



BlueFil®

PHASE SEPARATION TECHNOLOGY
Catch Every Drop. Cut Every Cost.

PROTECTING INDUSTRY FROM H_2SO_4 ACID MIST

BlueFil® Demister Pads

Proven 99%+ H_2SO_4 Aerosol Removal

Tailor-made. Energy-efficient. Regulation-ready.

The Challenge:

Acid Mist in Industrial Gas Streams

Sulfuric acid aerosols in exhaust gases can cause:

- Severe corrosion of ducts, fans, and stacks
- Regulatory compliance risks due to fine droplet emissions
- Operational hazards for workers and downstream systems

Did You Know?

A single micron-sized H_2SO_4 droplet can corrode stainless steel in just a few hours. BlueFil® pads trap and drain these droplets before they reach your equipment.



The BlueFil® Solution

BlueFil® demister pads are engineered to capture and drain acid mist efficiently while maintaining low pressure drop.

Why BlueFil® Stands Out

- Modular design for easy installation
- Proven 99 %+ removal efficiency
- Acid-resistant materials for long service life
- Custom-fit for any vessel geometry



Client Success Story

In early 2022, a leading chemical processing facility in Germany faced high-temperature acid mist challenges in their scrubber system. BlueFil® engineers collaborated closely with the client to design a modular demister pad configuration, optimized for high gas velocities and aggressive H₂SO₄ aerosols.

Performance Snapshot

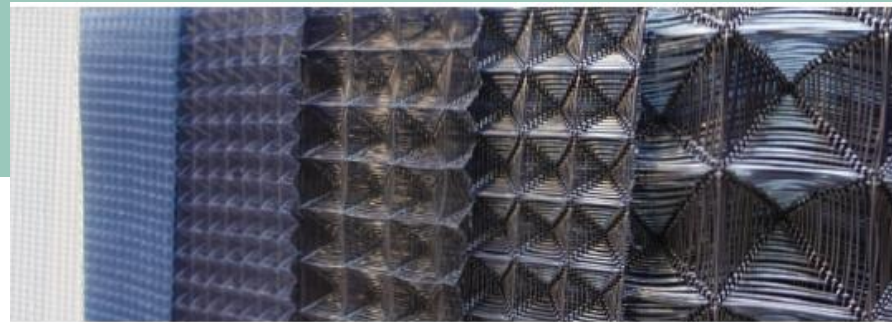
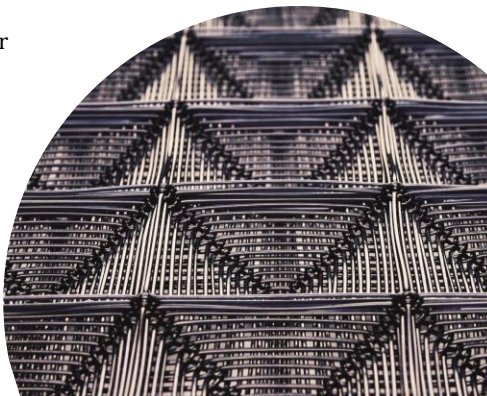
Droplet removal	≥ 99 % for > 2 µm
Pressure drop	13–16 mm W.C. (in vacuum condition)
Materials	PFA / ETFE
Temperature range	up to 160 °C
Gas flow	up to 90,000 Nm ³ /hr

Implementation Highlights

- Modular pad to fit through limited vessel openings
- Acid-resistant PFA / ETFE materials for durability
- Tailored layering to maximize fine droplet removal

Results

- Verified removal efficiency: 98–99 % for > 2 µm droplets
- Stable pressure drop: 13–16 mm W.C.
- Reduced corrosion rates downstream
- Easy installation & maintenance during shutdown
- Pressure drop maintained within design limits



Let's Solve Your Mist Challenges

Collaborate with our engineers to design tailored demister solutions for your plant.



fertilizer



chemicals



CCUS



metallurgical



water treatment



hydrogen



semiconductors



chrome plating

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