Rev. 1 - October 2022



## **Dust and Fume Extraction**

# A-SMOKE40 OIL SMOKE FILTER



# **DESCRIPTION**

The Absolent type A-smoke40 Oil smoke filter features one of the most effective systems in the world for cleaning oil mist and oil smoke. The unit requires very little service: it can run for 1–6 years without requiring a filter change. For Absolent customers, this means extremely low life cycle costs. The A-smoke40 filtration unit is designed for handling the most demanding applications, for air flows of up to  $4000 \, \text{m}^3 / \text{h}$ .

The Absolent filter unit offers a long useful life as well as consistently high collecting efficiency, thanks to its design and generous filter surface measuring either  $105.9 m^2$  (standard) or  $117.9 m^2$  (special requirements). Already after the second, self-draining Absolent filter, the particle level in the air is in most cases less than  $1.0 mg/m^3$ .

The A-smoke40 is equipped with a third filter stage, a so-called HEPA filter, which ensures a consistent collecting efficiency. Thanks to these three filter stages, the air can usually be returned to the premises. This means less loss of energy and more balanced ventilation in the premises.

### TECHNICAL SPECIFICATION

Model	A-smoke40
Max permissible air volume [m³/h]	4000
Sound level, 1m in front of filter unit <sup>1</sup> ) [dB(A)]	74
Weight (dry filters) [kg]	1000
Available dim. ext. pressure drop [Pa]	1000
Filter area, filter 1 (Absolent filter) [m²]	24 / 36
Filter area, filter 2 (Absolent filter) [m²]	25.5
Filter area, filter 3 (HEPA filter) [m²]	56.4
Fan Data	
Motor output [kW]	7.5
Rated current (3-Phase, 400V) [V]	13.8
Power supply [A]	380-420
Speed [rpm]	2900

<sup>1)</sup> Sound absorption in premises=200m², Hemispherical sound propagation.

### **OPERATION**

The filtering process occurs in three stages. The first and second stages consist of the self-draining Absolent filters, in which the filter material is adapted and mixed specifically for each application. The third stage consists of a HEPA filter, which has a guaranteed consistent collecting efficiency of at least 99.9% arresting  $0.3\mu m$  dia. particles.

Thanks to the unique design of the filter, the Absolent A-smoke filter can be operated continuously without unnecessary interruptions for draining. The return oil is collected at the bottom of the filter for recycling.

### **APPLICATIONS**

- Heat-treatment
- Cold-drawing
- Gear cutting
- Grinding with straight oil
- CNC turning with straight oil
- Forging operations and cold pressing

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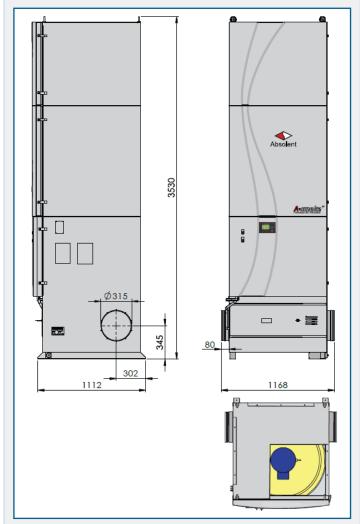
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# A-SMOKE20 DIMENSIONS



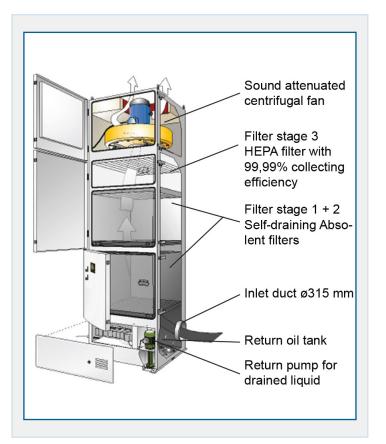
# Sound level<sup>1)</sup>, dB(A) 3m 2m 1m 1m 2m 3m 67 69 74 74 69 67 74 69 67

# STANDARD EQUIPMENT

- RAL 7035 fine structure (other colours on request!)
- Electronic manometer for reading the pressure drop across the filter cassettes.
- PLC-controlled return pump for drained liquid (not included in A-smoke40B)
- Fan starter
- Lifting lugs

# **ACCESSORIES**

- Alarm indication with LED for pump
- Frequency control of the fan
- Constant flow control
- Duct connections for various types of steel or plastic ductwork available on the market
- · Silencer, outlet
- Extension legs
- Water trap for various connections of the return oil pipe
- Outlet hood
- Spray system
- Special colour



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