

### **Dust and Fume Extraction**

# A-MIST40/80TF CENTRALIZED OIL MIST FILTERS WITH FAN



#### **DESCRIPTION**

The Absolent type A-mist Oil mist filter features one of the most effective systems in the world for cleaning oil mist. The series of central filter units consists of parallel modules which are dimensioned after the needed air-flow. The advantages of central filters are a cheaper installation, easier service because of less service points and the possibility to lead the process air through a heat exchanger. Lead for example the process air outside during summer and back into the premises at winter time.

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.

#### TECHNICAL SPECIFICATION

Model	A-mist40TF	A-mist80TF
Max permissible air volume [m³/h]	4000	8000
Filter area, filter 1 (Absolent filter) <sup>2</sup> ) [m <sup>2</sup> ]	28.6²)	57.2²)
Filterarea filter 2 (Absolent filter) [m²]	25.6²)	51.2 <sup>2</sup> )
Filter area, filter 3 (HEPA filter) [m²]	40.8	81.6
Weight (dry filters) [kg]	350	730
Sound level, 1m in front of filter unit¹) [dB(A)]	70¹)	73¹)
Available dim. ext. pressure drop [Pa]	1400	1400
Fan Data		
Motor output [kW]	4.0	7.5
Power supply [V]	400	400
Rated current (3-Phase) [A]	7.7	14.1
Speed [rpm]	2870	2910

- 1) Sound absorption in premises=200m², Hemispherical sound propagation.
- 2) The filter area varies for different applications.

#### **OPERATION**

The filtering process occurs in three stages. The first and second stages consist of self-draining Absolent filter cassettes. The third stage consists of a HEPA-filter, which has a guaranteed and consistent collecting efficiency of 99.99% arresting 0.3µm 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**

- Grinding (cutting fluid emulsion)
- Turning (cutting fluid emulsion)
- Milling (cutting fluid emulsion)
- Electrical discharge machining
- Machining, using straight oil and moderate loads

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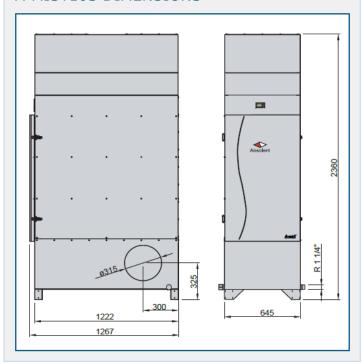
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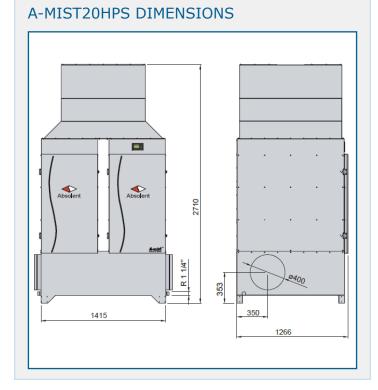


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#### A-MIST10S DIMENSIONS



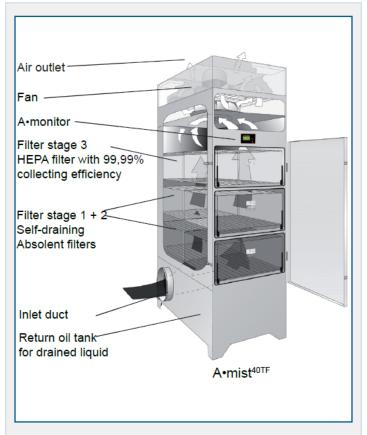


## STANDARD EQUIPMENT

- 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 for automatic or external starting)
- Frequency controll for the fan with constant flow control
- Outlet hood for channel interface ø400 resp. ø500
- 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
- Extra outlet silencer
- Special colours



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