GESSNER | a Mativ Brand

PFAS FILTER MEDIA
multilayer media for pleated & wrapped filter design

Traditionally, PFAS filtration has only been possible with the use of carbon block, resins or distillation, which limits design flexibility and more important filtration efficiency.

Our PFAS filter media is engineered to deliver exceptional performance in water filtration systems, with a pleated or wrapped filter design, combining four layers of innovation in one self-supported structure.

Multilayer filter media for highest efficiencies

Our multi-layer nylon composite with activated carbon is engineered for highest filtration efficiency (> 70-99%) and PFAS removal. Its self-supported structure enables defined geometry in pleated filters, making it ideal for pre-filter applications.

1. **Layer:** Meltblown for particle filtration and PFAS capture
2. **Layer:** Spunbond scrim supports and protects carbon
3. **Layer:** Carbon-coated meltblown is the primary PFAS adsorption layer, optimized for targeted removal and high efficiency.
4. **Layer:** Carbon-integrated spunbond scrim provides strength for pleatability and contributes to PFAS capture.

Complementary filtration mechanisms

Our media integrates three complementary filtration mechanisms to maximize PFAS removal and protect downstream systems:

- **Size Exclusion:** The nylon layers act as a physical barrier, trapping larger particles and sediments.
- **Adsorption:** The carbon-coated nylon layer captures PFAS molecules by leveraging hydrogen bonding and hydrophobicity, ensuring targeted removal of these persistent contaminants.
- **Absorption:** Additional surface area provided by meltblown structures enhances contaminant capture, leaving maximum carbon surface area dedicated to PFAS adsorption.

Benefits

- Design flexibility - for pleated and wrapped filter design
- Self-supported, multilayer media
- Cost-effective - less carbon & resin for same performance
- Filtration efficiency >70% up to 99%
- Extended service life
- Fewer change-outs - used as pre-filter increases filter lifetime by > 40%
- Structural robustness
- Complementary filtration mechanism for maximized PFAS removal
- Customizable to individual requirements

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