

A•smoke⁵ Oil Smoke Filter

The Absolent type A•smoke⁵ oil smoke filter is a compact, machine-mountable filter unit specialized in oil smoke. It is part of the A•smoke filter series that features one of the most effective systems in the world for cleaning oil mist and oil smoke. A•smoke⁵ is especially well suited for small, high-speed metal working machines that use oil or emulsion. The filter unit is designed for air flows up to 500m³/h.

» **The highest possible collecting efficiency for safe and pleasant working conditions**

The filter unit has 4 filter steps. Those include a H13 hepa filter that guarantees a constant separation degree of 99.97% at 0.3µm. The air gets totally free from particles and can usually be returned to the premises. This contributes to a balanced ventilation and reduces energy costs.

» **Designed for oil smoke**

Oil smoke particles are very small, smaller than 1.0µm. Other filter types, as for example centrifugal filters, have difficulties with small particles. The Absolent filter unit is designed just for this purpose. The self-draining, highly compact filter cassettes can recover up to 300 litres of oil per year, oil that otherwise would end up in the workshop air.

» **Energy-efficient fan with airflow guarantee - due to EcoDrive**

The highly efficient EC-fan with integrated airflow control ensures that the filter unit consumes as little energy as possible. The fan starts at low speed when the filter cassettes are clean and revs up slowly as they become dirtier, to ensure the correct airflow. It also responds if the machine is open or closed and adjusts its speed accordingly - the result is energy savings.

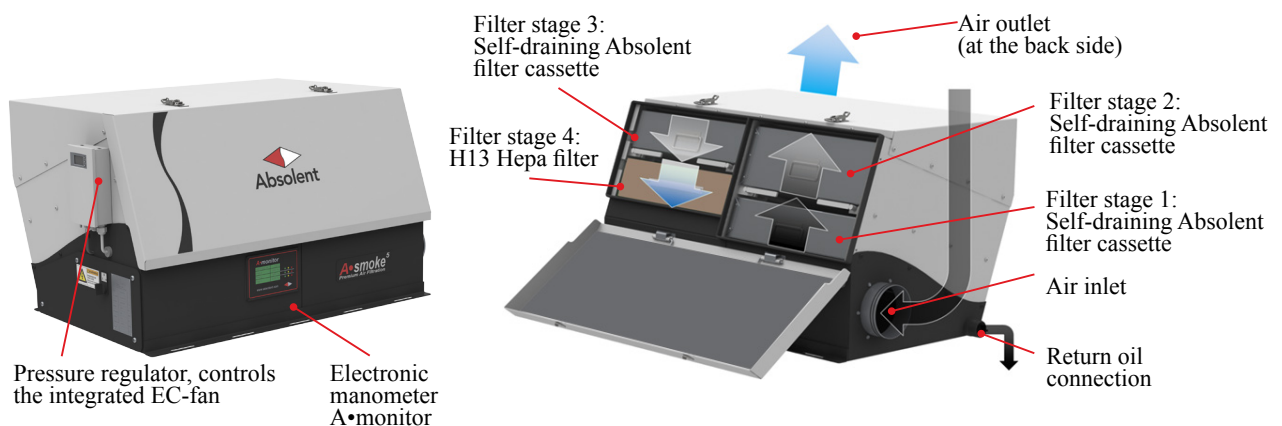
» **Its small and compact design makes A•smoke⁵ easy to place**

The filter unit is small and lightweight, making it ideal for placement on top of a machine, even small production machines. In some cases, it is even possible to integrate it into the machine.

Operation

The contaminated air from a machining process is led into the A•smoke⁵ via the inlet in the bottom section. This is also where the captured oil is led out, via the drainage outlet.

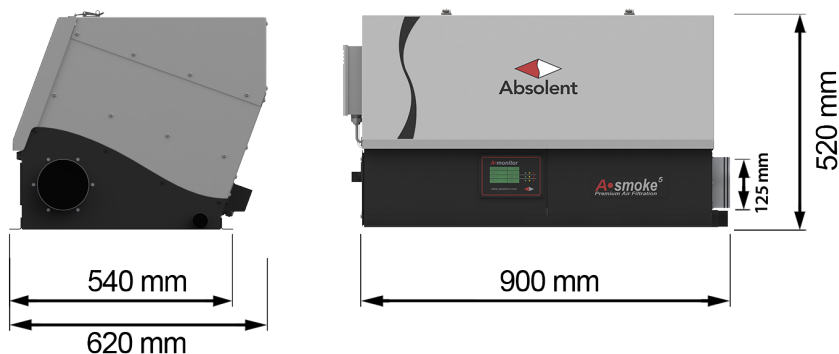
The air is first led through three self-draining Absolent filter cassettes and then the H13 HEPA filter. The filtration process will capture particles in a polluted airflow up to 500 m³/h with ≥99.97% efficiency for at least one year without any service, in most oil mist and -smoke applications. The clean air is led out on the back side of the filter unit. Absolent's electronic manometer A•monitor indicates when service is needed. The airflow through the filter unit is created by an integrated EC fan which is controlled by a pressure regulator for an optimal function and the least possible energy consumption.



Range of Application

The Absolent A•smoke⁵ is well suited for use in applications such as:

- Milling and CNC-turning involving neat oil
- Grinding
- Gear cutting
- Rotary transfer machines (Hydromats)
- Minimal lubrication
- Hardening



Technical Data		A•smoke ⁵
Max permissible air volume	[m ³ /h]	<500
Sound level, 1m in front of filter unit ¹⁾	[dB(A)]	<60
Weight (dry filters)	[kg]	70
Available dim. ext. pressure drop	[Pa]	100
Filter area filter 1 (Absolent filter)	[m ²]	3.4
Filter area filter 2 (Absolent filter)	[m ²]	2.8
Filter area filter 3 (Absolent filter)	[m ²]	3.1
Filter area filter 4 (HEPA filter)	[m ²]	6.2

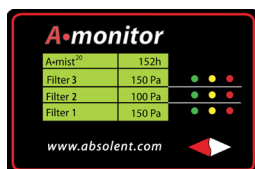
Fan Data

Max motor output	[W]	<360
Power supply	[V]	230V
Rated current (1-Phase, 230V)	[A]	2.2
Max speed	[rpm]	<5830

¹⁾ Sound absorption in premises=200m², Hemispherical sound propagation. For sound calculation concerning a specific room, contact us at Absolent or any of our dealers.

Standard Equipment

- ● RAL 7035 fine structure SK3 and ● RAL 9005 fine structure SK3
Other colours on request!
- EcoDrive (pressure regulation of EC-fan for maximum energy effectiveness)
- Electronic manometer with the following features:
 - ✓ Pressure drop and operation hour meters
 - ✓ Optical indication of filter alarm (LED).
 - ✓ Digital output signal for remote supervision.



Accessories

- Duct connections for steel or plastic ductwork
- Duct connection for air outlet
- Liquid traps for various connections of the return oil pipe
- Transformer for other voltages than 230V
- Special colours

Unique filter cassettes

Absolent is one of few companies in this line of business that has specialized in the filtration of air containing wet particles. This has given us the opportunity to develop a filter cassette that offers a long useful life with consistently high separation efficiency.



Sound level, dB(A)¹⁾

