

Fact Sheet

High-Flow ePTFE BHA® Preveil® Membrane Technology

Unmatched High-Flow Product

Parker Hannifin unique High-Flow membrane technology increases permeability without increasing the pore size (when compared to conventional ePTFE products). Previously, increased permeability could only be achieved by increasing the pore size of the membrane. Applying a membrane with a larger average pore size in the long-term will allow finer/sub-micron particulate to penetrate the membrane and block airflow.

Parker Hannifin achieves the combination of higher airflow without changing the pore size through a combination of advances in membrane expansion (stretching), sintering, and lamination. The result is a more uniform ratio of nodes to fibrils, referred to as the aspect ratio.

A scanning electron microscope (SEM) reveals the pore structure of the two membranes. The nodes are the thick solid areas of the membrane. The fibrils are the thin strands between the nodes, which trap the particulate but allow airflow to pass. The nodes, due to their solid nature, restrict airflow.

High-Flow Technology Attributes

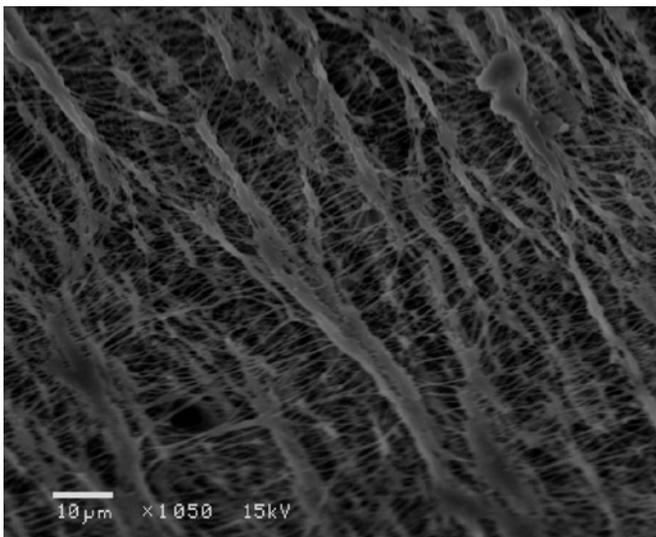
- Higher percentage of fibrils
- Smaller nodes
- Up to 50% higher air permeability
- Same efficiency
- Currently available as QG098 - PTFE Finish and QG132 - Acid Resistant Finish for Reverse Air applications

Environmental Requirements

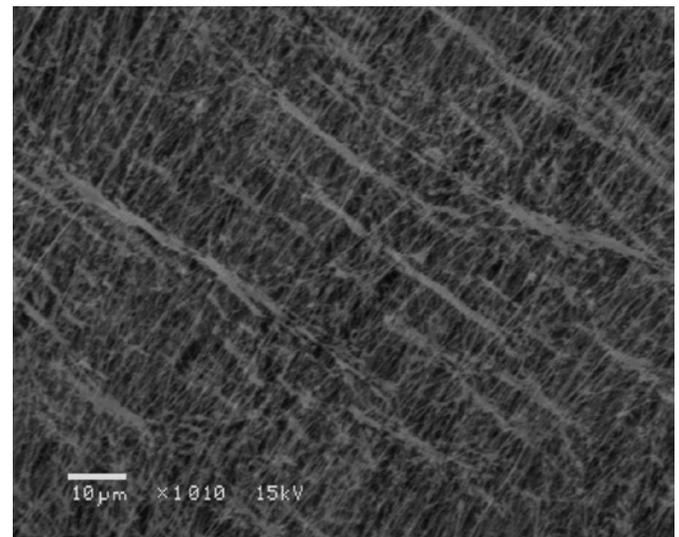
The application of Parker Hannifin ePTFE membranes provides for enhanced collection efficiencies capable of meeting PM2.5 regulations. It operates at a more consistent pressure-drop over the life of the filters due to its ability to readily clean down under normal reverse air-cleaning pressures.

The Parker Hannifin Difference

Parker Hannifin manufactures its own ePTFE membrane (Preveil®) and laminates the membrane to the filtration surface of the base media. In addition, Parker Hannifin manufactures and constructs the finished filters ready for installation. All plants are ISO 9001:2000 certified.



A conventional membrane has larger nodes and fewer fibrils.



High-Flow membrane has smaller nodes and more fibrils.

