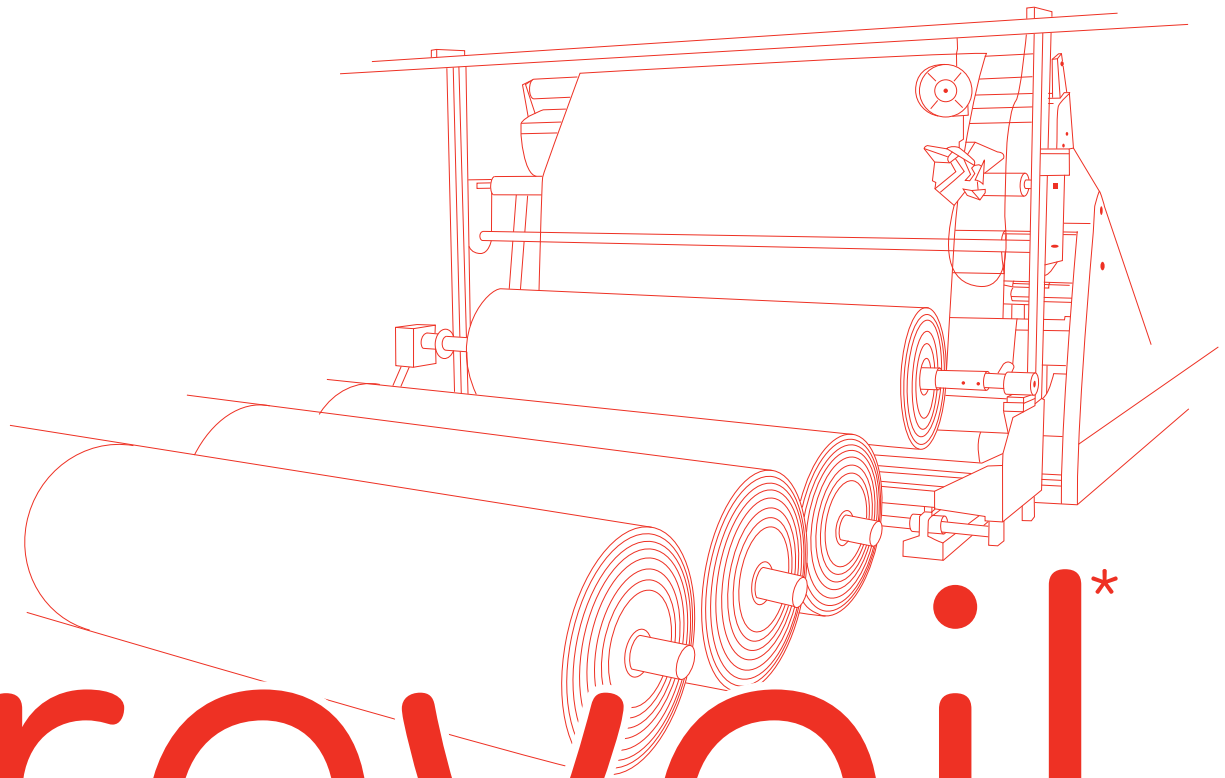


GE Energy



# Preveil\*

ePTFE Filtration Media for Air Pollution Control



imagination at work

a product of  
**ecomagination**

At GE, we are motivated daily by a common belief: what we imagine...we can make happen. For over 40 years, **GE Energy's Filtration Technologies** team has been putting that imagination to work helping companies just like yours improve their operating performance with the best we have to offer in cleanable filtration media.

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Whether you are a small company servicing niche markets or a larger company needing inventory services, we deliver quick, cost-effective products that are widely used in many pulse-jet and reverse air baghouse applications. And we are here for you beyond the sale to ensure that you are satisfied.

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The foundation of our portfolio is Preveil Air Pollution Control (APC) media. Preveil filter media provides the solutions your customers are seeking to help reduce energy costs, increase production, and meet or exceed increasingly stringent environmental emissions requirements.

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You can count on GE Energy to deliver what you need, where you need it, when you need it. And that's not just a promise. It's the promise of something better.

# The products you need, when you need them.

GE Energy works with you to keep your buying costs as low as possible. So whether you're looking for competitive pricing, or simply need a product now, our global order management and fulfillment teams can handle it.



## Incredible Responsiveness

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When timelines are short and expectations high, it's great to have an experienced, responsive partner. That's why GE Energy offers a one-day quote turnaround time, follow-up delivery confirmation, and a 24-hour customer support hotline **(1-800-821-2222)** for handling unplanned plant outages and rush orders. Plus, our inventory system features core products frequently used in baghouse applications, so the right products are in stock to ensure on time delivery and shortened lead times for our customers.

## Product Support

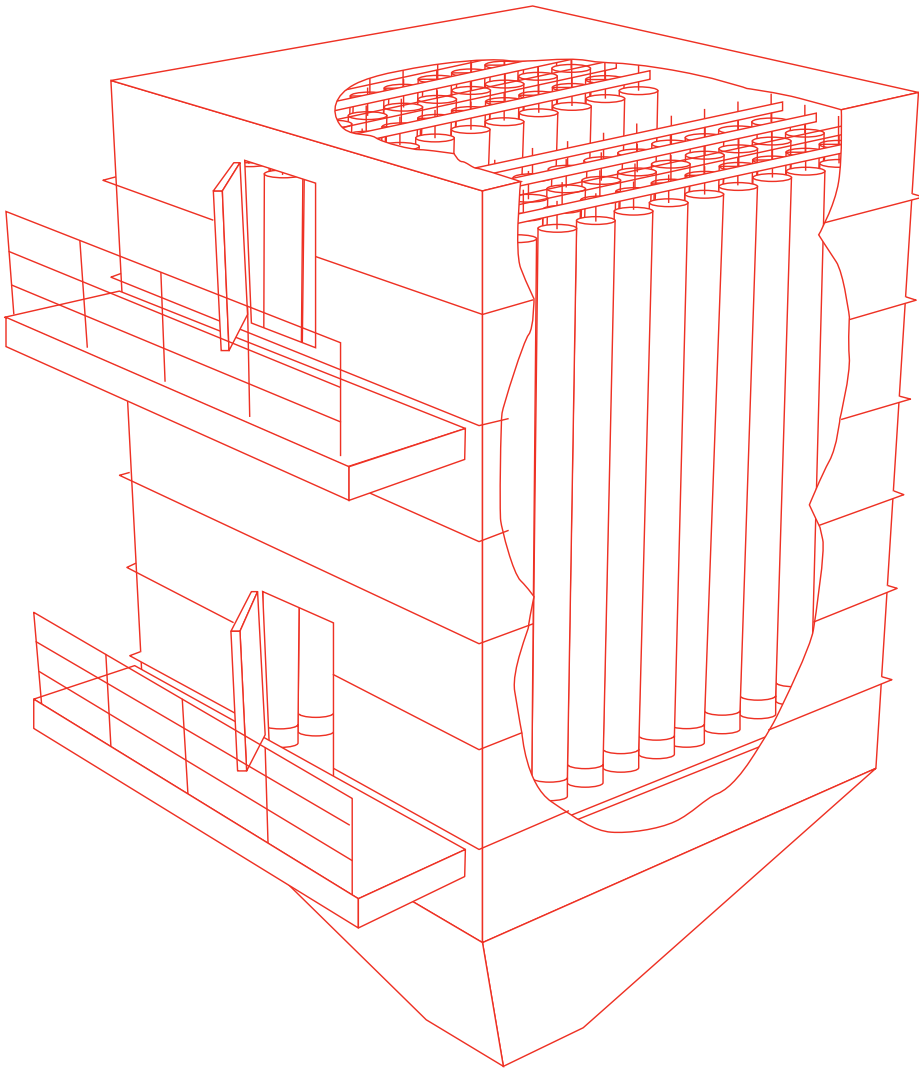
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At GE, we understand that great products need great product support. Our dedicated sales and service teams offer fast and convenient responses to your most commonly encountered application questions. We make sure we help you select the right product for where it's needed, including cement, power and other industrial processes.

*– Jeff Ladwig, Preveil Product Line Leader  
Specialist in ePTFE laminates for filtration*

“Our customers have many different pain points. It’s my goal to continually improve our processes and our products so that we can address these needs with high-performing, cost-effective solutions.”

– Karmin Olson, Preveil Engineer  
Filtration Technologies



GE Energy can design inventory systems around frequently used baghouse products, so the products you need are available and can be delivered on time.

## Innovative Textile Technology

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Our dedicated team of scientists and engineers works closely with global textile suppliers to develop unique base media tailored for specific applications, while our own manufacturing facilities extrude ePTFE into high-quality micro-porous membranes. Our knowledge of textiles and membrane manufacturing has led to improved thermal lamination, increased media performance and numerous patents.

## Quality

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GE Energy is one of only a handful of organizations globally that offer testing capability, **ASTM D6830-02** and **VDI/DIN-3926**. With these rigorous tests, we can prove that our membrane laminates are capable of meeting or exceeding today’s emissions requirements. We also develop and apply other rigorous internal test protocols with quality control processes to ensure our products meet your expectations. As a global supplier of ePTFE products, we are ISO 9001-2000 certified and employ independent laboratories to perform third-party validation testing.

## Performance Guarantees

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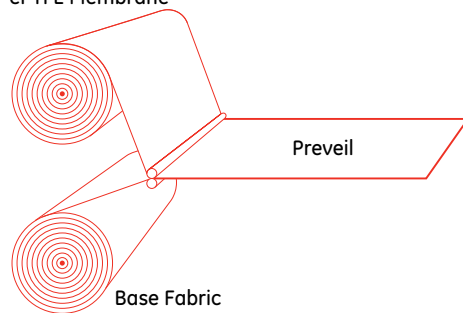
Filter media selection is one of the most critical factors to optimizing fabric filter performance. Preveil membrane laminates can help extend the life of the products you deliver to your customers. For added peace of mind, we offer performance guarantees on select Preveil membrane laminates for qualified applications.

# Not all membranes are created equal.



It's not just the quality of the membranes we make that sets us apart. It's what we do to them. Using our core competencies in membrane extrusion, lamination and finishing treatments, we design Preveil membrane laminates for Air Pollution Control Filtration Bags to improve filtration efficiency and operate at consistently low differential pressures. This helps reduce replacement and energy costs, extends product lifetime, and reduces particulate emissions across a wide range of applications.

ePTFE Membrane



## Lamination

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Preveil ePTFE membranes are thermally laminated to a variety of base filter media, including woven fiberglass and synthetic needlefelt fibers. **To achieve optimal application performance, selecting the right base media can be just as important as the membrane.** Lamination requires exacting skill and care, and if not performed properly can lead to premature filter bag failure. We help avoid premature failure with patent-protected technology and innovative lamination processes which ensures strong adhesion of the membrane to the base media.

## Membrane Extrusion

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Preveil membranes are made by expanding PTFE resin into a three-dimensional, micro-porous, web-like structure called ePTFE membrane. When ePTFE membranes are not extruded properly, they don't have strength and durability to withstand harsh operating environments and they can easily tear or develop defects, resulting in decreased performance.

## Finishing Treatments

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Our fiberglass membrane-based laminate is optimized to offer two critical properties: right amount of yarn lubrication and the appropriate amount of yarn texturization, both of which enhance the membrane bond. Our technology team also has relationships with key domestic and international felt suppliers, maintaining an innovative pipeline of product developments that can be easily adjusted to fit your customers' changing application needs. Our patented technologies provide improved fiber bonding and flex endurance properties of the base media.

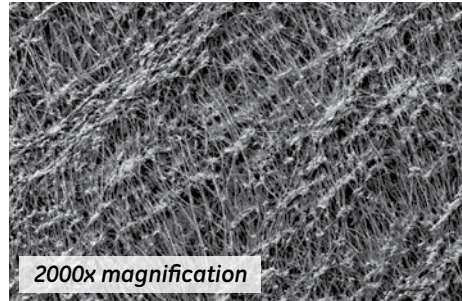
## Strength and Flexibility

We designed a product portfolio that provides you with the ability to meet your customers' needs regardless of their plant conditions. Preveil filtration membrane laminates combine strength and flexibility for use across a wide range of applications, from cement and power plants to food and pharmaceutical manufacturing facilities.

## Reduced Differential Pressure

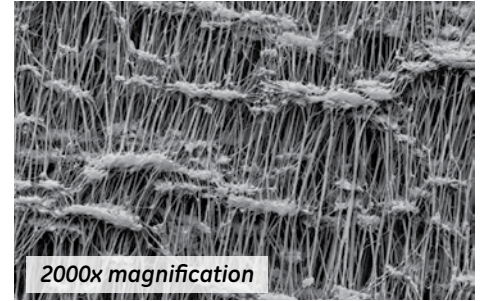
GE engineers have worked diligently with felt manufacturers and woven media suppliers to develop base media that resist membrane cracking — a major cause of increased differential pressure. By doing so, we create a finished laminate that operates at consistently low differential pressure, while also helping increase throughput and lower energy costs.

## Preveil QG061 — 22 oz. fiberglass laminated with ePTFE



A heavier membrane with a smaller pore structure promotes consistently lower differential pressure and near zero emissions over the lifetime of the filter media.

## Competing product— 22 oz. fiberglass laminated with ePTFE



Large pores can result in increased differential pressure due to fine particulate migration into the membrane fibril structure. Further, a lightweight membrane may be more prone to damage during normal pulse cleaning, which can result in increased emissions.

## Fabric Characteristics

	Polypropylene	Acrylic	Polyester	PPS	Aramid	Fiberglass	P84**	PTFE
Maximum Continuous Operating Temperature	170° F (77° C)	265° F (130° C)	275° F (135° C)	375° F (190° C)	400° F (204° C)	500° F (260° C)	500° F (260° C)	500° F (260° C)
Abrasion	Excellent	Good	Excellent	Good	Excellent	Fair	Fair	Good
Energy Absorption	Good	Good	Excellent	Good	Good	Fair	Good	Good
Filtration Properties	Good	Good	Excellent	Excellent	Excellent	Fair	Excellent	Fair
Moist Heat	Excellent	Excellent	Poor	Good	Good	Excellent	Good	Excellent
Alkalines	Excellent	Fair	Fair	Excellent	Good	Fair	Fair	Excellent
Mineral Acids	Excellent	Good	Fair	Excellent	Fair	Poor	Good	Excellent
Oxygen (15%+)	Excellent	Excellent	Excellent	Poor	Excellent	Excellent	Excellent	Excellent

We promise *to help you better serve your customers.*

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- GE Energy's Filtration Technologies team

GE Energy's Filtration Technologies team knows that your sole focus is delivering the very best for your customers. That's our focus, too. If you have any questions, or need any additional information, please go to [ge-energy.com/membrane](http://ge-energy.com/membrane) or give us a call at **1-800-821-2222**. See how we can help you help your customers.

And that's not just a promise. It's the

promise  
of something better.



imagination at work

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