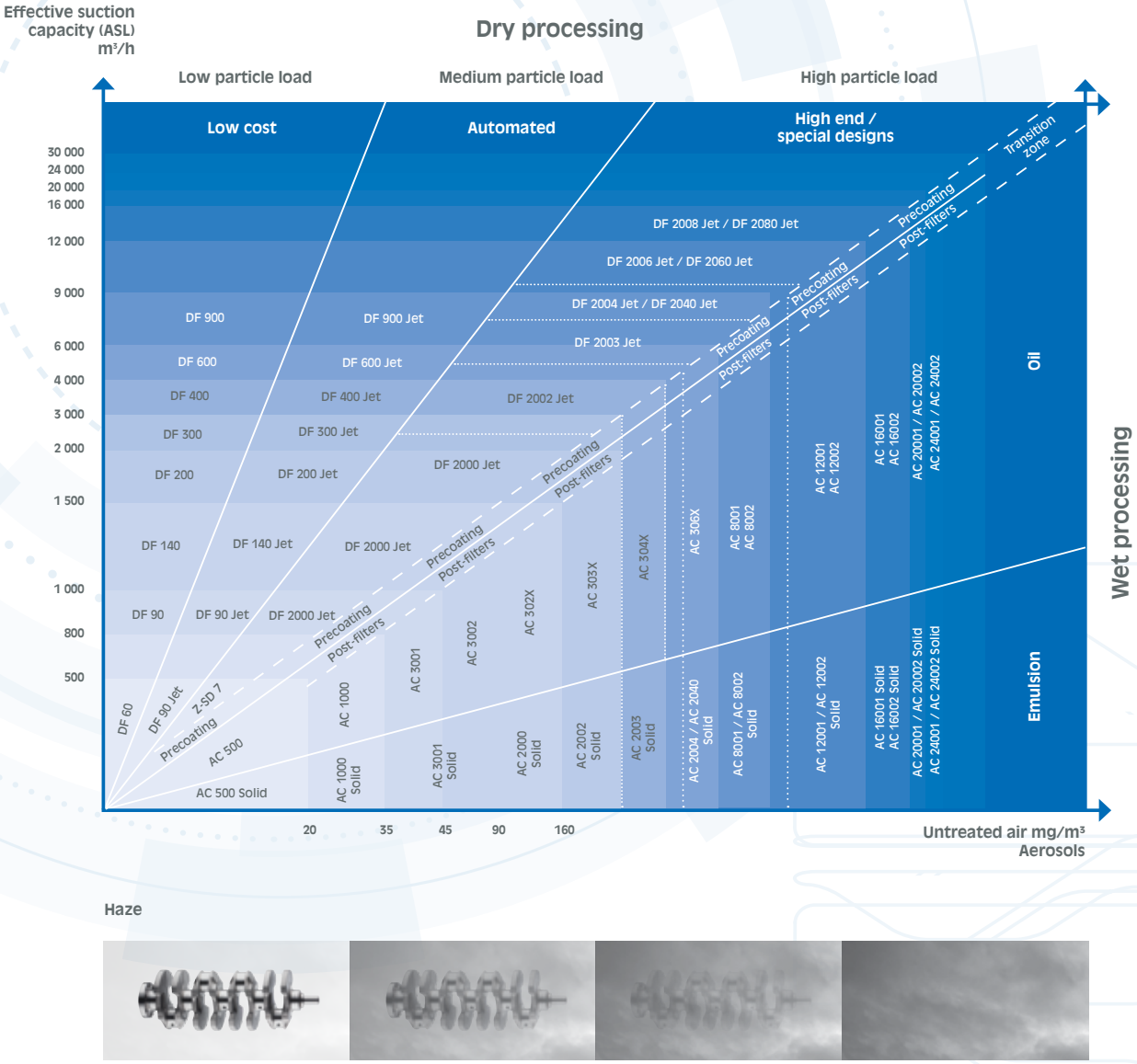
Industrial Air Cleaning

Products

LTA – your specialist for filtration solutions

The extensive LTA performance spectrum



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 500 / AC 500 Solid

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

The **AC 500** air filter, for oil and emulsion mist extraction, is compact in design and can be mounted directly on the machine. Recirculation of the filtered medium occurs directly at the machine.

The pre-filters are integrated in the housing with fully washable filter inserts. The filter cells have a universal design and can be used for both oil and emulsion. Integrated in the housing with fully washable filter inserts. The filter cells have a universal design and can be used for both oil and emulsion.

The AC 500 oil and emulsion mist filter features very low power consumption of just 0.5 kW. The electronics are fully integrated into the air filter, eliminating the need for a special electrical cabinet. The AC 500 air filter has an excellent rate of filtration (> 99 %) and is extremely quiet running at < 75 dB(A).

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, which means the filter is appropriate for internal coolant pressures of up to 20 bars and a machine interior of up to 4 m³, whether for oil or emulsion.

The air filter is also available with a solid matter filter insert – the "Solid" model. Additionally, it can be retro-fitted with an optional afterfilter with various filter cells, i.e. for smoke or, in the activated charcoal version, for odors.

Technical data

Designation	AC 500	
Design	ESP	
Variant	230 V	400 V
Fan output (m³/h)	1,315	1,950
Suction capacity up to (m³/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)	500 x 500 x 590	500 x 500 x 610
Weight appr. (kg)	50	50

Designation	AC 500 Solid	
Design	Solid matter filter	
Variant	230 V	400 V
Fan output (m³/h)	1,200	1,950
Suction capacity up to (m³/h)	700	800
Connection (V, Hz, kVA)	230, 50-60, 0.18	400, 50, 0.45
Standard pressure (PA)	700	780
Noise level appr. (dB (A))	75	75
Dimensions L x W x H (mm)	500 x 500 x 610	500 x 500 x 610
Weight appr. (kg)	42	48

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 (m³/h)	1,315	1,950
Suction capacity up to (m³/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

OIL AND EMULSION MIST FILTERS

AC 2000 Solid

- Solid matter filter
- Effective suction capacity: up to 2,500 m³/h (capable of modular upgrading to 10,000 m³/h)
- Extensive service life
- Low-maintenance solution
- Option: Compact version for direct mounting on machine hood

The **AC 2000 Solid** matter filter, for oil and emulsion mist extraction, is characterized by its service life and low-maintenance requirements. The washable pre-filters are integrated in the housing, and the "Primus B" version main filter is fully regenerable.

Power is supplied as a three-phase current. In addition, this filter model is capable of modular upgrading to an AC 2004, making it adaptable for extraction on large machines, as well as group extraction on multiple machines.

For medium (or standard) untreated gas content, we guarantee the following service lives for the filter cartridges:
- Emulsion applications: 3,000 hours
- With lower untreated gas content, this service life can be up to several years longer.

We are also happy to provide you with measurements that are carried out in advance to allow for optimal system design.

Additionally, the system can be retrofitted with an optional afterfilter with various filter cells, i.e. in the activated charcoal version for odors. This floor-mounted unit is also available as a compact version that can be mounted directly on the machine hood.

Technical data

Designation	AC 2000 Solid
Design	Solid matter filter
Variant	Free-standing unit
Fan output (m³/h)	4,500
Suction capacity up to (m³/h)	2,500
Connection (V, Hz, kVA)	400, 50, 2.35
Standard pressure (PA)	2,100
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	700 x 700 x 2,000
Weight appr. (kg)	295

Connection: DN 250 coupling system

AC 2002 Solid / AC 2003 Solid

Technical data

Designation	AC 2002 Solid
Design	Solid matter filter
Variant	Free-standing unit
Fan output (m³/h)	9,000
Suction capacity up to (m³/h)	5,000
Connection (V, Hz, kVA)	400, 50, 4.7
Standard pressure (PA)	2,100
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	1,400 x 700 x 2,000
Weight appr. (kg)	590

Connection: DN 250 coupling system

Designation	AC 2003 Solid
Design	Solid matter filter
Variant	Free-standing unit
Fan output (m³/h)	13,500
Suction capacity up to (m³/h)	7,500
Connection (V, Hz, kVA)	400, 50, 7.05
Standard pressure (PA)	2,100
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	2,100 x 700 x 2,000
Weight appr. (kg)	885

Connection: DN 250 coupling system

OIL AND EMULSION MIST FILTERS

AC 2000 Solid / AC 2002 Solid – Compact unit

Technical data

Designation	AC2000 Solid
Design	Solid matter filter
Variant	Compact unit
Fan output (m³/h)	4,400
Suction capacity up to (m³/h)	1,500
Connection (V, Hz, kVA)	400-460, 50-60, 3.2
Standard pressure (PA)	1,800
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	800 x 1,230 x 1,315
Weight appr. (kg)	200

Connection: DN 250 coupling system

Designation	AC2002 Solid
Design	Solid matter filter
Variant	Compact unit
Fan output (m³/h)	8,800
Suction capacity up to (m³/h)	3,000
Connection (V, Hz, kVA)	400-460, 50-60, 6.4
Standard pressure (PA)	1,800
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	1,500 x 1,230 x 1,315
Weight appr. (kg)	400

Connection: DN 250 coupling system

AC 2000 Solid (oil) – Coalescence filter

Technical data

Designation	AC 2000 Solid (oil)
Design	**Coalescence filter**
Variant	**Free-standing unit**
Fan output (m³/h)	4,500
Suction capacity up to (m³/h)	1,200
Connection (V, Hz, kVA)	400, 50, 3.2
Standard pressure (PA)	2,100
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	700 x 700 x 2,500
Weight appr. (kg)	250

Connection: DN 250 coupling system

OIL AND EMULSION MIST FILTERS

AC 3000 / AC 3000 Solid

- **ESP or solid matter filter**
- **1-step or 2-step version**
- **Effective suction capacity: up to 1,200 m³/h (capable of modular upgrading to 7,200 m³/h)**
- **Can be mounted directly at the machine**
- **Minimal energy consumption due to EC technology (optional with 400 V)**
- **Option: Mobile version with extraction arm, magnesium version**

The **AC 3000** is a compact oil and emulsion mist filter and can be mounted directly on the machine. In addition, it is available with a 1-step as well as a 2-step electrostatic filter cell. It can be equipped with respectively adapted prefilters for removing coarse contaminants and extending the service life.

The filter elements used in the AC 3000 are fully washable and the prefilters are installed in the housing. All the filter inserts are fully compatible with our AC 8000 – AC 24000 large filter versions. And the collector cell is compatible with our AC 1000 model, which makes maintenance simple and economical for the customer.

As with all LTA air filters, the AC 3000 features minimal power consumption with an excellent rate of filtration of > 99 % and a noise level of < 75 dB(A). As the electronics are integrated directly in the air filter, no special electrical cabinet is required. In addition, the filter is equipped with an EC fan characterized by an extremely high level of efficiency. For a two-shift operation with approx. 4,000 operating hours a year, the investment on EC fans is recouped after 1.3 years or 5,400 operating hours.

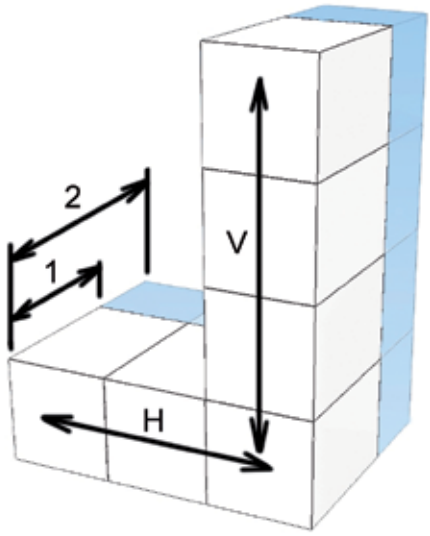
It can be powered with either single-phase or as an option three-phase current. The AC 3001 single-step filter is appropriate for internal coolant pressures of up to 40 bars and a machine interior of up to 6 m³. The AC 3002 two-step filter is appropriate for internal coolant pressures of up to 80 bars and a machine interior of up to 6 m³, whether for oil or emulsion. In addition, this filter model is capable of modular upgrading to an AC 3061 / 3062, making it adaptable for extraction on large machines, as well as group extraction on multiple machines.

The AC 3000 is also available as the solid matter filter AC 3000 Solid. Additionally, it can be retrofitted with an optional afterfilter with various filter cells, e.g. for smoke or, in the activated charcoal version, for odors. This filter series is also available as a mobile version with an extraction arm for extracting welding fumes, as well as a magnesium version approved for magnesium processing with emulsion and oil.

Modular structure / AC 3001

Modular design (AC 3000 – AC 3062)

Structure



H = horizontal design
V = vertical design
1 = one-step filter
2 = two-step filter

Technical data

Designation	AC 3001	
Design	ESP	
Variant	230 V	400 V
Fan output (m³/h)	2,400	3,200
Suction capacity up to (m³/h)	1,200	1,200
Connection (V, Hz, kVA)	230, 50-60, 0.78	400, 50, 1.23
Standard pressure (PA)	840	980
Noise level appr. (dB (A))	75	78
Dimensions L x W x H (mm)	800 x 625 x 610	770 x 625 x 610
Weight appr. (kg)	100	110

OIL AND EMULSION MIST FILTERS

AC 3001 Solid / AC 3002

Technical data

Designation	AC 3001 Solid	
Design	Solid matter filter	
Variant	230 V	400 V
Fan output (m³/h)	2,400	3,200
Suction capacity up to (m³/h)	1,000	1,000
Connection (V, Hz, kVA)	230, 50-60, 0.63	400, 50, 1,08
Standard pressure (PA)	840	980
Noise level appr. (dB (A))	75	78
Dimensions L x W x H (mm)	800 x 625 x 610	770 x 625 x 610
Weight appr. (kg)	80	90

Designation	AC 3002	
Design	ESP	
Variant	230 V	400 V
Fan output (m³/h)	2,400	3,200
Suction capacity up to (m³/h)	1,200	1,200
Connection (V, Hz, kVA)	230, 50-60, 0.93	400, 50, 1.38
Standard pressure (PA)	840	980
Noise level appr. (dB (A))	75	78
Dimensions L x W x H (mm)	1,130 x 625 x 610	1,100 x 625 x610
Weight appr. (kg)	130	135

AC 3021-H / AC 3022-H

Technical data

Designation	AC 3021-H	
Design	ESP	
Variant	230 V	400 V
Fan output (m³/h)	4,800	6,400
Suction capacity up to (m³/h)	2,400	2,400
Connection (V, Hz, kVA)	230, 50-60, 1.55	400, 50, 2.13
Standard pressure (PA)	840	980
Noise level appr. (dB (A))	75	78
Dimensions L x W x H (mm)	800 x 1,105 x 610	770 x 1,105 x 610
Weight appr. (kg)	170	175

Also available in a vertical design

Designation	AC 3022-H	
Design	ESP	
Variant	230 V	400 V
Fan output (m³/h)	4,800	6,400
Suction capacity up to (m³/h)	2,400	2,400
Connection (V, Hz, kVA)	230, 50-60, 1.55	400, 50, 2.28
Standard pressure (PA)	840	980
Noise level appr. (dB (A))	75	78
Dimensions L x W x H (mm)	1,130 x 1,105 x 610	1,130 x 1,105 x 610
Weight appr. (kg)	270	270

Also available in a vertical design

OIL AND EMULSION MIST FILTERS

AC 6002 CIP / AC 6022 CIP

- **ESP**
- **Effective suction capacity: up to 1,200 m³/h (capable of modular upgrading to 2,400 m³/h)**
- **Automatic cleaning**
- **Extended service life**
- **Only regenerative filter elements**
- **Constant high separation ratio > 99 %**
- **Can be mounted directly on the machine**
- **Minimal energy consumption**

The **AC 6000 CIP** is an automatically cleanable air filter of compact design. Due to its special design, the AC 6000 CIP air filter is perfectly suited for direct machine integration. The aerosol-containing exhaust air flows through a double-step electrostatic air filter. During this process, the particles (aerosols) contained in the air are charged, diverted by an electrical field between the collector plates and precipitated. The voltage applied to the collector and ionizer can be changed enabling adaptation to the specific application, e.g. oil or emulsion etc. The AC 6000 CIP is exclusively fitted with regenerative filter elements. Thanks to the use of these elements, in combination with an automatic flushing device, the filters may be cleaned as often as required thus eliminating the high disposal and purchase costs for replacement filters. In addition, a consistently high filtration efficiency of > 99 %, as well as permanent operational safety, is guaranteed.

In regular filter operation, cooling lubricant is delivered from the customer's central system into the intermediate tank of the filter before being optionally heated. The cleaning of the filter may be scheduled or a machine signal may be output to the filter to start the cleaning process, e.g. during downtimes or when changing the machine setup. In order to reduce oil loss, the stop valve to the fan is closed during the cleaning process. Using a high-pressure pump, the filter elements are cleaned using special flushing nozzles. Contamination is removed due to the optionally heated medium or washed off by the flushing pressure. At the end of the cleaning cycle, the contaminated flushing medium flows back into the central system. In this way, fresh cooling lubricant may be discharged from the central system as flushing medium during the next flushing cycle. The cleaning process is programmed and controlled by a PLC allowing the automatic cleaning procedure to be individually adjusted to the customer's requirements.

Technical data

Designation	AC 6002 CIP
Design	**ESP**
Variant	**400 V**
Fan output (m³/h)	3,200
Suction capacity up to (m³/h)	1,600
Connection (V, Hz, kVA)	400, 50, 1.38
Standard pressure (PA)	980
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	1,130 x 570 x 1,550
Weight appr. (kg)	370

Compressed air connection required

Designation	AC 6022 CIP
Design	**ESP**
Variant	**400 V**
Fan output (m³/h)	6,400
Suction capacity up to (m³/h)	3,200
Connection (V, Hz, kVA)	400, 50, 2.76
Standard pressure (PA)	980
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	1,130 x 1,140 x 1,550
Weight appr. (kg)	700

Compressed air connection required

OIL AND EMULSION MIST FILTERS

AC 8000 – AC 24000

- ESP or solid matter filter
- 1-step or 2-step version
- Air throughput: 8,000 – 36,000 m³/h
- Minimal energy consumption due to air stream-optimized construction
- Option: Automatic cleaning, fan unit

The **AC 8000 to AC 24000** air filters are characterized by their sturdy design. They are the perfect solution for group and central extraction of oil and emulsion mist for machines and machining centers as well as entire factory halls. Thanks to their modular design, they can be customized to suit your individual needs. In addition, they are available with 1-step as well as 2-step electrostatic filter cell. They can be equipped with suitably adapted pre-filters for removing coarse contaminants and extending the service life.

The pre-filters are integrated in the housing with fully washable filter inserts. The filter cells have a universal design and can be used for both oil and emulsion. All the filter inserts are fully compatible with our AC 3000 filter version. The collector cell is also compatible with our AC 1000 model, which makes maintenance simple and economical for the customer. Thanks to the streamlined design, power consumption is greatly minimized.

The filters feature an excellent rate of separation (> 99 %). The basic module is supplied with 230 V. In combination with a fan unit, the power is supplied as a three-phase current. The single-step filter has an air throughput rate of 8,000 – 30,000 m³/h, while the two-step filter AC 8002 has an air throughput rate of 8,000 – 36,000 m³/h, whether for oil or emulsion.

The air filters are also available with a solid matter filter insert – the "Solid" model. Complete fan units, as well as automatic cleaning, are optionally available for our large filter models.

Cleaning automation:
- Optional cleaning system for large modules
- Cleaning of individual filter levels via built-in injection tubes with corresponding full-cone nozzles
- Cleaning without chemical additives or diluted solutions
- Reconditioning of cleaning oil using a cleaning centrifuge
- Filtration system sealed off during cleaning process with electrically controlled stop valves

Cleaning automation

AC 8001 / AC 8002
AC 12001 / AC 12002

Technical data

Designation	AC 8001	AC 8002
Design	ESP	
Air throughput (m³/h)	8,000 - 10,000	8,000 - 12,000
Connection (V, Hz, kVA)	230, 50-60, 0.5	230, 50-60, 1.0
Dimensions L x W x H (mm)	650 x 1,115 x 2,300	1,300 x 1,115 x 2,300
Weight appr. (kg)	300	600

1-step version AC 8001

Designation	AC 12001	AC 12002
Design	ESP	
Air throughput (m³/h)	12,000 - 15,000	12,000 - 16,000
Connection (V, Hz, kVA)	230, 50-60, 0.5	230, 50-60, 1.0
Dimensions L x W x H (mm)	650 x 1,580 x 2,300	1,300 x 1,580 x 2,300
Weight appr. (kg)	400	800

1-step version AC 12001

OIL AND EMULSION MIST FILTERS

AC 16001 / AC 16002
AC 20001 / AC 20002

Technical data

Designation	AC 16001	AC 16002
Design	ESP	
Air throughput (m³/h)	16,000 - 20,000	16,000 - 24,000
Connection (V, Hz, kVA)	230, 50-60, 1.0	230, 50-60, 2.0
Dimensions L x W x H (mm)	650 x 2,230 x 2,300	1,300 x 2,230 x 2,300
Weight appr. (kg)	600	1,200

1-step version AC 16001

Designation	AC 20001	AC 20002
Design	ESP	
Air throughput (m³/h)	20,000 - 25,000	20,000 - 30,000
Connection (V, Hz, kVA)	230, 50-60, 1.0	230, 50-60, 2.0
Dimensions L x W x H (mm)	650 x 2,695 x 2,300	1,300 x 2,695 x 2,300
Weight appr. (kg)	700	1,400

1-step version AC 20001

AC 24001 / AC 24002

Technical data

Designation	AC 24001	AC 24002
Design	ESP	
Air throughput (m³/h)	24,000 - 30,000	24,000 - 36,000
Connection (V, Hz, kVA)	230, 50-60, 1.0	230, 50-60, 2.0
Dimensions L x W x H (mm)	650 x 3,160 x 2,300	1,300 x 3,160 x 2,300
Weight appr. (kg)	800	1,600

1-step version AC 24001

FAN UNIT

G 8008 / G 12008

The complete fan unit consists of:

- Floor pan with mounting bracket
- Fan housing (optionally with acoustic insulation)
- Connecting element for filtration system
- Central electrical cabinet with main switch
- Three phase fan with vibration dampers

Technical data

Designation	G 8008
Application	AC 8001 / 8002
Volumetric flow (m³/h)	8,000
Connection (V, Hz, kVA)	400, 50, 4.0
Standard pressure (PA)	1,000
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	1,570 x 1,000 x 1,705
Weight appr. (kg)	200

Designation	G 12008
Application	AC 8002
Volumetric flow (m³/h)	12,000
Connection (V, Hz, kVA)	400, 50, 7.5
Standard pressure (PA)	1,000
Noise level appr. (dB (A))	76
Dimensions L x W x H (mm)	1,570 x 1,350 x 1,705
Weight appr. (kg)	250

G 12012 / G 16012
G 16016 / G 20016

Technical data

Designation	G 12012
Application	AC 12001 / 12002
Volumetric flow (m³/h)	12,000
Connection (V, Hz, kVA)	400, 50, 7.5
Standard pressure (PA)	1,000
Noise level appr. (dB (A))	76
Dimensions L x W x H (mm)	1,710 x 1,350 x 1,750
Weight appr. (kg)	250

Designation	G 16012
Application	AC 12002
Volumetric flow (m³/h)	16,000
Connection (V, Hz, kVA)	400, 52, 11.0
Standard pressure (PA)	1,500
Noise level appr. (dB (A))	77
Dimensions L x W x H (mm)	1,710 x 1,940 x 1,750
Weight appr. (kg)	300

Designation	G 16016
Application	AC 16001 / 16002
Volumetric flow (m³/h)	16,000
Connection (V, Hz, kVA)	400, 52, 11.0
Standard pressure (PA)	1,500
Noise level appr. (dB (A))	77
Dimensions L x W x H (mm)	2,175 x 1,940 x 1,900
Weight appr. (kg)	300

Designation	G 20016
Application	AC 16002
Volumetric flow (m³/h)	20,000
Connection (V, Hz, kVA)	400, 46, 15.0
Standard pressure (PA)	1,500
Noise level appr. (dB (A))	78
Dimensions L x W x H (mm)	2,175 x 2,400 x 1,900
Weight appr. (kg)	350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FAN UNIT

G 20020 / G 24020
G 24024

Technical data

Designation	G 20020
Application	**AC 20001 / 20002**
Volumetric flow (m³/h)	20,000
Connection (V, Hz, kVA)	400, 46, 15.0
Standard pressure (PA)	1,500
Noise level appr. (dB (A))	78
Dimensions L x W x H (mm)	2,222 x 2,400 x 2,280
Weight appr. (kg)	350

Designation	G 24020
Application	**AC 20002**
Volumetric flow (m³/h)	24,000
Connection (V, Hz, kVA)	400, 48, 15.0
Standard pressure (PA)	1,500
Noise level appr. (dB (A))	79
Dimensions L x W x H (mm)	2,222 x 2,700 x 2,280
Weight appr. (kg)	400

Designation	G 24024
Application	**AC 24001 / 24002**
Volumetric flow (m³/h)	24,000
Connection (V, Hz, kVA)	400, 48, 15.0
Standard pressure (PA)	1,500
Noise level appr. (dB (A))	79
Dimensions L x W x H (mm)	2,300 x 2,700 x 2,400
Weight appr. (kg)	400

OIL AND EMULSION MIST FILTERS

AC 8001 Solid / AC 10001 Solid

Integrated or external fan units can be used.

Technical data

Designation	AC 8001 Solid
Design	Solid matter filter
Air throughput (m³/h)	8,000
Dimensions L x W x H (mm)	2,500 x 710 x 1,580
Weight appr. (kg)	450

Option: Version with coalescence cassettes

Designation	AC 10001 Solid
Design	Solid matter filter
Air throughput (m³/h)	10,000
Dimensions L x W x H (mm)	3,170 x 710 x 1,580
Weight appr. (kg)	630

Option: Version with coalescence cassettes

AC 16001 Solid / AC 20001 Solid

Technical data

Designation	AC 16001 Solid
Design	Solid matter filter
Air throughput (m³/h)	16,000
Dimensions L x W x H (mm)	2,500 x 1,420 x 1,580
Weight appr. (kg)	900

Option: Version with coalescence cassettes

Designation	AC 20001 Solid
Design	Solid matter filter
Air throughput (m³/h)	20,000
Dimensions L x W x H (mm)	3,170 x 1,420 x 1,580
Weight appr. (kg)	1,260

Option: Version with coalescence cassettes

DUST FILTER

DF

- Pocket filter
- Effective suction capacity: 600 m³/h to 2,000 m³/h
- Manual or pneumatic vibration
- Variable collecting basin
- Options: Mobile version, water bath pre-filter, afterfilter: Fine filter class E11-H13

The model **DF pocket filter** is used for simple industrial applications and/or in mobile systems.

The dust filter has an effective suction capacity of 600 m³/h to 2,000 m³/h depending on the model (DF 60 / 90 / 140 / 200). For particularly high standards, our DF Jet cartridge filters are also available with an effective suction capacity of up to 20,000 m³/h.

On the pocket filters, vibration can be manual or pneumatic, depending on the version. In addition, the collecting basin is variable.

An optional afterfilter with fine-filter class E11-H13 filter inserts is additionally available. Additional options are a water-bath pre-filter, as well as a mobile version of the dust filter.

DF 60 / DF 90 / DF 140 / DF 200

Technical data

Designation	DF 60
Design	Pocket filter
Fan output (m³/h)	800
Suction capacity up to (m³/h)	600
Connection (V, Hz, kVA)	400-460, 50-60, 1.35
Standard pressure (PA)	1,050
Noise level appr. (dB (A))	70
Dimensions L x W x H (mm)	650 x 550 x 1,205
Weight appr. (kg)	88
Dust capacity (l)	45

Designation	DF 90
Design	Pocket filter
Fan output (m³/h)	1,100
Suction capacity up to (m³/h)	900
Connection (V, Hz, kVA)	400-460, 50-60, 1.65
Standard pressure (PA)	1,200
Noise level appr. (dB (A))	72
Dimensions L x W x H (mm)	650 x 550 x 1,205
Weight appr. (kg)	90
Dust capacity (l)	45

Designation	DF 140
Design	Pocket filter
Fan output (m³/h)	2,000
Suction capacity up to (m³/h)	1,400
Connection (V, Hz, kVA)	400-460, 50-60, 2.9
Standard pressure (PA)	1,600
Noise level appr. (dB (A))	74
Dimensions L x W x H (mm)	750 x 850 x 1,775
Weight appr. (kg)	175
Dust capacity (l)	80

Designation	DF 200
Design	Pocket filter
Fan output (m³/h)	2,600
Suction capacity up to (m³/h)	2,000
Connection (V, Hz, kVA)	400-460, 50-60, 4.2
Standard pressure (PA)	1,800
Noise level appr. (dB (A))	76
Dimensions L x W x H (mm)	750 x 850 x 1,775
Weight appr. (kg)	180
Dust capacity (l)	80

DUST FILTERS

DF Jet

- Cartridge filter
- Effective suction capacity: 600 m³/h to 2,500 m³/h (capable of modular upgrading to 20,000 m³/h)
- Automatic cleaning
- Variable collecting basin
- Options: Precoating unit for adhesive dust or residual moisture, after-filter: Fine filter class E11-H13

The model **DF Jet cartridge filter** is used for stringent industrial standards, special customer specifications and/or applications in explosion-prone areas.

The dust filter has an effective suction capacity of 600 m³/h to 2,500 m³/h depending on the model (DF 60 / 90 / 140 / 200 / 300 / 2000 Jet). In addition, the model DF 2000 Jet is capable of modular upgrading to a DF 2008 Jet (suction capacity up to 20,000 m³/h,) which makes it suitable for group or central extraction for multiple machines. For simple applications, our model DF pocket filters are also available with an effective suction capacity of up to 2,000 m³/h.

The cartridge filters are cleaned automatically by jet pulse. In addition, the collecting basin is variable.

An optional afterfilter with fine-filter class E11-H13 filter inserts is additionally available. Also optionally available is a pre-coating unit for adhesive dust or residual moisture.

DF 90 Jet / DF 200 Jet / DF 300 Jet

Technical data

Designation	DF 90 Jet
Design	Cartridge filter
Fan output (m³/h)	1,100
Suction capacity up to (m³/h)	750
Connection (V, Hz, kVA)	230, 50, 1.1
Standard pressure (PA)	1,000
Noise level appr. (dB (A))	78
Dimensions L x W x H (mm)	650 x 750 x 2,270
Weight appr. (kg)	100
Dust capacity (l)	95
Number of cartridges	2

Designation	DF 200 Jet
Design	Cartridge filter
Fan output (m³/h)	2,600
Suction capacity up to (m³/h)	2,000
Connection (V, Hz, kVA)	400-460, 50-60, 2.2
Standard pressure (PA)	1,550
Noise level appr. (dB (A))	76
Dimensions L x W x H (mm)	950 x 850 x 2,920
Weight appr. (kg)	230
Dust capacity (l)	95
Number of cartridges	2

Designation	DF 300 Jet
Design	Cartridge filter
Fan output (m³/h)	4,000
Suction capacity up to (m³/h)	3,000
Connection (V, Hz, kVA)	400-460, 50-60, 3.45
Standard pressure (PA)	1,750
Noise level appr. (dB (A))	77
Dimensions L x W x H (mm)	950 x 850 x 2,920
Weight appr. (kg)	230
Dust capacity (l)	95
Number of cartridges	2

DUST FILTERS

DF 2000 Jet / DF 2002 Jet

Technical data

Designation	DF 2000 Jet
Design	**Cartridge filter**
Fan output (m³/h)	6,200
Suction capacity up to (m³/h)	2,000
Connection (V, Hz, kVA)	400, 50, 5.9
Standard pressure (PA)	2,700
Noise level appr. (dB (A))	75
Dimensions L x W x H (mm)	920 x 975 x 2,970
Weight appr. (kg)	240
Dust capacity (l)	10
Number of cartridges	4

Designation	DF 2002 Jet
Design	**Cartridge filter**
Fan output (m³/h)	12,400
Suction capacity up to (m³/h)	4,000
Connection (V, Hz, kVA)	400, 50, 11.8
Standard pressure (PA)	2,700
Noise level appr. (dB (A))	76
Dimensions L x W x H (mm)	1,620 x 975 x 2,970
Weight appr. (kg)	480
Dust capacity (l)	20
Number of cartridges	8

DF 2003 Jet / DF 2004 Jet

Technical data

Designation	DF 2003 Jet
Design	Cartridge filter
Fan output (m³/h)	18,600
Suction capacity up to (m³/h)	6,000
Connection (V, Hz, kVA)	400, 50, 17.7
Standard pressure (PA)	2,700
Noise level appr. (dB (A))	77
Dimensions L x W x H (mm)	2,320 x 975 x 2,970
Weight appr. (kg)	720
Dust capacity (l)	30
Number of cartridges	12

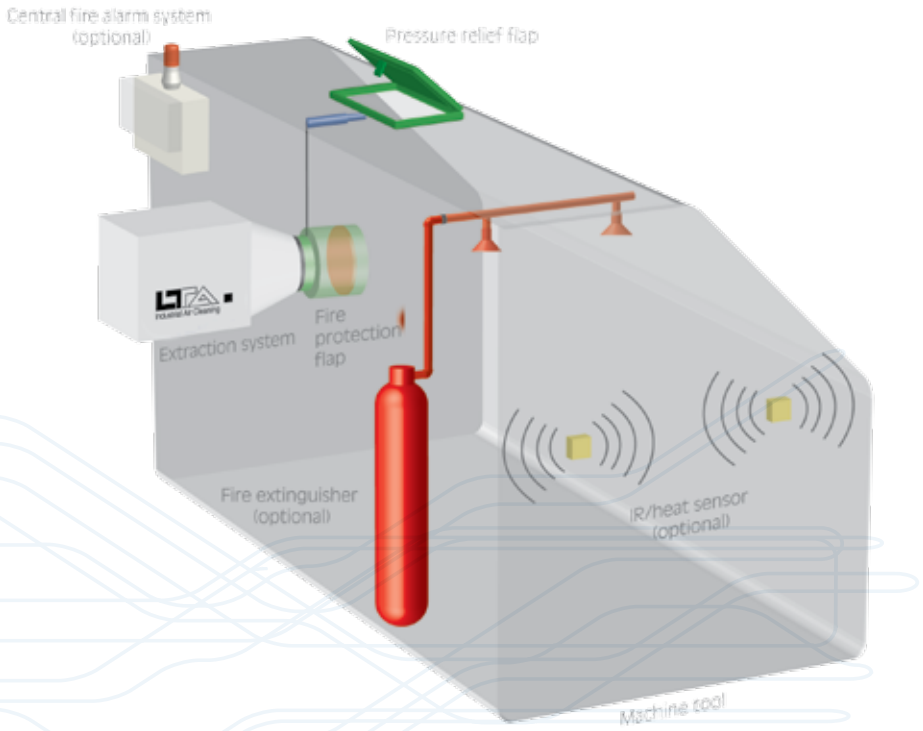
Designation	DF 2004 Jet
Design	Cartridge filter
Fan output (m³/h)	24,800
Suction capacity up to (m³/h)	8,000
Connection (V, Hz, kVA)	400, 50, 23.6
Standard pressure (PA)	2.700
Noise level appr. (dB (A))	78
Dimensions L x W x H (mm)	3,020 x 975 x 2,970
Weight appr. (kg)	960
Dust capacity (l)	40
Number of cartridges	16

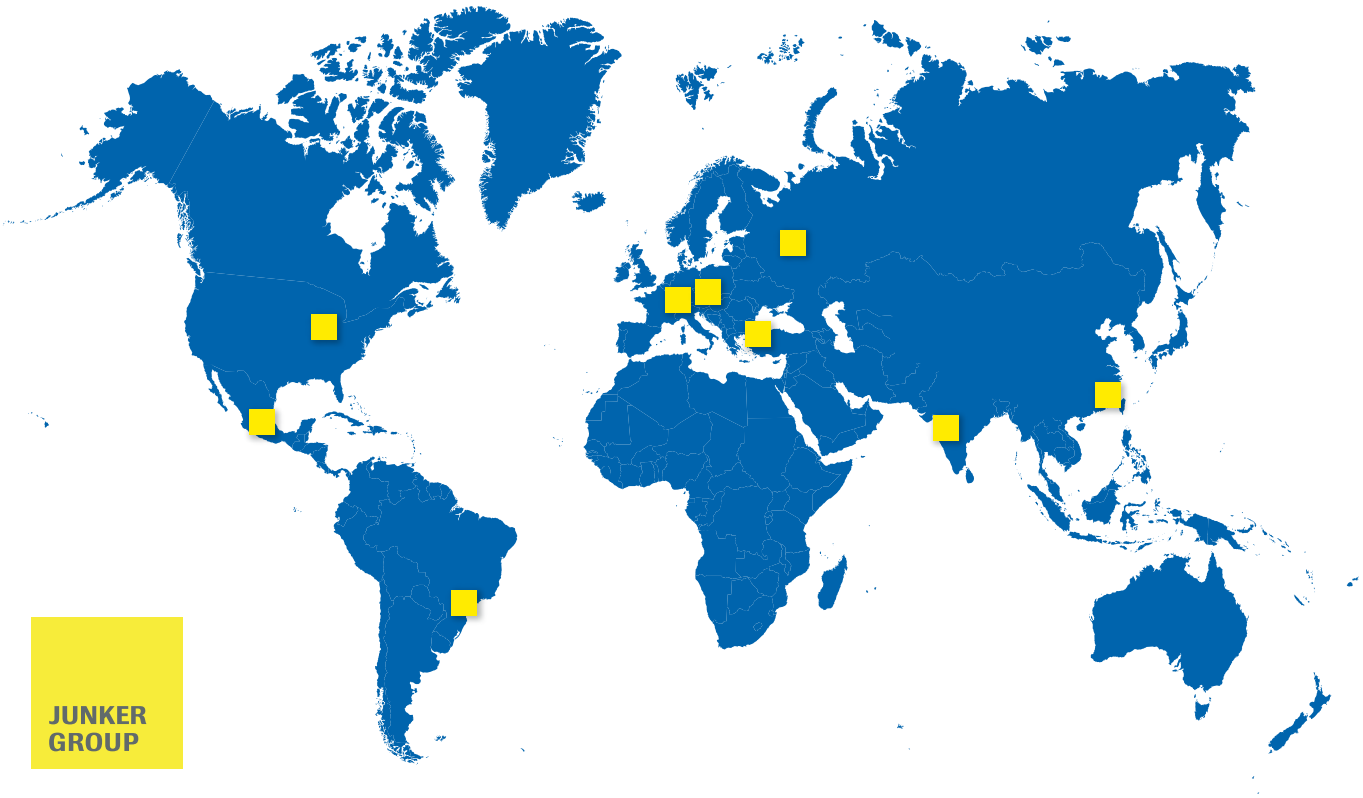
LTA SAFETY TECHNOLOGY
for machine tools

In the metalworking industry, and particularly chip-forming operations, the use of large quantities of cutting fluid (coolant) is common. These coolants are generally non-water-soluble, modern oils. When heated to above their flash point, they form explosive vapor/air compounds. Choosing coolants with the highest possible flash points helps to counter this effect. However, it is not possible to avoid the for-ma-tion of aerosols through spray aeration or atom-ization. Aerosols are potentially explosive even below the flash point. When using oil/water emulsions (water-soluble coolants), only a water content of over 80 % can reliably prevent ignition.

There are a number of safety measures required in order to use non-water-soluble coolants in machine tools.

LTA Lufttechnik has developed a special fire and ex-plosion protection system, which has been appraised by an independent institute (IBEXU).





JUNKER GROUP

EUROPE

LTA Lufttechnik GmbH

Junkerstraße 2
77787 Nordrach
Germany

info@lta.de
+49 (0)7838 84-245
www.lta.de

Erwin Junker Maschinenfabrik GmbH

Junkerstraße 2
77787 Nordrach
Germany

info@junker.de
+49 (0)7838 84-0
www.junker.de

Erwin Junker Grinding Technology a.s. Plant Holice
Pardubická 332
534 13 Holice
Czech Republic

info@junker.cz
+420 466 003-111
www.junker.cz

Erwin Junker Grinding Technology a.s. Russia Branch Office
Prospekt Tolbukhina 17/65
150000 Yaroslavl
Russian Federation

info@junker-russia.ru
+7 (4852) 20 61 21
www.junker-russia.ru

AMERICA

Erwin Junker Machinery, Inc.
2541 Technology Drive, #410
Elgin, IL 60124
USA

info@junker-usa.com
+1 847 488 0406
www.junker-usa.com

Erwin Junker de Mexico, S. de R.L. de C.V.
Blvd. Bernardo Quintana #7001
Torre 2, #1203
Centro Sur Querétaro
Qro., C.P. 76079
Mexico

info@junker.com.mx
+52 442 199 5111
www.junker.com.mx

Erwin Junker Máquinas Ltda.
Centro Administrativo Rio Negro
Edifício Jaçari - Bloco A
13° andar cj. 132/133
Alameda Rio Negro 585
CEP 06454-000
Alphaville – Barueri, São Paulo
Brazil

info@junker-group.com.br
+55 11 4153 9645
www.junker-group.com.br

ZEMA Zselics Ltda.
Estrada do Capivari 741
Cep 09835-450
S.B. do Campo, São Paulo
Brazil

zema@zema.com.br
+55 11 4397 6000
www.zema.com.br

ASIA

Erwin Junker Maschinenfabrik GmbH Shanghai Representative Office
Unit 1003, Floor 10
Tower II Kerry Ever Bright City
Enterprise Center
No. 209 Gonghe Road
Shanghai 200070
P.R. China

info@junker.com.cn
+86 21 6143 8528
www.junker.com.cn

Erwin Junker Maschinenfabrik GmbH India Branch Office
Office No. 104, City Square
29-2, K.M. Gandhi Path
Bhamburda, Shivaji Nagar
Pune 411 005
India

info@junker.in
+91 20 255 33 896
www.junker.in

Erwin Junker Makina Sanayi Ticaret LTD. ŞTİ.
Esentepe Mah.
Milangaz Cad. No:75
Monumento
Kartal/Istanbul
Turkey

info@junker-turkey.com.tr
+90 216 504 28 11
www.junker-turkey.com.tr

www.lta.de

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