# AmerShield™

#### Performance Enhancement for Gas Turbines

Advanced-Technology Pre-filters

## 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.



1 | Reduced Lifecycle Cost 2 | Lower Pressure Drop 3 Improved Fine Filter Protection

#### **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





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## Performance Specification Data

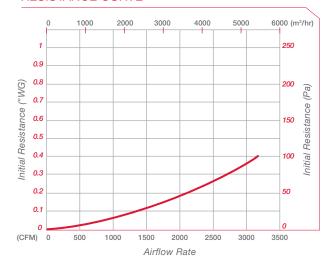
Efficiency G4 according to EN779:2012 MERV 8 according to ASHRAE 52.2 - 2007 Initial Pressure Drop 70 Pa at 4280m3/Hr (0.28" WG @ 2520 cfm) **Dust Holding Capacity** 860 grams @ 375 Pa (1.5" WG) ISO Fine Dust Recommended Final 450 Pa (1.8" WG) Resistance Temperature Range -40°C to +65°C (-40°F to +149°F)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

#### CONSTRUCTION

Filter Media	100% Synthetic		
Frame Material	High-Impact Plastic		
Adhesive	Foamed Hot Melt		
Potting	Polyurethane		
Gasket	Closed Cell, Nitrile		



#### RESISTANCE CURVE



#### **DIMENSIONS**

	24" x 24" x 4"	12" x 24" x 4"	18" x 24" x 4"	20" x 24" x 4"	24" x 24" x 6"*
Width	23-3/8" (594mm)	11-3/8" (298mm)	17-3/8" (441mm)	19-3/8" (492mm)	23-3/8" (594mm)
Height	23-3/8" (594mm)				
Depth	3-3/4" (95mm)	3-3/4" (95mm)	3-3/4" (95mm)	3-3/4" (95mm)	5-7/8" (150mm)

<sup>\*4&</sup>quot; (Nominal) Deep Pack in 6" (Nominal) Deep Frame

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



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