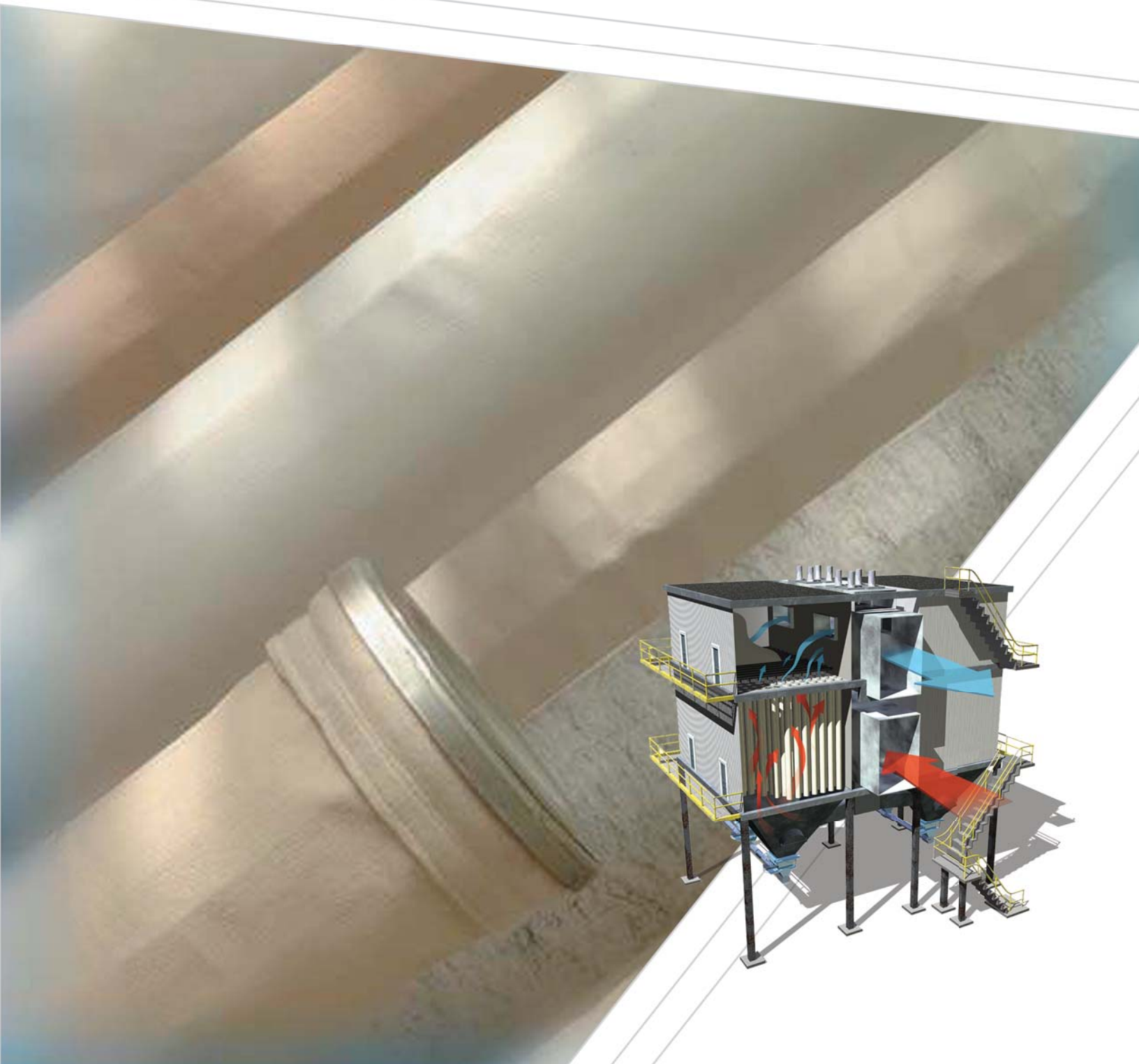




Gore® Filtration Products

*Proven To Optimize
System Performance*





Gore® Filtration Products

**Proven To Optimize
System Performance**

A total system approach to optimize the efficiency of your air filtration system.



Proven Performance

W. L. Gore and Associates, Inc. (Gore) is the inventor of expanded polytetrafluoroethylene (ePTFE) membrane, and was the first to apply it to industrial filters. Gore has introduced literally thousands of ePTFE based products, and is now considered to be a world expert in ePTFE technology. As a result, our products have been applied in literally every type of filtration system known. On any given day there are over 1,000,000 Gore® membrane filters in use globally, some lasting longer than 10 years! We can think of no better way to illustrate the proven reliability and universal acceptance of GORE® Filtration Products.

Optimized Solutions

The GORE® Filtration Products team will help you solve your most difficult filtration problems and obtain the highest performance from your new or existing baghouse. We achieve this by simultaneously optimizing your filters and your filtration system. You receive a comprehensive package of system evaluations, design support, and installation services, as well as an extensive line of innovative membrane filters. We also offer you a choice of risk-reducing warranties, fully backed by an international support team. GORE® Filtration Products are the lowest risk way to optimize any industrial air filtration system.



1973	1975	1978	1983	1984	1986	1991	1992	1994	1996	1998	1998	2000	2002	2002
Invented ePTFE membrane filtration	First to introduce ePTFE filters for pulse jet use	First to introduce ePTFE membrane fiberglass filter bags	First to introduce an ePTFE membrane cartridge	First to introduce woven fabric with ePTFE membrane	First to introduce lightweight membrane cartridge	First to introduce ePTFE felt filter bags with ePTFE membrane	First to introduce anti-static filter bags with ePTFE membrane	First to introduce ePTFE filter offering over 1,000,000 MIT flex cycles	First to introduce rigid body filters with ePTFE membrane	First to introduce acid-resistant aramid filter bags for high humidity applications	First to introduce reactive media for destruction of dioxin and furans	First to introduce high durability & high flow membrane filter bags	First to develop selectively bonded membrane filter bags	First to develop an ADVANCED HYBRID™ Filter

A long history of innovation!



Gore® Filtration Products

Proven To Optimize System Performance

We minimize risk by optimizing the entire collector, not just the filters.

Complete System Analysis

On-Site Troubleshooting

Right from the beginning we work to understand your system needs. Filtration engineers will evaluate every aspect of your baghouse and provide detailed feedback and suggestions for reaching optimal performance.

In-House Filter Bag and Cartridge Design

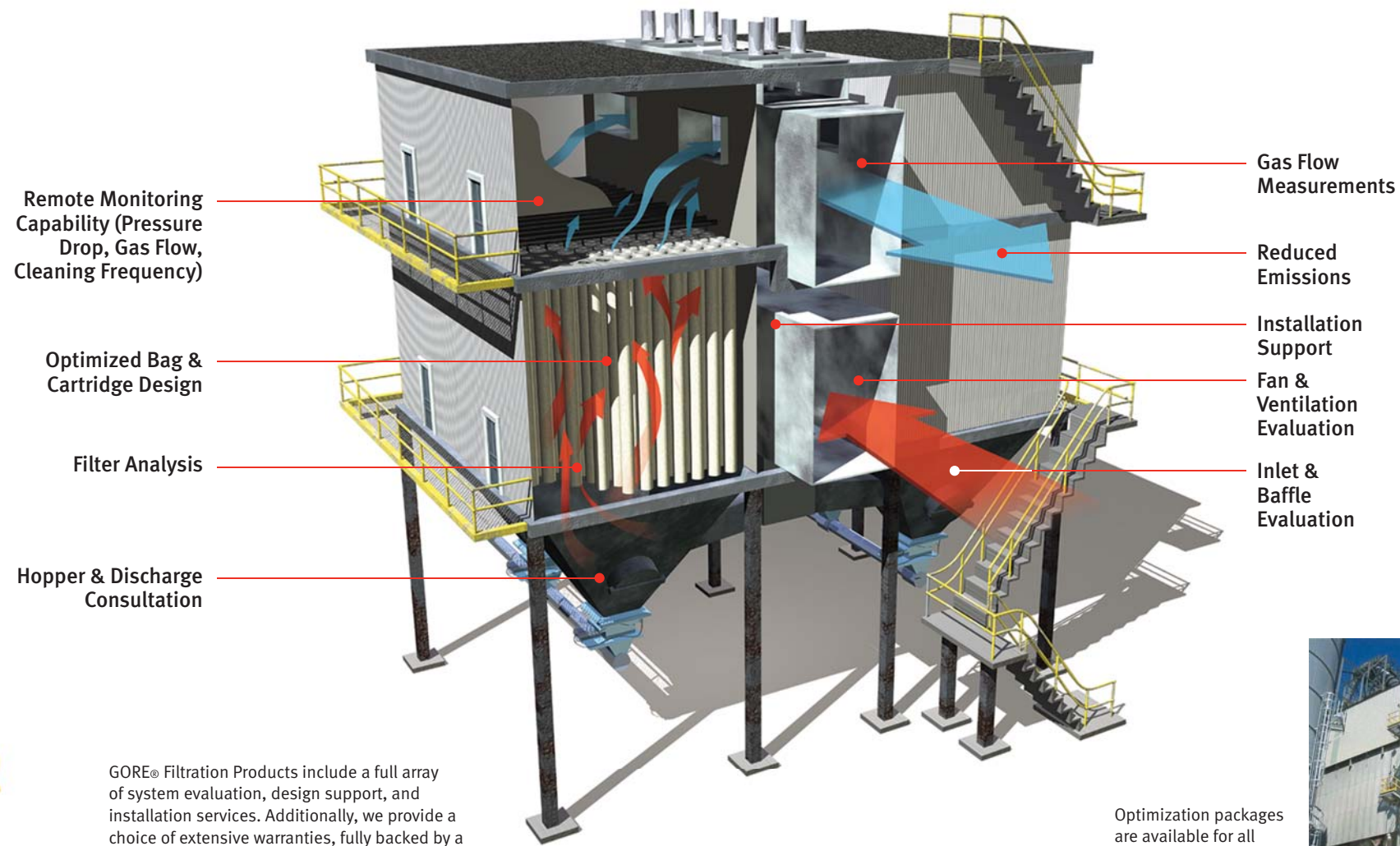
Our extensive filtration expertise is available to help you choose the right material and filter configuration that exactly matches your baghouse's characteristics. This ensures that the correct filter is in place right from start-up.

Fully Functional Prototypes

Gore's prototyping shops provide run-ready filters of preliminary test designs. We efficiently produce high quality, small quantity runs that keep your trial costs down without sacrificing accuracy.

On-Site Installation Support

Thorough installation instructions are included with each shipment. Gore installation experts can also be on-site to provide guidance and ensure that the filters are properly installed. This facilitates quick start-ups and eliminates downtime associated with improper installation. GORE® Filtration Products include a full array of system evaluation, design support, and installation services. Additionally, we provide a choice of extensive warranties, fully backed by a global support team. Optimization packages are available for all major baghouses.



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Automated Data Collection and Analysis

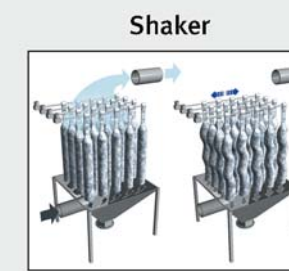
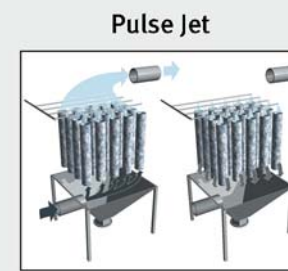
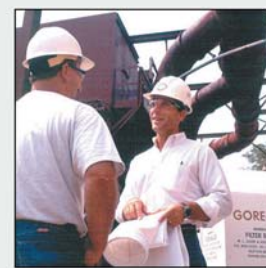
Once suggested changes are in place, we can provide automated monitoring and data collection. This data will be used to analyze system performance and refine settings for optimized productivity.

Long-Term Optimization

We stay in touch with you throughout the life of your filter. The full depth of resources from the world's leading filter innovator will be available to keep your filtration system up and running to maximize productivity.

Comprehensive Warranties

Our warranties can be customized to your exact application needs, and can range from months to years. They can protect you from mechanical failures, loss of airflow, pressure drop, or emissions problems. We give you the most cost-effective warranty solution for your application. This ensures that maximum return on every dollar of investment is achieved when using GORE® Filtration Products.





Gore® Filtration Products

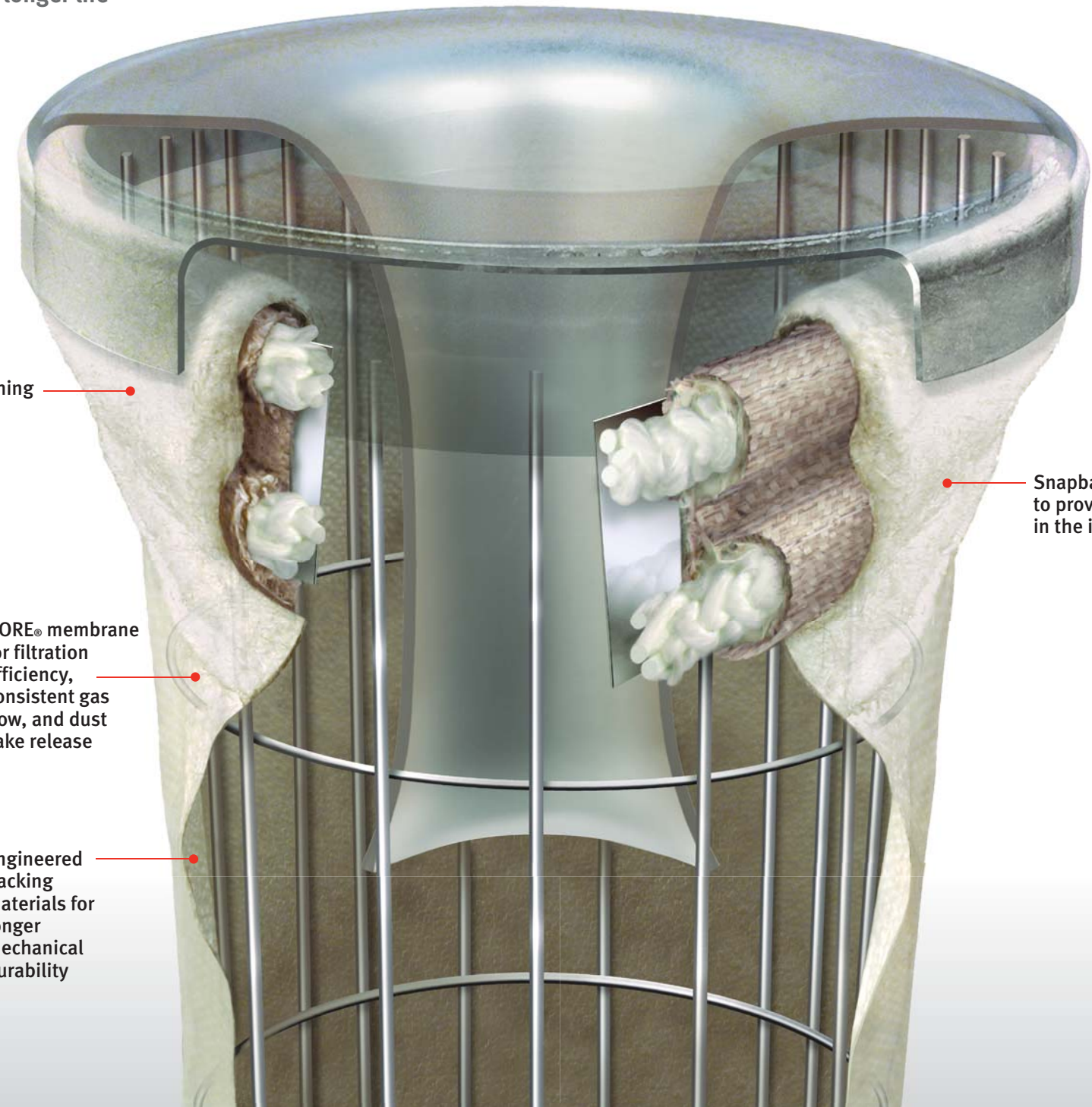
Proven To Optimize System Performance

Maximum productivity through the advancement of membrane and filter construction.

The Most Advanced Membranes and Filter Construction

GORE® Filtration Products provide a comprehensive solution to your air filtration needs. One critical component of that solution is the expanded PTFE membrane. To keep your system optimized we are constantly improving the performance of our membranes. Each new generation directly leads to increases in productivity. A wide variety of GORE® membranes and specially developed backing materials are available. These choices, and a rigorous filter construction process, let you get the highest performance from your filter.

Individually designed bags for better fit and longer life

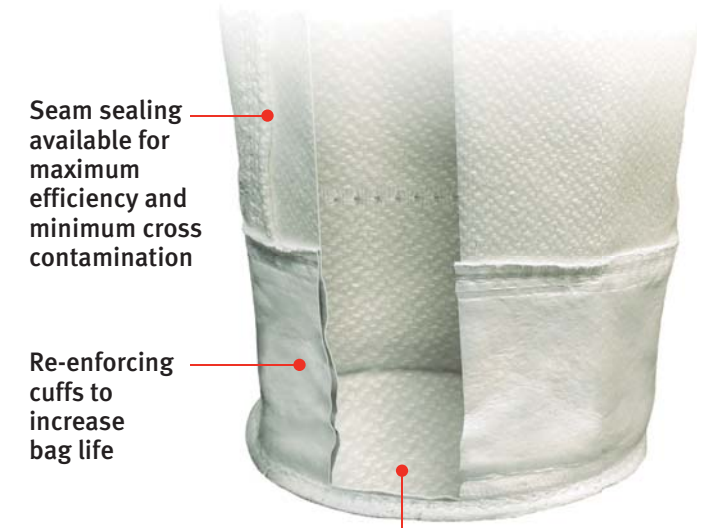


High quality stitching and seam design minimize leakage

Snapbands sized to provide best fit in the industry

GORE® membrane for filtration efficiency, consistent gas flow, and dust cake release

Engineered backing materials for longer mechanical durability

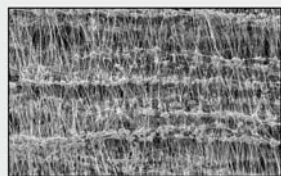


Seam sealing available for maximum efficiency and minimum cross contamination

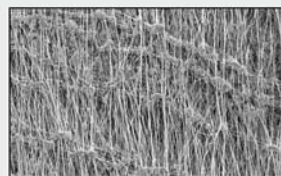
Re-enforcing cuffs to increase bag life

Double Layer bottom for increased durability

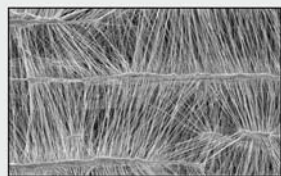
A Variety of Innovative Membranes for Your Exact Needs!



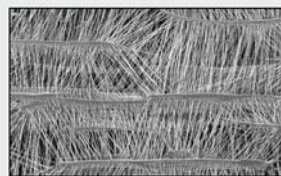
GORE® traditional membrane for versatility



GORE® membrane for rugged environments

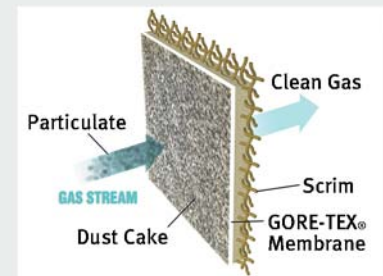


GORE® membrane optimized for both airflow and durability

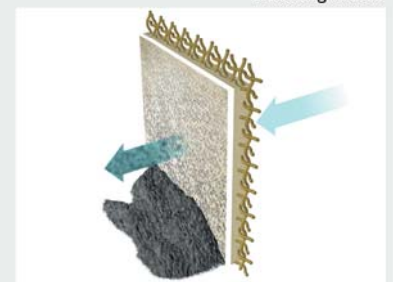


GORE® membrane optimized for both durability and efficiency

Membrane Filtration



Filtering Mode



Cleaning Mode



Gore® Filtration Products

Proven To Optimize System Performance

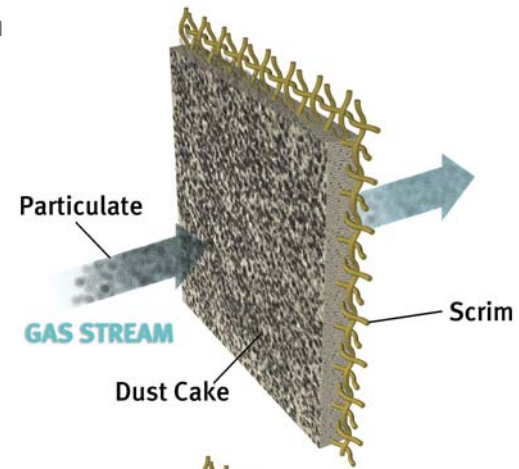
Gore® Membrane Technology vs. Non-Membrane Media

Longer Bag Life, Lower Emissions Rates, Lower Pressure Drops, Better Gas Throughput.

Non-Membrane Depth Filtration

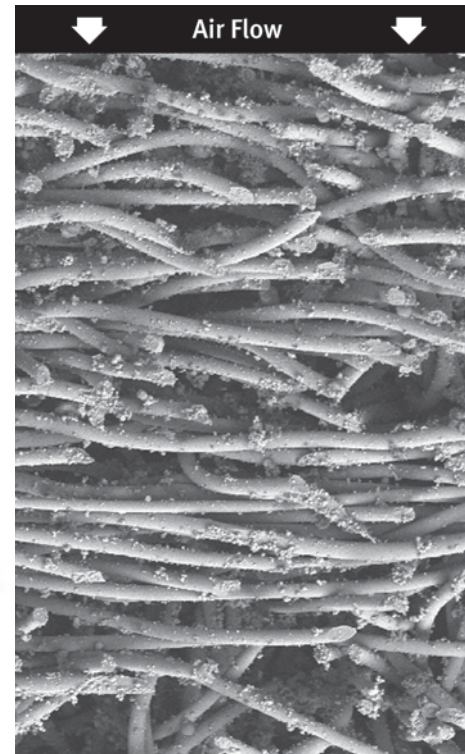
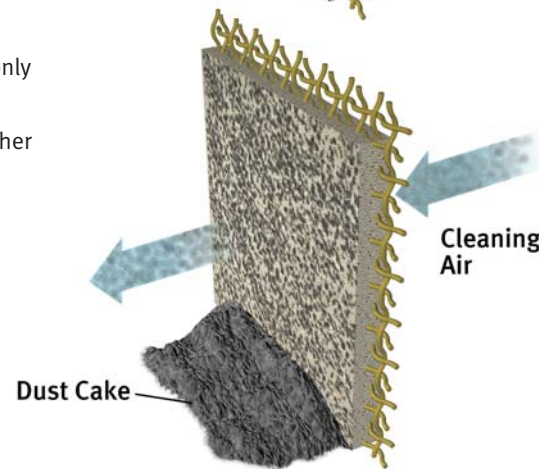
Filtering Mode

1. Dust is filtered inside of filter media
2. Internal dust cake buildup required
3. Particles enter into filter media and can pass through
4. Might not filter finest particles
5. Efficiency requires careful balance between filter, particulate, and system conditions



Cleaning Mode

1. Difficult to remove internal particles, only surface dust cake is removed
2. Dust deep inside media can cause higher Dp and blinding with time
3. Dust buildup inside media can lead to emissions after cleaning

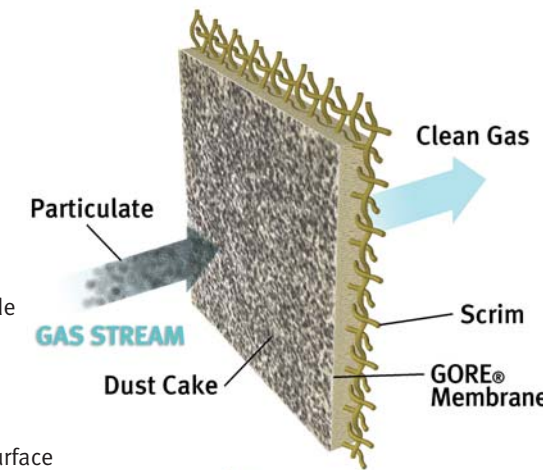


Non-membrane filter lets dust get inside filter media reducing cleanability and increasing pressure drop.

Membrane Surface Filtration

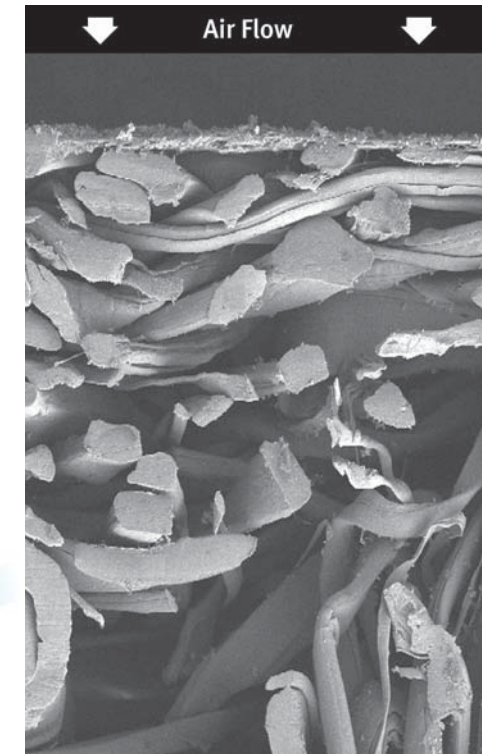
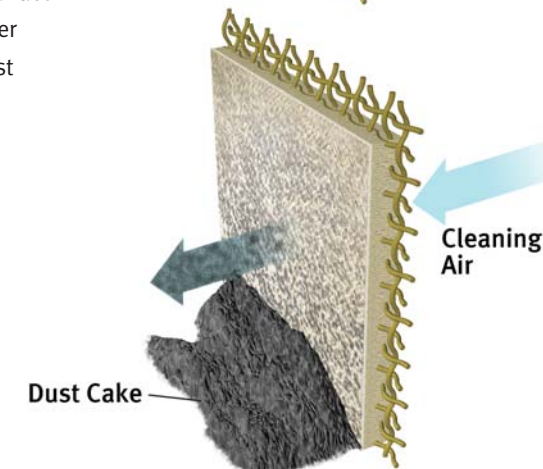
Filtering Mode

1. Dust filtered at membrane surface
2. No dust cake buildup required
3. No particles enter backer
4. Capable of submicron filtration
5. Maintains capture efficiency over wide range of system conditions



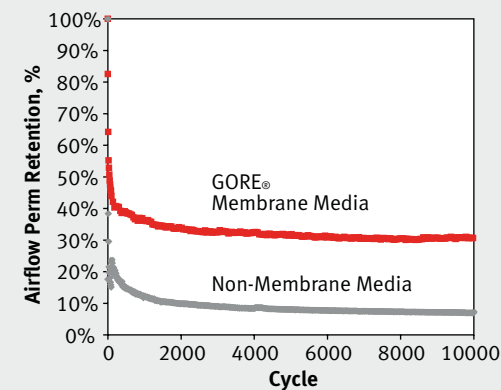
Cleaning Mode

1. Almost all dust falls off membrane surface
2. Particles do not build up inside backer
3. Surface is hydrophobic, even wet dust cakes can still be handled

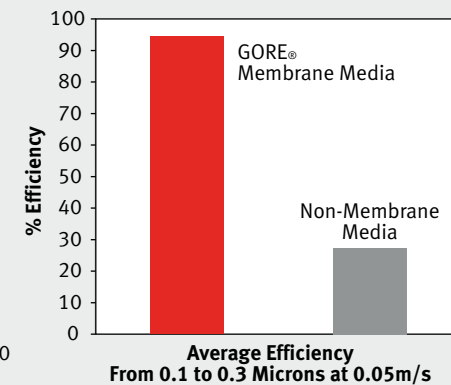


Membrane laminate keeps dust on surface for easier cleaning and low Dp.

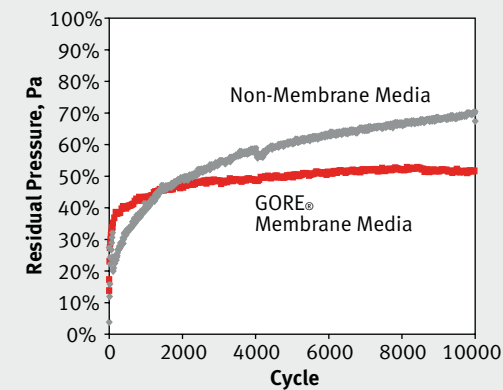
Better Gas Throughput



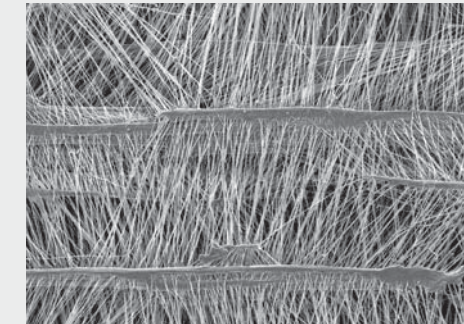
Lower Emissions



Lower Pressure Drops



Membrane



Surface Filtration

Uniform membrane structure allows higher efficiency

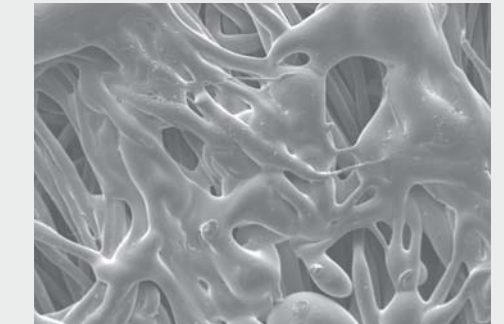
Non-Membrane



Depth Filtration

Open structure lets dust and smaller particles pass through

Microfiber (Glazed)



Depth Filtration

Dust still penetrates into backer and is trapped



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Optimizing Systems Across All Industries!

Emissions control or product collection... GORE® Filtration Products improve the efficiency of any application.



Organic and Inorganic Chemicals Most Durable. Highest Production.

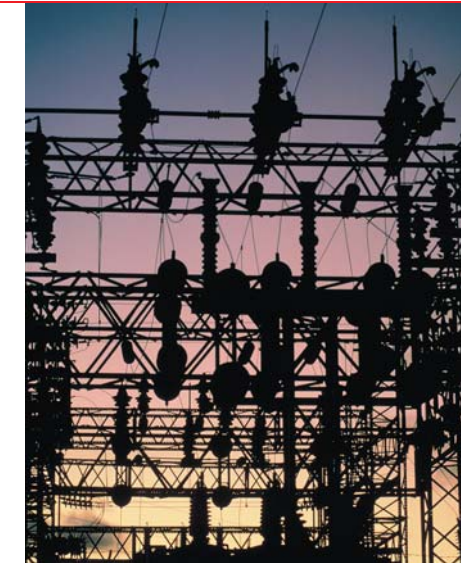
Gore introduced membrane filtration to the Chemical Processing Industry nearly 30 years ago. Since then, successive generations of membrane enhancements have allowed Gore® Filtration Products to consistently offer unmatched product collection with consistent performance durability. Whether you are producing submicron pharmaceutical powders, fertilizers, catalysts, plastic resins, or the latest generation of pigments, we have a product that is optimized for your needs.

Applications Include:
Carbon Black, Pharmaceuticals, Dairy, TiO₂, Silica, and Plastics

Incineration, Process Steam, and Power Generation Proven Record. Reduced Operating Costs.

Through experience in more than 200 combustion system baghouses throughout the world, we have gained extensive knowledge of how Gore® Filtration Products can improve performance in boiler and incineration systems. Whether your steam flow is being limited by system pressure drop or you are derated for emission problems, Gore has a proven record of solving system problems and reducing operating costs.

Applications Include:
Coal, Wood, Bio-fuel, Tires, Municipal, Hazardous, and Medical Waste



Cement, Lime, and other Minerals Highest Airflow. Lowest Risk.

GORE® Filtration Products are installed in over 150 kiln baghouses around the world. This experience has given us intimate knowledge of what can be expected from new or existing applications. Whether you use conventional or alternative fuels, Gore's proven experience can help improve dust collection or reduce energy costs.

Applications Include:
Kilns/exhaust, Alkali Bypass, Finish Mills, Separators, Raw Mills, and Coal/coke Mills



Steel, Lead, and Other Metals Highest Capacity. Most Cost-Effective.

Gore has nearly 30 years of experience in developing high performance air filtration products for the Metals Processing Market. We offer creative filtration solutions and hands-on consultation that result in the lowest risk strategies for optimizing fume control in electric arc and other furnace types. GORE® Filtration Products address needs at all steps of your process, resulting in increased furnace productivity and/or cost savings in the operation of the pollution control system.

Applications Include:
Electric Arc, Submerged Arc, And Other Pyrometallurgical Furnaces, Metal Recovery Operations, and General Nuisance Operations





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An extensive line of filtration products continues to grow!

Many Generations of Innovation

Along with extensive service and design support, GORE® Filtration Products also include an extensive array of membrane and backing material developments. Dozens of variations of membrane and backing material types allow us to customize the exact solution for your application. Our traditional line of laminates can handle most any situation. For extra-challenging needs or problem baghouses, we offer our newest developments, GORE® High Durability and GORE® High Flow Filters. Specialty filters are also available for anti-static, high humidity, high temperature, and many other demanding applications.

High Durability Longer Life

A tougher ePTFE membrane on our new Gore® High Durability Filters significantly improves the useful life of the filter and enhances its product capture, even at submicron particle sizes. It allows a consistently low differential pressure, and reliable productivity.

High Flow More Production

GORE® High Flow Filters employ the latest airflow and durability enhancements. They provide much higher airflow capability, or a cost saving reduction in fan energy, and can be used with conventional or alternative fuels.



GORE® Filter Bags, Cartridges and Rigid Filters



Features

- Superior Filtration Efficiency
- Excellent Dust Cake Release
- Less Downtime
- Optimized System Performance

Benefits

- Meet/Exceed Emissions Targets
- Improved Upset Recoverability
- Higher Productivity
- Improved Capacity Utilization

Applications

- Chemical Processing
- Iron and Steel
- Cement
- Incineration
- Power Generation
- Ferro-Alloy



GORE® High Durability Filter Bags and Cartridges



Features

- High Strength Membrane
- Engineered Backing Materials
- Dimensional Stability
- Consistent Airflow

Benefits

- Longer Life
- Reduced Downtime Risk
- Reliable Performance
- Improved Product Capture

Applications

- Iron and Steel
- Paint and Pigments
- TiO₂
- Carbon Black
- Pharmaceuticals
- Lead



GORE® High Flow Filter Bags



Features

- High Flow Membrane
- Lower Pressure Drop
- Durability
- Lower Filter Drag

Benefits

- Enhanced Dust Collection
- Lower Energy Costs
- Consistent Performance
- Longer Bag Life
- Improved System Productivity

Applications

- Cement Finish Mill/Separator
- Kiln
- Kiln with Alkali Bypass
- In-Line Raw Mill
- Ferro-Alloy
- Metal Concentrates



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Worldwide Sales and Support

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