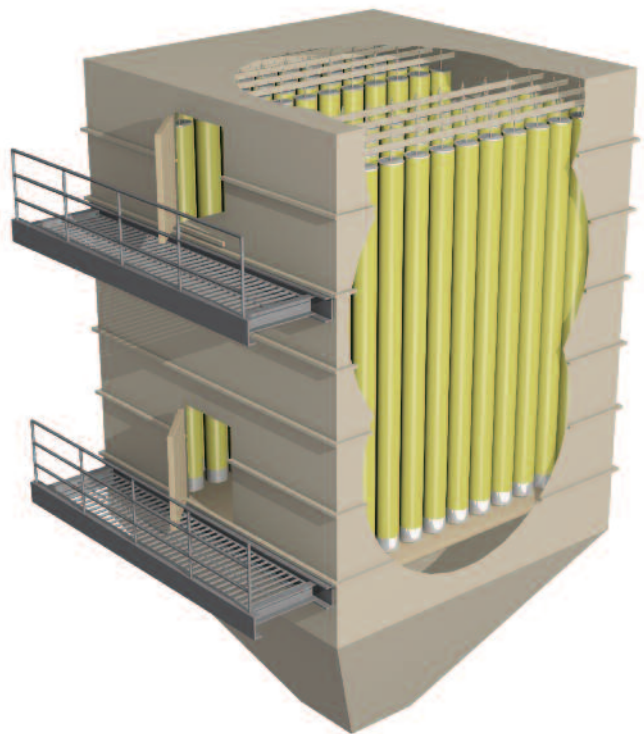
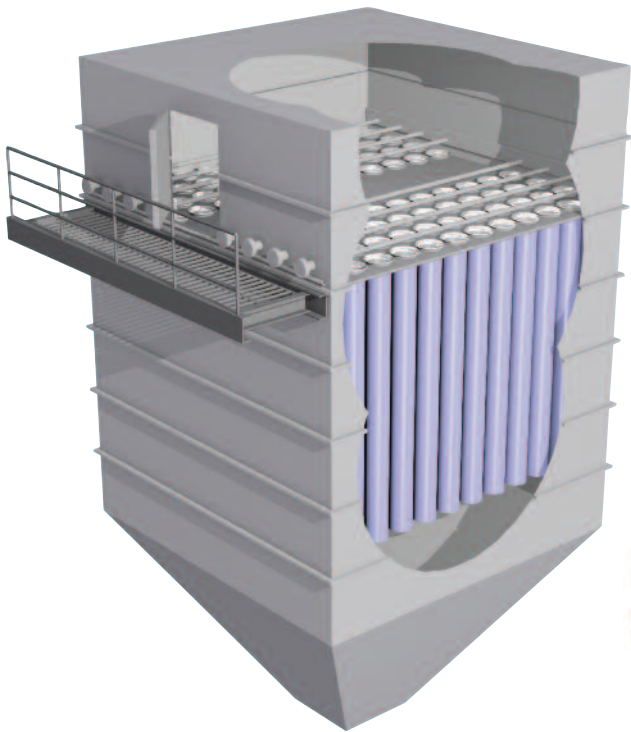


Particulate Matter Expertise



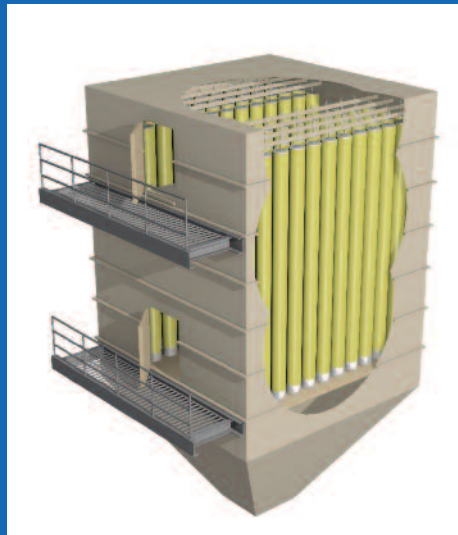
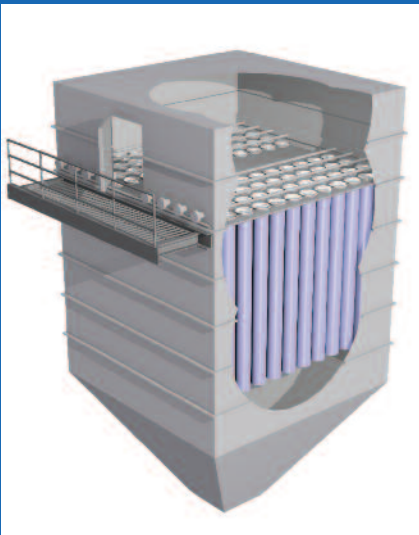
Controlling particulate matter (PM) emissions and improving performance.

Serving more than 50 industries, specializing in providing solutions for problem dust collectors.

With these important goals in mind and years of filtration technologies expertise, GE Energy provides quality replacement parts and services for air pollution control equipment. Particulate matter control has never been more of an issue globally, and the ability to enhance the performance of existing fabric filter (baghouse) collectors is important to improve production capability and profitability.

Through years of troubleshooting expertise based on a total system approach, GE can help you find the trouble areas of your ventilation system and then provide the integrated technology and services you need to enhance its performance.

We have seen and solved just about every type of dust collection problem in hundreds of applications worldwide. With an experienced team of technicians, engineers, and emissions experts ready to serve you, GE Energy can be your preferred choice for particulate matter expertise and technology.



High Efficiency Fine Filtration



PulsePleat* pleated filter elements

GE Energy's PulsePleat filter elements are one-piece pleated performance filters that replace a traditional filter bag and support cage. PulsePleat elements are custom manufactured to fit easily and quickly into nearly every OEM style of pulse-jet baghouse. Elements are available with many types of filter media, tops/bottoms, and inner cores to handle different types of process conditions, temperatures, and gas stream.

Key benefits of pleated technology

- Spunbond polyester media is twice as efficient as standard felt media (up to 99.99% efficiency)
- Exclusive patented iPLAS* pleat alignment system maintains proper pleat spacing and eliminates premature strap failure—which improves filter efficiency and useful life
- One-piece design reduces installation time
- Pleated design increases filtration surface area 2–3 times versus standard filter bags, allowing more airflow to be filtered
- For gas temperatures up to 265°F (130°C)
- No baghouse modifications necessary—PulsePleat elements create a dust-tight seal with existing tubesheets
- Reduces air-to-cloth ratios and operating differential pressure
- Helps reduce energy costs because less compressed air is required to effectively pulse clean the elements
- Shorter lengths and molded bottoms reduce the chances of abrasion (which causes premature failure)
- Perfect for undersized baghouses, fine particulate, and filter abrasion problems

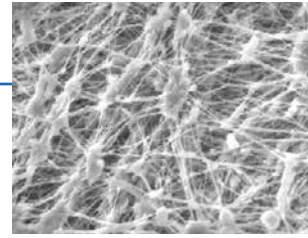
ThermoPleat* high temperature pleated elements

For increased airflow through a hot gas baghouse, GE Energy offers ThermoPleat and ThermoPleat EXT* elements that operate in temperatures up to 450°F (240°C). ThermoPleat elements directly replace high temperature filter bags such as aramid, PPS, and fiberglass. Various stiffened media options, along with steel inner cores and metal components, enable these filters to withstand extreme heat conditions, yet can provide 99.9% efficiency and reduced differential pressures. These filters have proven to be effective in many high temperature applications, including cement, utility, and asphalt.

High performance replacement cartridges

GE Energy offers nanofiber media cartridges for industrial fume, dust, and mist applications for nearly every OEM style. This next generation replacement cartridge delivers high efficiency surface filtration properties and lower pressure drops for product recovery and nuisance emissions collection.

GE Energy manufactures several product lines that can provide exceptionally high levels of particulate matter collection efficiency.



Preveil* expanded PTFE membrane filters

For applications that demand the absolute highest filtration efficiencies, GE Energy offers filters laminated with Preveil expanded polytetrafluoroethylene (ePTFE) membrane. The Preveil membrane can provide 99.99+% efficiencies, excellent dustcake release, and greater airflow at lower energy consumption levels.

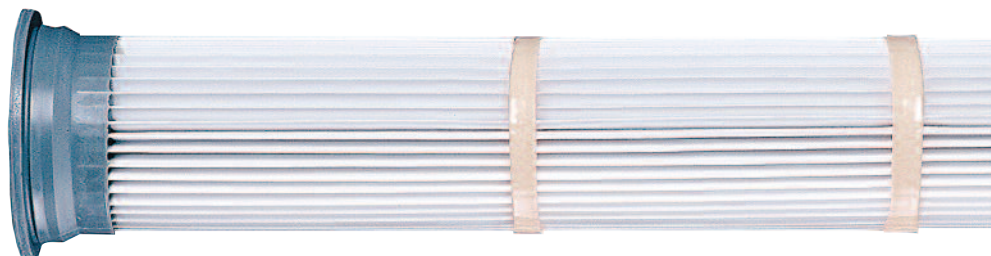
How does the ePTFE membrane work?

GE Energy's sophisticated manufacturing process expands PTFE resin into a membrane composed of billions of microscopic pores in a three-dimensional weblike structure. These pores are small enough to collect submicron dust particles, yet large enough for air to pass through. The Preveil membrane, when applied to a filter bag, creates a filter solution that operates with virtually no dustcake. Plus, the nonstick nature of the membrane enables even the stickiest dust to be cleaned easily from the filters.

Key benefits of ePTFE membrane filters

- Near ZERO emissions
- The non-stick surface reduces the need for cleaning, which ultimately helps lower compressed air costs and increases filter life
- Reduces operating pressure drop
- Available on a variety of base media, including polyester, acrylic, aramid, and fiberglass
- Operates effectively in high moisture environments (creating sticky particulate) and temperatures up to 500°F (260°C)
- ePTFE membrane is resistant to chemical attack
- GE Energy's bi-component lamination process improves membrane durability and airflow

GE Energy continues to innovate membrane filter technologies and provides ePTFE manufacturing and lamination combined with bag and cage design and fabrication. These factors are critical to maximizing the performance of a premium fabric filter bag.



Solutions for Fabric Filter Collectors



Filter Bags and Cages

GE Energy manufactures a wide range of replacement filters to fit all OEM styles of baghouses, including pulse-jet, reverse air, plenum pulse, and cartridge collectors. Felt and woven fabric filters are available in the following media types:

- Polyester
- Polypropylene
- Aramid
- Acrylic
- Fiberglass
- P84™
- PTFE
- PPS

GE Energy also manufactures support cages in a variety of sizes, wire configurations, and materials to ensure optimum performance in unison with the proper fabric.

Fine Filtration Products

For enhanced filtration efficiency, we offer:

- PulsePleat, ThermoPleat, and ThermoPleat EXT filter elements
- Preveil expanded PTFE membrane filters

See the High Efficiency Fine Filtration page for more details.

Baghouse Services

GE Energy's service crews are trained and experienced in all aspects of APC equipment operation, maintenance, and repair. Our service crews work exclusively on APC equipment and have an excellent track record for safety and on-time completion. GE offers many services to improve baghouses, including:

- Inspections and plant surveys
- Filter installations
- Ventilation system analysis
- Preventive maintenance programs/troubleshooting

Baghouse Accessories

In addition to filters, GE Energy offers a complete selection of replacement parts and accessory items for all types of baghouse designs. The following is a partial list of components available:

- Pulse-jet valves and diaphragm kits
- Bag tensioning devices
- Neutralite* filter bag conditioning powder
- Visolite* leak detection system
- Pulse-on-Demand* cleaning controls
- Differential pressure gauges
- Access doors
- Door seal
- Bag cups/venturies
- Auto purge valves/surge valves
- Blowpipes
- Timer boards
- Tubesheets/thimbles

GE Energy supplies a complete line of replacement filters and parts to fit almost every style of fabric filter (baghouse) collector.



Engineered Solutions and System Modifications

Many times the best solution for a poorly performing baghouse is to rebuild it with new components or change the cleaning method. GE Energy offers engineering services that define the scope, materials, and procedures necessary to perform baghouse upgrade projects. Our engineers have worked with all types of fabric filtration systems in a variety of industries and applications.

Horizontal Dust Collectors for Belt Conveyors

With traditional in-plant dust collectors, severe emission problems can occur in areas that are hard to ventilate. To solve this challenging dust collection problem, our Filtration Technologies team designed a unique dust collector for venting belt conveyors, especially in areas with restricted height such as, limestone transfer conveyors, clinker handling off the way feeder, coal belt conveyor transfer points, and clinker reclaim tunnels. Fitted with high efficiency PulsePleat filters, GE's horizontal collector combines ease of installation and operational effectiveness with a compact design that requires no ductwork.

Acoustic Cleaners and Impulse Cleaning

Powerwave* acoustic cleaning systems can significantly improve the cleaning of baghouses, precipitators, boiler tubes, heat transfer surfaces, SCRs, silos, spray dryers, and material handling equipment. Powerwave cleaners are an economical and effective solution to remove particulate buildup anywhere in your system, without causing the structural damage that frequently occurs with other cleaning methods.

Powerwave+* impulse cleaning systems help remove tenacious deposits and can potentially improve flow rate, increase heat rate, and reduce emissions. Managed entirely by a fully automated, easy to use control system, each impulse wave has the ability to penetrate in and around obstructions to provide a more complete surface contact and removal of deposits than traditional cleaning methods, such as sootblowers.



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Education/Seminars

To help customers better understand the proper operation and maintenance of APC equipment, GE conducts dozens of troubleshooting seminars each year in the U.S. and abroad. Seminars can also be arranged at individual plant sites. For further information and a full schedule of upcoming educational events, visit www.ge-energy.com/onelessworry.

Products and Services

- High Efficiency Filtration Solutions
- Fabric Filter Components and Accessories
- Technical Training
- Fabric Filter Services/Troubleshooting
- Engineering Services

Industries Served

Providing environmental solutions to more than fifty industries, including:

- Aluminum
- Asphalt
- Battery/Lead
- Carbon Black
- Cement
- Chemical
- Energy
- Food
- Foundry
- Gypsum
- Incinerator
- Lime
- Oil & Gas Production
- Petroleum Refining
- Pharmaceutical
- Plastics
- Paints & Pigments
- Power Generation
- Rubber
- Soaps & Detergents
- Steel
- TiO₂

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www.ge-energy.com/filtration

Specifications and performance are subject to change; results may vary in your application. Please discuss your needs with GE Energy before purchase.

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imagination at work