A•smoke\(^{40}\) Oil Smoke Collector

The Absolent type A•smoke\(^{40}\) Oil smoke collector 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 cassette change. For Absolent customers, this means extremely low life cycle costs. The A•smoke\(^{40}\) collector unit is designed for handling the most demanding applications, for air flows of up to 2350 cfm.

All Absolent products offer a unique combination of long useful life and high collecting efficiency. The Absolent unit offers a long useful life as well as consistently high collecting efficiency, thanks to its design and generous filter surface measuring either 1140ft\(^2\) (standard) or 1269ft\(^2\) (special requirements). Already after the second, self-draining Absolent filter, the particle level in the air is in most cases less than 1.0mg/m\(^3\). The A•smoke\(^{40}\) 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.

**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 99.97% arresting 0.3 micron dia. particles. Thanks to the unique design of the collector, 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.

**Range of Application**

The Absolent A•smoke\(^{40}\) is well suited for use in applications such as:
- Heat-treatment
- Cold-drawing
- Gear cutting
- Grinding with straight oil
- CNC turning with straight oil
- Forging operations and cold pressing

**Design**

The A•smoke\(^{40}\) contains an electronic manometer, which shows the filter unit’s time of operation as well as the state of the filter cassettes. The unit has spacious doors for safe and easy service. The pump and control box are built-in and the filter unit is ready to start - just connect it electrically and to the air duct. That’s why we call it a “plug and play unit”.

Ongoing product development may subject our specifications to alteration without notice.
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 collecting efficiency.

Technical Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>A•smoke 40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max permissible air volume</td>
<td>[cfm]</td>
</tr>
<tr>
<td>Sound level, 1 m in front of unit(^1)</td>
<td>[dB(A)] 74</td>
</tr>
<tr>
<td>Weight (dry filters)</td>
<td>[lbs.] 2205</td>
</tr>
<tr>
<td>Available dim. ext. pressure drop</td>
<td>[in WC] 4.02</td>
</tr>
<tr>
<td>Filter area, stage 1 (Absolent filter)(^2)</td>
<td>[ft(^2)] 258 / 387</td>
</tr>
<tr>
<td>Filter area stage 2 (Absolent filter)</td>
<td>[ft(^2)] 275</td>
</tr>
<tr>
<td>Filter area, stage 3 (HEPA filter)</td>
<td>[ft(^2)] 607</td>
</tr>
</tbody>
</table>

Fan Data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor output</td>
<td>10.0 [hp]</td>
</tr>
<tr>
<td>Power supply</td>
<td>440-480 [V]</td>
</tr>
<tr>
<td>Rated current (3-Phase, 400V)</td>
<td>12.4 [A]</td>
</tr>
</tbody>
</table>

\(^1\) Sound absorption in premises=2153ft\(^2\), 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.

Electronic manometer

- Pressure drop and operation hour meters
- Optical indication of filter alarm (LED).
- Digital output signal for remote supervision.

Standard equipment

- Colour: RAL 7035 fine structure
- Other colours on request!
- Electronic manometer for reading the pressure drop across the filter cassettes.
- Fan starter
- Lifting lugs

Accessories

- PLC-controlled return pump for drained liquid
- 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
- Pressure monitor, for external alarm or alarm indications with LED
- Spray system
- Special colour

Sound level, dB(A)\(^1\)

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