

A-SMOKE20 OIL SMOKE FILTER



TECHNICAL SPECIFICATION

Model	A-smoke20
Max permissible air volume [m ³ /h]	2000
Sound level, 1m in front of filter unit ¹⁾ [dB(A)]	64
Weight (dry filters) [kg]	300
Available dim. ext. pressure drop [Pa]	430
Filter area, filter 1 (Absolent filter) [m ²]	11.4
Filter area, filter 2 (Absolent filter) [m ²]	13.6
Filter area, filter 3 (HEPA filter) [m ²]	20.4
Fan Data	
Motor output [kW]	2.2
Rated current (3-Phase, 400V) [V]	4.6
Power supply [A]	380-420
Speed [rpm]	2900

1) Sound absorption in premises=200m², Hemispherical sound propagation.

DESCRIPTION

The Absolent type A-smoke20 oil smoke filter features one of the most effective systems in the world for cleaning oil mist and oil smoke. The filter unit is to be placed adjacent to one or several machines. The A-smoke20 filter unit is designed for handling tough applications with air flows up to 2000m³/h.

Having the highest possible collecting efficiency, the filtered air becomes so clean that it usually can be returned to the premises. This means less loss of energy and a more balanced ventilation.

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.

Absolent filter units are extremely low maintenance and can usually run for at least one year without requiring a filter change. This results in a low total cost of ownership.

The fan, as the only moving component, is placed at the clean-side to minimize wear & tear. The unit has an extremely low noise level for agreeable working conditions.

OPERATION

The filtering process occurs in three stages. The process air passes first through a self-draining Absolent filter cassette. Here, the bigger part of the oil mist and smoke is arrested. When the filter is saturated, the liquid drops into the return oil tank. The air continues through another Absolent filter, where the rest of the bigger particles is arrested. The third stage consists of a HEPA filter, which has a guaranteed and consistent collecting efficiency of 99.99% arresting 0.3µm dia. particles.

Every filter stage has a pressure gauge that indicates when a filter change is necessary. Thanks to the continuous draining of the filter cassettes, the unit can be operated without interruptions. The return oil is collected at the bottom of the filter for recycling.

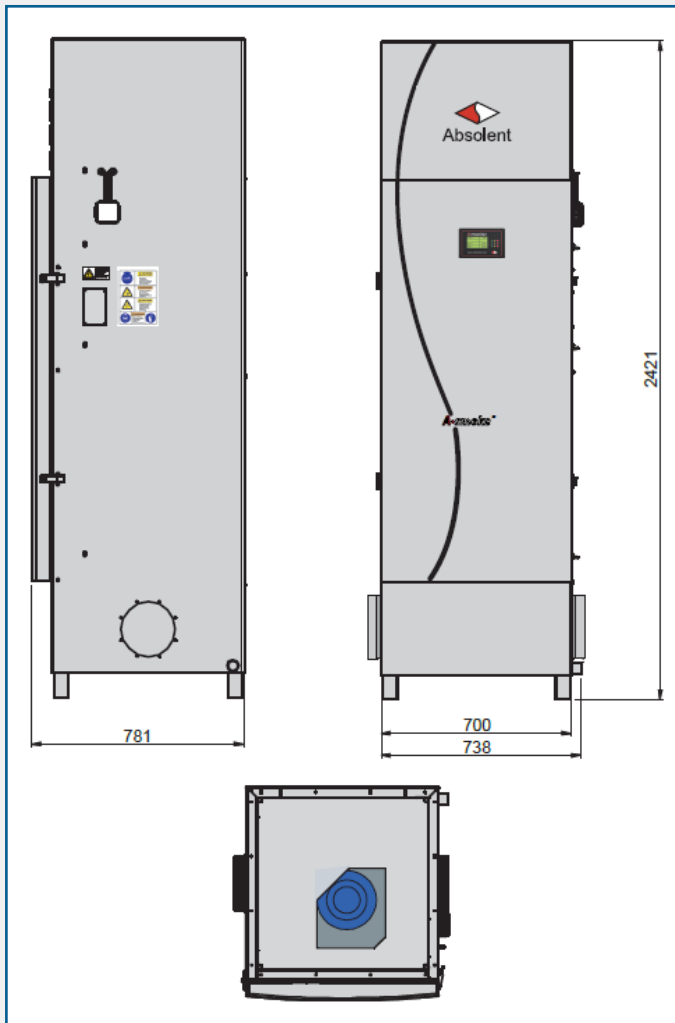
APPLICATIONS

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

AES OFFER INSTALLATION AND SERVICE SUPPORT FOR ALL EQUIPMENT

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A-SMOKE20 DIMENSIONS



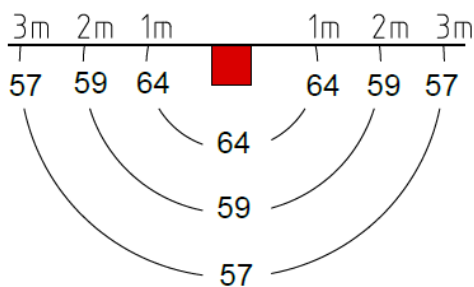
STANDARD EQUIPMENT

- RAL 7035 fine structure (other colours on request!)
- Pressure gauges for reading the pressure drop across the filter.

ACCESSORIES

- Motor starter for fan. Either a manual or protective motor contactor (for automatic or external starting)
- Outlet hood
- Carbon filter
- Duct connections for steel or plastic ductwork.
- Extension legs, (standard height 400 mm).
- Water trap for various connections of the return oil pipe.
- Pump unit for pumping the return oil from the filter.
- Sound insulation (-3 dB)
- Extra outlet silencers (-2 dB).
- Special colours

Sound level, dB(A)¹⁾



Sound attenuated centrifugal fan

HEPA filter with 99,99% collecting efficiency

Filter stage 2
Self-draining
Absolent filter

Filter stage 1
Self-draining
Absolent filter

Inlet duct \varnothing 200

Return oil tank

Return oil pipe for drained liquid (not shown)

