Barrier Pre-Filter/Coalescer

Description
Specifically designed for the rigorous environments of gas turbine inlet applications, AmerShield pre-filters offer an outstanding combination of advanced pleating technology and coalescing performance in a rugged, high-impact frame.

Thermal embossed-pleat technology and intermittent beads of adhesive create the ideal surface geometry for smooth and even airflow, while the entire perimeter of the filter media pack is bonded to the plastic frame to ensure a positive seal. AmerShield optimized pleat spacing technique allows the filter media to load evenly throughout its depth and maintain a low resistance to airflow, while also serving to maximize filter life.

In addition, AmerShield's hydrophobic media allows free-running moisture to form large droplets on the intake side of the media, which then fall out of the airstream to the bottom of the filter.

Benefits
Low airflow resistance
AmerShield's advanced pleating design and optimized media area deliver the lowest possible resistance, increasing turbine output.

Longer filter life
The ideal pleat geometry of AmerShield facilitates full media utilization, long life, fewer filter change-outs and less downtime.

Coalescing media
The 100% synthetic, proprietary media is hydrophobic, allowing moisture to coalesce out of the airstream to protect final filters.

Lightweight
AmerShield is very lightweight, making removal and installation as easy as possible.

Rugged construction
The moisture-proof, high-impact plastic frame is designed for tough gas turbine intake environments.

Corrosion proof
AmerShield filters contain no metal components, preventing the corrosion that can add particulates to the airstream over time.

Product features
- Ideal pleat geometry for maximum service life and low cost of ownership
- Moisture-proof, thermally bonded synthetic media
- Very low airflow resistance for increased turbine output
- Completely incinerable and corrosion-proof
- Lightweight for easy removal and installation

Applications
- Coastal or high-moisture installations
AmerShield™
Performance Enhancement for Gas Turbines
| Advanced-Technology Pre-filters

Performance Specification Data

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
</table>
| Efficiency                            | G4 according to EN779:2012  
MERV 8 according to ASHRAE 52.2 - 2007 |
| Initial Pressure Drop                  | 70 Pa at 4280m³/Hr  
(0.28" WG @ 2520 cfm) |
| Dust Holding Capacity ISO Fine Dust   | 860 grams @ 375 Pa (1.5” WG) |
| Recommended Final Resistance          | 450 Pa (1.8” WG) |
| Temperature Range                     | -40°C to +65°C (-40°F to +149°F) |
| Humidity Range                        | 0 to 100% relative humidity |

CONSTRUCTION

<table>
<thead>
<tr>
<th>Component</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter Media</td>
<td>100% Synthetic</td>
</tr>
<tr>
<td>Frame Material</td>
<td>High-Impact Plastic</td>
</tr>
<tr>
<td>Adhesive</td>
<td>Foamed Hot Melt</td>
</tr>
<tr>
<td>Potting Blue</td>
<td>Polyurethane</td>
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<tr>
<td>Gasket</td>
<td>Closed Cell, Nitrile</td>
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DIMENSIONS

<table>
<thead>
<tr>
<th>Size</th>
<th>Width</th>
<th>Height</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>24&quot; x 24&quot; x 4&quot;</td>
<td>23-3/8” (594mm)</td>
<td>23-3/8” (594mm)</td>
<td>3-3/4” (95mm)</td>
</tr>
<tr>
<td>12&quot; x 24&quot; x 4&quot;</td>
<td>11-3/8” (298mm)</td>
<td>23-3/8” (594mm)</td>
<td>3-3/4” (95mm)</td>
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<tr>
<td>18&quot; x 24&quot; x 4&quot;</td>
<td>17-3/8” (441mm)</td>
<td>23-3/8” (594mm)</td>
<td>3-3/4” (95mm)</td>
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<tr>
<td>20&quot; x 24&quot; x 4&quot;</td>
<td>19-3/8” (492mm)</td>
<td>23-3/8” (594mm)</td>
<td>3-3/4” (95mm)</td>
</tr>
<tr>
<td>24&quot; x 24&quot; x 6&quot;**</td>
<td>23-3/8” (594mm)</td>
<td>23-3/8” (594mm)</td>
<td>5-7/8” (150mm)</td>
</tr>
</tbody>
</table>

*4” (Nominal) Deep Pack in 6” (Nominal) Deep Frame

Additional face dimensions, header and gasket options are available. Consult with an AAF representative.

SALES OFFICES:

Europe & North Africa

<table>
<thead>
<tr>
<th>Location</th>
<th>Address/Contact</th>
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</thead>
<tbody>
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U.S. Patent  
No. 6,685,833 B2

Residence Curve