

Rev. 1 - October 2022



**Dust and Fume Extraction** 

# A-MIST S OIL SMOKE FILTERS



### DESCRIPTION

The Absolent type A-mist S Oil smoke filter features one of the most effective systems in the world for cleaning oil mist and oil smoke. The series includes A-mist10S and A-mist20HPS for air flows up to 500m<sup>3</sup>/h respectively 1000m<sup>3</sup>/h. The filter units are designed for handling moderate levels of oil smoke from for example turning or grinding.

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.

Absolent filter units are extremely low maintenance and can usually run for at least one year without requiring a filter change. Moreover, A-mist filter cassettes can usually be washed (does not apply for the HEPA filter. 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.

## TECHNICAL SPECIFICATION

Model	A-mist10S	A-mist20HPS
Max permissible air volume [m <sup>3</sup> /h]	500	1000
Sound level, 1m in front of filter unit <sup>1</sup> ) [dB(A)]	641)	721)
Weight (dry filters) [kg]	115	220
Available dim. ext. pressure drop [Pa]	< 50	500
Filter area, filter 1 (Absolent filter) [m <sup>2</sup> ]	6.5	5.1²)
Filter area, filter 2 (Absolent filter) [m²]	-	6.5²)
Filter area, filter 3 (HEPA filter) [m <sup>2</sup> ]	20.4	20.4
Fan Data		
Motor output [kW]	0.55	2.2
Rated current (3-Phase, 400V) [V]	380-420	380-420
Power supply [A]	1.35	4.6
Speed [rpm]	2800	2800

1) Sound absorption in premises=200m<sup>2</sup>, Hemispherical sound propagation.

2) The filter area varies for different applications.

### **OPERATION**

The filtering process occurs in two (A-mist10S) resp. three (A-mist20HPS) stages. The process air passes first through the self-draining Absolent filter cassettes. Here, approximately 95% of the oil mist and smoke is arrested. The last stage consists of a HEPA filter, which has a guaranteed and consistent collecting efficiency of 99.99% arresting 0.3  $\mu$ m dia. particles.

The filter unit has an electronic pressure gauge, A-monitor, which shows the pressure drop over the different filter stages and indicates when a filter cassette is to be changed. 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

- Cold-drawing
- Gear cutting
- Grinding with neat oil
- CNC turning with neat oil

## AES OFFER INSTALLATION AND SERVICE SUPPORT FOR ALL EQUIPMENT

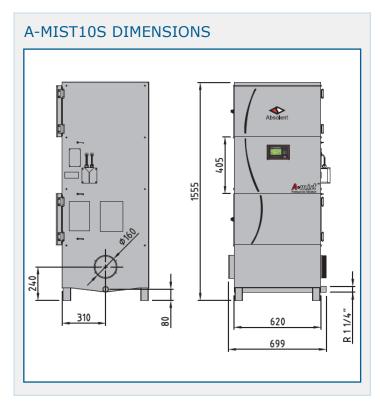


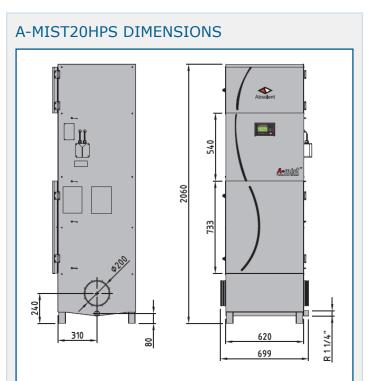
Datasheet Reference No: DF-AM02

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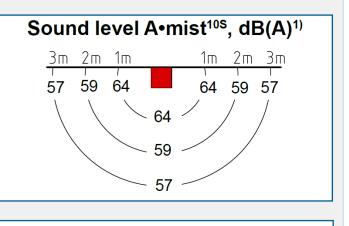


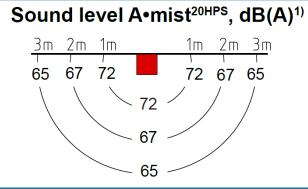
## STANDARD EQUIPMENT

- RAL 7035 fine structure (other colours on request!)
- 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

- 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 400mm.
- 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.





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