A•mist¹⁰, A•mist²⁰ Oil Mist Filters

The Absolent type A•mist oil mist filter features one of the most effective systems in the world for cleaning oil mist. A•mist¹⁰ and A•mist²⁰ are available with different filter cassettes depending on the application and are designed for air flows up to 1000m³/h respectively 2000m³/h. The filter units are being placed adjacent to one or several machines. The A•mist²⁰HP version can even cope with longer duct lengths and thereby higher external pressure drops.

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.

Extremely low maintenance. Absolent filter units can usually run for at least one year without requiring a filter change. Moreover, A•mist filter cassettes can usually be washed.* This results in a low total cost of ownership.

A very reliable filter unit. The fan, as the only moving component, is placed at the clean-side to minimize wear & tear.

Extremely low noise level for agreeable working conditions.

*Does not apply for the HEPA filter.

Operation
The filtering process occurs in two (A•mist¹⁰) resp. three (A•mist²⁰HP) stages. The process air passes first through the self-draining Absolent filter cassettes. Here, approximately 90% of the oil mist is arrested. The last stage consists of a HEPA filter, which has a guaranteed and consistent collecting efficiency of 99.97% arresting 0.3 µm 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.

Range of Application
The Absolent A•mist is well suited for use in applications such as:
• Grinding (cutting fluid emulsion)
• Turning (cutting fluid emulsion)
• Milling (cutting fluid emulsion)
• Electrical discharge machining
• Machining, using straight oil and moderate loads

Functional design
The A•mist filter range has a highly robust tower design that occupies a minimum of floor space. Its hinged access doors make service still more convenient. The filter is supplied with a baked powder painted finish that adds colour to the shop floor.

Ongoing product development may subject our specifications to alteration without notice.
### Technical Data

<table>
<thead>
<tr>
<th></th>
<th>A•mist&lt;sup&gt;10&lt;/sup&gt;</th>
<th>A•mist&lt;sup&gt;20&lt;/sup&gt; / A•mist&lt;sup&gt;20HP&lt;/sup&gt;</th>
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<tbody>
<tr>
<td>Max permissible air volume [m³/h]</td>
<td>1000</td>
<td>2000</td>
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<tr>
<td>Sound level, 1m in front of filter unit&lt;sup&gt;1)&lt;/sup&gt; [dB(A)]</td>
<td>64&lt;sup&gt;1)&lt;/sup&gt;</td>
<td>70/72&lt;sup&gt;2)&lt;/sup&gt;</td>
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<tr>
<td>Weight (dry filters) [kg]</td>
<td>115</td>
<td>215/220</td>
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<tr>
<td>Available dim. ext. pressure drop [Pa]</td>
<td>&lt; 50</td>
<td>300/500</td>
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<tr>
<td>Filter area, filter 1 (Absolent filter) [m²]</td>
<td>12.8</td>
<td>14.3&lt;sup&gt;3)&lt;/sup&gt;</td>
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<tr>
<td>Filter area, filter 2 (Absolent filter) [m²]</td>
<td>-</td>
<td>12.8&lt;sup&gt;3)&lt;/sup&gt;</td>
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<tr>
<td>Filter area, filter 3 (HEPA filter) [m²]</td>
<td>20.4</td>
<td>20.4</td>
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**Fan Data**

- **Motor output [kW]**: 0.55 / 2.2
- **Power supply [V]**: 380-420 / 380-420
- **Rated current (3-Phase, 400V) [A]**: 1.35 / 4.6
- **Speed [rpm]**: 2800 / 2800

### Standard Equipment

- RAL 7035 fine structure SK3
- 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 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 A•mist<sup>10</sup>, dB(A)<sup>1)</sup>

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<th>1m</th>
<th>2m</th>
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### Sound Level A•mist<sup>20</sup>, dB(A)<sup>1)</sup>

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### Sound Level A•mist<sup>20HP</sup>, dB(A)<sup>1)</sup>

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**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.

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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.

2) The filter area varies for different applications.

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