



STANDARD FILTER

C O R P O R A T I O N

The Right Filter, at the Right Price, Right Now!



www.standardfilter.com • 1.800.634.5837



Welcome!

I feel honored that you are considering Standard Filter for your pollution control needs. We strive to be more than a filter manufacturer: we are your "Solution Provider."

My family started this company over 40 years ago with a primary focus on giving our customers the right product at a fair price while backing that product with attention to detail, exceptional customer service and after sales support. My goal is to build on that vision in a God-honoring way.

The staff of engineers and customer service professionals here at Standard Filter Corporation will see that your requests are taken care of in a timely manner. Our research and development team of experts is constantly researching the most innovative and technologically advanced methods for improving the performance of our filter bags so we can provide you with a superior, cost efficient product. We are committed to long-term partnerships with our customers.

In this catalog, you will see just a few of the many filtration products we manufacture and supply. Make us your first and last stop when shopping for filtration products. We are here to help by offering you the best possible solutions. Let Standard Filter be your trusted resource for operating and maintaining your dust collectors. I encourage you to give us a try. You will be assured you've made the right decision. Let us show you what we can do for you!

Regards,

Toby Wiik, President



Toby Wiik, President



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The Right Price,

Right Now.



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Industries

Asphalt

For over 30 years, Standard Filter has been a leading filter bag supplier to the asphalt industry both as original equipment for the major manufacturers in the industry as well as a key source for aftermarket replacements for the over 4,000 asphalt plants in North America. Whether your fuel is natural gas or waste oil, have a virgin mix or are adding 40% RAP, straight HMA or getting involved with warm mix (WMA), we know what works best in your baghouse. Our new Capture WMA filter bag is engineered to perform in both HMA and WMA set up without breaking down.

We manufacture filter bags to fit baghouses from Astec, Barber-Green, Cedar-Rapids, CMI/Terex, Gencor, Maxam, Standard Havens and more.



Cement

Whether it is at the raw mill, kiln, clinker cooler or finish mill, Standard Filter has the right filter bag for all areas of your plant as well as batch plants and terminals. We offer a wide variety of specialty filter media to overcome problems such as excess moisture, blinding and stack dusting.

Standard Filter manufactures aftermarket filter bags to fit ABB/Flakt, Flexkleen, FLS/Fuller, Mikropul, Norblo, Redecam, Solios and other dust collectors utilized in the cement industry.



Industries



Chemical/ Pharmaceutical

Selecting the best filter to use in a chemical process is critical. It not only has to capture the emission, it has to perform and give you the service life you need; often in the harshest of environments.

Standard Filter's ability to select and custom manufacture the right filter materials to go into creating the optimal filter for your unique chemical process is what sets us apart.

Food Processing

Standard Filter's very first customers were in food processing and 35 years later it is still a strong part of our business. Our ability to monitor the manufacturing process from fiber to completed filter all under one roof sets us apart from other filter manufacturers. In the Food Processing business, we specialize in powdered milk process filters, brewery filters and difficult applications involving oils and starches in the dust collector.

From grain processing to dried food production, Standard Filter has replacement filters for milling collectors, blenders, mixers, granulators and silo/bin vents.



Industries

Foundry/Metals

Standard Filter has a long history in the metals industry working with electric arc furnace operations to smelting to castings to precious metal reclaim. We understand proper fume collection and spark-carry over issues and offer a variety of low and high temp filters in felts and wovens including seamless tubes to address these issues.

We manufacture aftermarket replacements to fit Amerex, Norblo, Wheelabrator, Carborundum and many other collectors in the metals industry.



Mining

The process of harvesting minerals and metals from the earth, whether at the surface or deep underground, creates environmental issues, including air pollution. The conditions at the mining site (moisture, altitude, waste) may hinder the ability to remain compliant.

Standard Filter has products specifically suited for a variety of mining applications including those for lime, gypsum, aggregates, kaolin and others.



Industries

Power Generation/ Energy from Waste (EfW)

The demands on the power industry are forcing generators to look for creative answers when it comes to controlling emissions. Changes in feed stock (co-blending, biomass, ash & sulfur content) impact the performance and life of filter bags in the baghouse. Standard Filter works closely with fiber producers to engineer filter fabrics that work and deliver value plus performance.

Standard Filter products include PPS/Torcon/Procon, P84, Teflon, fiberglass, ePTFE membranes.



Wood and Wood Fiber Products

Filtration in the wood and wood products industry brings with it unique requirements for the baghouse. Ripping and sanding create different filter needs from the same wood. Whether you're working with rough cut lumber, MDF, OSB or an exotic hardwood Standard Filter has the replacement filter that will perform.

We carry replacement aftermarket filters to fit MAC, Murphy-Rodgers, Pneumafil, Torit and many more collectors. We also supply one-off filters for workstations and covers for waste roll-offs.



Filter Bags

After Market replacement filter bags for your equipment!

- Aerodyne
- Aeropulse
- Aget
- Airtrol
- Air Sentry
- Amerex
- American Air Filter
- American Std
- Astec Industries
- BACT Engineering
- Barber-Green
- Baumco
- Belco
- Bituma Construction
- BMG
- Brandt Engineering
- Buhler-Miag
- Carter-Day
- CMI/terex
- Con-e-co
- C&W
- Dustex
- Dynamic Air
- Eastern Control Systems
- Environmental Elements
- ExCel Air
- Fabrics Filters N.W.
- Farr
- Flex-Kleen
- Fuller
- Gencor
- GenTec
- George Rolfes
- GMD Environmental
- Guzzler
- Hoffman
- ICM
- Johnson March
- Kleissler
- Maxam
- Mikropul
- Murphy-Rodgers
- Norblo
- Parsons
- Perlite
- Pneumafil
- Rayjet/CEA
- Redecam
- Semco/Keystone Intl.
- Seneca
- Spahr
- Staclean
- Stansteel
- Tech-Air
- US Air
- United Air Specialist
- United Conveyor
- W.W. Sly
- Westinghouse
- Wheelabrator-Frye
- and many, many more...

Pulse-Jet



Reverse Air



Shaker



The Fiber to Filter Process

Our In-House Filter Bag Manufacturing Process

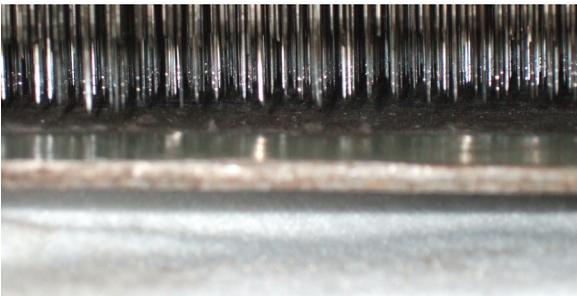
From Fiber...



1. Raw Fiber



2. Opening & Carding



3. Needlepunching



4. Felt Finish Process



5. Three Needle Stitch Tubing



6. Snapping Construction



7. Attachment Sewing



8. Filter

...to Filter!

Filter Bags

Filter bags manufactured in-house. Direct to you!



Standard Filter manufactures **pulse-jet** and **plenum pulse** filter bags that utilize support cages to allow air flow from the exterior of the bag and exiting through the interior.

Our bags are sewn under tension with a 3-needle chain stitch to insure seam integrity. Top constructions consist of snap band, flange top, ring top, soft cuffs or raw edge. Bottom removal bags are constructed with a raw top or soft cuff. Top and bottom removal bag bottoms have disc bottoms that are sewn using either an overlock (surge) stitch or lock stitch. We also provide a wear strip or custom skirts to the bottom portion of the bag to prevent premature wear from bag-to-bag and bag-to-cage abrasion.



We also provide a wide variety of filter bags for use in **shaker type** collectors. We manufacture shaker bags from wovens and shakerfelts. Standard Filter's engineering department can recommend the media that will give you the performance you expect from your shaker unit.

We offer various types of top attachments to work with your shaker mechanism, whether it's loop, hanger, strap, grommet or we will design one to fit your specific needs. Our bottom attachments are made with snapbands, corded cuffs or reinforced cuffs for extra wear protection. We also supply clamps for the standard cuff bottoms, as well as other necessary hardware.



Standard Filter manufactures a wide variety of **reverse air** bag types. Typical top designs are strap top, loop top, corded cuff top, compression band tops with steel caps or grommet top bags. Bottom designs can be raw edge, cuffed, compression band or beaded cuff.

Anti-collapse rings of mild steel, stainless steel and other alloys can be placed along the bag at the proper points for maximum cleaning efficiency. Standard Filter can also supply clamps for the cuff bottoms.



Custom Filter Bags

Besides the popular OEM filter bags, Standard Filter is capable of producing custom filter bags and envelope style bags for your dust collector.

We can engineer and recommend custom materials from our textile mill that will improve your baghouse performance and improve problem applications.

With the wide variety of different and unique filter bags available, with a sample, description or drawing, Standard Filter can produce your special filter bag.

Welded Seams

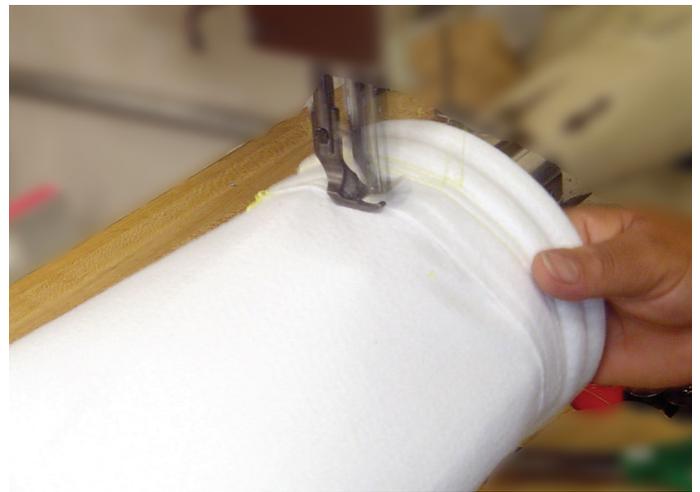
Needle holes in the vertical seam of a filter bag can be a conduit for fine particulate bleed through. In order to give you the most efficient filter possible, Standard Filter manufactures one piece welded filter tubes.

This fusing of the filter eliminates fine particle migration through needle holes in the vertical seam allowing the entire filter tube surface to operate at a higher efficiency. We offer these filters in Polyester, Polypropylene and Torcon®/Procon® (fka Ryton®) PPS.

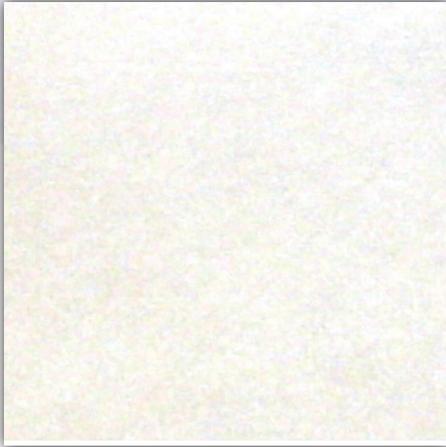
Convenient Packaging

Standard Filter bags are purposefully wound into a tight core that allows us to place up to 20% more filters per box over conventional folding resulting in lower transit costs.

In addition the core style permits a quick, better install of the filter bag into the tube sheet.

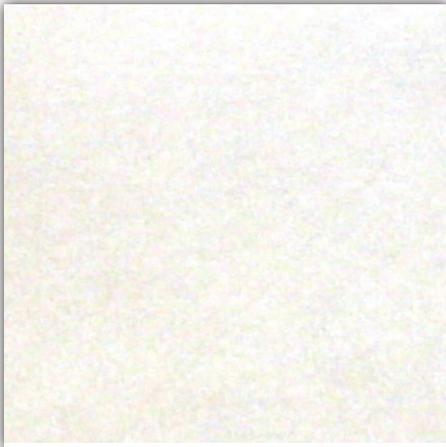


Filter Media / Low Temperature Materials



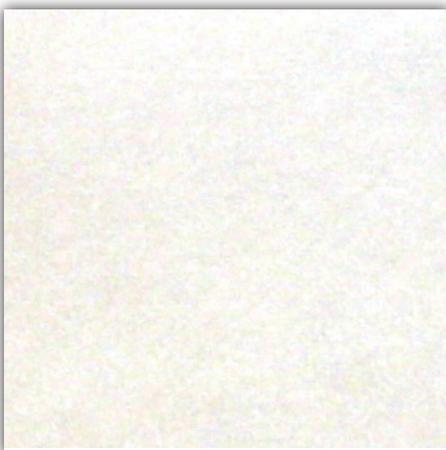
Polyester Felt/Dacron®

Recommended continuous operation temperature	275°F
Maximum (short time) operation temperature.....	300°F
Supports combustion	Yes
Biological resistance (bacteria, mildew)	No Effect
Resistance to alkalies	Fair
Resistance to mineral acids	Fair +
Resistance to organic acid	Fair
Resistance to oxidizing agents.....	Good
Resistance to organic solvents	Good
Available weights	10 oz. - 22 oz.



Polypropylene Felt

Recommended continuous operation temperature	190°F
Maximum (short time) operation temperature.....	210°F
Supports combustion	Yes
Biological resistance (bacteria, mildew)	Excellent
Resistance to alkalies	Excellent
Resistance to mineral acids	Excellent
Resistance to organic acids.....	Excellent
Resistance to oxidizing agents.....	Good
Resistance to organic solvents	Excellent
Available weights	12 oz. - 18 oz.



Combo™ Felt

Recommended continuous operation temperature	210°F
Maximum (short time) operation temperature.....	225°F
Supports combustion	Yes
Biological resistance (bacteria, mildew)	Good
Resistance to alkalies	Good
Resistance to mineral acids	Good
Resistance to organic acids.....	Good
Resistance to oxidizing agents.....	Good
Resistance to organic solvents	Good
Available weights	12 oz. - 18 oz.



Filter Media / Low Temperature Material Specs

10 oz. Polyester Shakerfelt™

Style **PE10SU**
 Primary Applications Dry Filtration

PROPERTY	U.S. SYSTEM
Fiber Content	100% Polyester
Construction.....	Needle Punched, Self-Supported
Weight.....	10 oz./sq yd. nom.
Thickness	0.050" - 0.070"
Finish.....	Singed
Mullen	300 PSI min.
Permeability.....	45-65 CFM @ 0.5" W.G.
Temperature	275°F Continuous to 300°F Surge

12 oz. Polyester Felt

Style **PE12SU**
 Primary Applications Dry Filtration

PROPERTY	U.S. SYSTEM
Fiber Content	100% Polyester
Construction.....	Needle Punched, Self-Supported
Weight.....	12 oz./sq yd. nom.
Thickness	0.45" - 0.65"
Finish.....	Singed
Mullen	300 PSI min.
Permeability.....	35-55 CFM @ 0.5" W.G.
Temperature	275°F Continuous to 300°F Surge

16 oz. Polyester Felt

Style **PE16SU**
 Primary Applications Dry Filtration

PROPERTY	U.S. SYSTEM
Fiber Content	100% Polyester
Construction.....	Needle Punched, Self-Supported
Weight.....	16 oz./sq yd. nom.
Thickness	0.075" Nom.
Finish.....	Singed
Mullen	400 PSI min.
Permeability.....	20-40 CFM @ 0.5" W.G.
Temperature	275°F Continuous to 300°F Surge

18 oz. Polyester Felt

Style **PE18SU**
 Primary Applications Dry Filtration

PROPERTY	U.S. SYSTEM
Fiber Content	100% Polyester
Construction.....	Needle Punched, Self-Supported
Weight.....	18 oz./sq yd. nom.
Thickness	0.080" Nom.
Finish.....	Singed
Mullen	450 PSI min.
Permeability.....	15-35 CFM @ 0.5" W.G.
Temperature	275°F Continuous to 300°F Surge

16 oz. Combo™ Felt

Style **CB16GU**
 Primary Applications Dry Filtration

PROPERTY	U.S. SYSTEM
Fiber Content	60/40 Polyester/Polypropylene
Construction.....	Needle Punched, Self-Supported
Weight.....	16 oz./sq yd. nom.
Thickness	0.075" - 0.095"
Finish.....	Glazed
Mullen	400 PSI min.
Permeability.....	30 - 50 CFM @ 0.5" W.G.
Temperature	210°F Continuous to 225°F Surge

16 oz. Polypropylene Felt

Style **PP16GU**
 Primary Applications Dry Filtration, Liquid Filtration

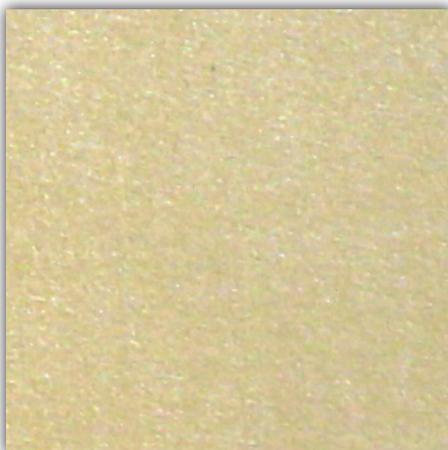
PROPERTY	U.S. SYSTEM
Fiber Content	100% Polypropylene
Construction.....	Needle Punched, Self-Supported
Weight.....	16 oz./sq yd. nom.
Thickness085 - .100" Nom.
Finish.....	Glazed
Mullen	500 PSI min.
Permeability.....	20 - 40 CFM @ 0.5" W.G.
Temperature	190°F Continuous to 210°F Surge

Filter Media / High Temperature Materials



CONEX®/NOMEX® Felt (Aramid)

Recommended continuous operation temperature	400°F
Maximum (short time) operation temperature.....	425°F
Supports combustion	No
Biological resistance (bacteria, mildew)	No Effect
Resistance to alkalies	Good
Resistance to mineral acids	Fair
Resistance to organic acids.....	Fair
Resistance to oxidizing agents.....	Poor
Resistance to organic solvents	Very Good
Available weights	14 oz. - 18 oz.



TORCON®/PROCON® Felt/PPS (fka Ryton®)

Recommended continuous operation temperature	375°F
Maximum (short time) operation temperature.....	400°F
Supports combustion	No
Biological resistance (bacteria, mildew)	No Effect
Effect resistance to alkalies	Excellent
Resistance to mineral acids	Excellent
Resistance to organic acids.....	Excellent
Resistance to oxidizing agents.....	Fair
Resistance to organic solvents	Excellent
Available weights	14 oz. - 18 oz.



P84® Felt/Polymide

Recommended continuous operation temperature	450°F
Maximum (short time) operation temperature.....	475°F
Supports combustion	No
Biological resistance (bacteria, mildew)	Good
Effect resistance to alkalies	Fair
Resistance to mineral acids	Good+
Resistance to organic acids	Good+
Resistance to oxidizing agents.....	Good+
Resistance to organic solvents	Excellent
Available weights	14 oz. - 18 oz.



Filter Media / High Temperature Materials Specs

14 oz. CONEX®/NOMEX® (Aramid)

Style **AX14SU**
 Primary Applications Dry Filtration

PROPERTY	U.S. SYSTEM
Fiber Content	100% Aramid
Construction.....	Needle Punched, Self-Supported
Weight.....	14 oz./sq yd. nom.
Thickness070" - .090"
Finish.....	Singed
Mullen	400 PSI min.
Permeability.....	20-45 CFM @ 0.5" W.G.
Temperature	400°F Continuous to 425°F Surge

16 oz. CONEX®/NOMEX® (Aramid)

Style **AX16SU**
 Primary Applications Dry Filtration

PROPERTY	U.S. SYSTEM
Fiber Content	100% Aramid
Construction.....	Needle Punched, Self-Supported
Weight.....	16 oz./sq yd. nom.
Thickness	0.075" - 0.095"
Finish.....	Singed
Mullen	450 PSI min.
Permeability.....	20-40 CFM @ 0.5" W.G.
Temperature	400°F Continuous to 425°F Surge

14 oz. P84®

Style **P814SS**
 Primary Applications Dry Filtration

PROPERTY	U.S. SYSTEM
Fiber Content	100% P84
Construction.....	Needle Punched, Scrim-Supported
Weight.....	14 oz./sq yd. nom.
Thickness	0.080" - 0.100"
Finish.....	Singed
Mullen	350 PSI min.
Permeability.....	25-45 CFM @ 0.5" W.G.
Temperature	450°F Continuous to 475°F Surge

14 oz. TORCON®/PROCON® Felt/PPS

Style **RY16SS**
 Primary Applications Dry Filtration

PROPERTY	U.S. SYSTEM
Fiber Content	100% PPS
Construction.....	Needle Punched, Scrim-Supported
Weight.....	16 oz./sq yd. nom.
Thickness	0.055" - 0.080"
Finish.....	Singed
Mullen	380 PSI min.
Permeability.....	25-45 CFM @ 0.5" W.G.
Temperature	375°F Continuous to 400°F Surge

Wovens

Acrylic • Polyester • Cotton • Polypropylene • Fiberglass
 TORCON®/PROCON® PPS • NOMEX®/CONEX® • Teflon®

Due to the variety of constructions and weights of the woven materials, we suggest that you contact a Standard Filter representative to discuss your particular needs.

All specifications subject to change in order to improve product performance.

Filter Media / Specialty Materials



Draylon® Homopolymer Acrylic Felt

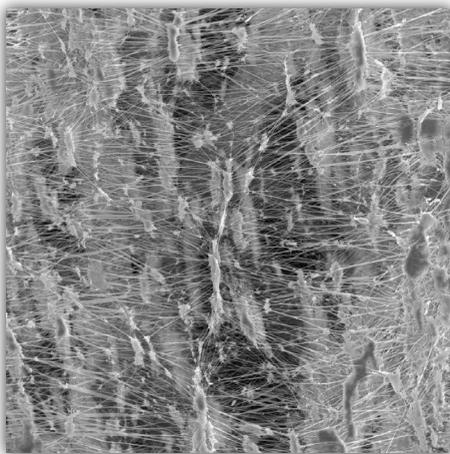
Recommended continuous operation temperature	250°F
Maximum (short time) operation temperature.....	275°F
Supports combustion	Yes
Biological resistance (bacteria, mildew)	Good+
Resistance to alkalis	Fair
Resistance to mineral acids	Good+
Resistance to organic acids.....	Excellent
Resistance to oxidizing agents.....	Good
Resistance to organic solvents	Good+
Available weights	15 oz. - 18 oz.



Anti-Static Polyester Felts

Also available with stainless steel fiber and scrims

Recommended continuous operation temperature	275°F
Maximum (short time) operation temperature.....	300°F
Supports combustion	Yes
Biological resistance (bacteria, mildew)	No
Effect resistance to alkalis	Fair
Resistance to mineral acids	Fair+
Resistance to organic acids.....	Fair
Resistance to oxidizing agents.....	Good
Resistance to organic solvents	Good
Available weights	16 oz.



Magnified image of membrane

Tetratex® Expanded PTFE Membrane on Woven Fiberglass

Recommended continuous operation temperature	500°F
Maximum (short time) operation temperature.....	525°F
Supports combustion	No
Biological resistance (bacteria, mildew)	Excellent
Effect resistance to alkalis	Fair
Resistance to mineral acids	Good+
Resistance to organic acids.....	Good+
Resistance to oxidizing agents.....	Excellent
Resistance to organic solvents	Good+
Available weights	9 oz. - 16 oz. - 22 oz.



Filter Media / Specialty Materials Specs

16 oz. Draylon® Acrylic Felt

Style **AC16SS**
 Primary Applications Dry Filtration

PROPERTY **U.S. SYSTEM**
 Fiber Content 100% Acrylic
 Construction Needle Punched, Scrim-Supported
 Weight 16 oz./sq yd. nom.
 Thickness075" - .095"
 Finish Singed
 Mullen 400 PSI min.
 Permeability 20-40 CFM @ 0.5" W.G.
 Temperature 250°F Continuous to 275°F Surge

18 oz. Draylon® Acrylic Felt

Style **AC18SS**
 Primary Applications Dry Filtration

PROPERTY **U.S. SYSTEM**
 Fiber Content 100% Acrylic
 Construction Needle Punched, Scrim-Supported
 Weight 18 oz./sq yd. nom.
 Thickness080" - .110"
 Finish Singed
 Mullen 450 PSI min.
 Permeability 15-45 CFM @ 0.5" W.G.
 Temperature 250°F Continuous to 275°F Surge

16 oz. Epitropic/Polyester Anti-Static Felt

Style **EP16SS**
 Primary Applications Dry Filtration

PROPERTY **U.S. SYSTEM**
 Fiber Content 97% Polyester / 3% Epitropic
 Construction Needle Punched, Scrim-Supported
 Weight 16 oz./sq yd. nom.
 Thickness065" - .085" Nom.
 Finish Singed
 Mullen 325 PSI min.
 Permeability 20-40 CFM @ 0.5" W.G.
 Temperature 275°F Continuous to 300°F Surge

16 oz. Polyester Felt w/Stainless Steel Scrim

Style **PS16SS**
 Primary Applications Dry Filtration

PROPERTY **U.S. SYSTEM**
 Fiber Content 100% Polyester
 Construction Needle punched, Stainless Steel Scrim
 Weight 16 oz./sq yd. nom.
 Thickness 0.070" nom.
 Finish Singed
 Mullen 400 PSI min.
 Permeability 25-35 CFM @ 0.5" W.G.
 Temperature 275°F Continuous to 300°F Surge

16 oz. Woven Glass w/PTFE Membrane

Style **6252**
 Primary Applications Dry Filtration

PROPERTY **U.S. SYSTEM**
 Fiber Content Fiberglass
 Construction 48x30
 Weight 16.5 – 18.5 oz./sq. yd.
 Weave Pattern Double Filling Face
 Finish PTFE
 Mullen 600 PSI min.
 Permeability 7 + 3 CFM/ft2 @ 0.5 wg
 Temperature 500°F

22 oz. Woven Glass w/PTFE Membrane

Style **6255**
 Primary Applications Dry Filtration

PROPERTY **U.S. SYSTEM**
 Fiber Content Fiberglass
 Construction 48x40
 Weight 21.5 – 26 oz./sq. yd.
 Weave Pattern Double Filling Face
 Finish PTFE
 Mullen 800 PSI min.
 Permeability 7 + 3 CFM/ft2 @ 0.5 wg
 Temperature 500°F

**All specifications subject to change in order to improve product performance.
 Please call for specific woven materials specifications.**



Filter Media / CAPTURE™ PE16ZU



Microscopic cross section of CAPTURE™ filter media shows its excellent filtration capabilities.

CAPTURE™ PE16ZU from Standard Filter is a revolutionary material specifically engineered to meet the challenges of PM 2.5 regulations.

The U.S. EPA has conducted performance verification testing of CAPTURE™ and has verified it for control of PM 2.5 particle emissions.

ETV CAPTURE™ PE16ZU has earned the ETV verification stamp and is an excellent choice for fine particulate control in operations such as:

- Electric Arc Furnace • Metal Finishing • Cement
- Pharmaceutical • Foundry • Gypsum Dust
- Fine Dust at temperatures below 275° F

Staying compliant while trying to leap to higher efficiency **PTFE** membrane bags can set you back a small fortune, often 3–4 times what you had been paying for your bags previously. Most operating budgets can't afford to absorb the additional cost for higher efficiency membrane bags. Fortunately, CAPTURE™ is a low cost, high performance alternative.

Filter bags made with CAPTURE™ Filter Media represent a cost-effective, durable, high performance alternative to PTFE membranes. CAPTURE™ is engineered to allow your existing baghouse, no matter how old, to meet the stringent PM 2.5 standard. CAPTURE™ Filter Media is the value solution to meet stringent emission regulations especially in an abrasive environment.

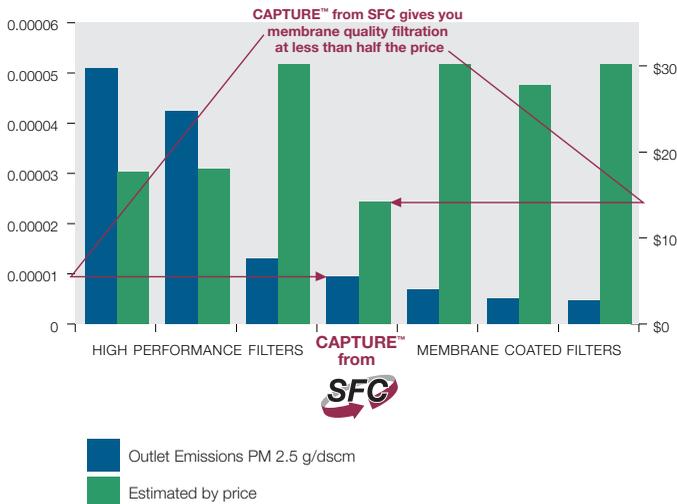
The CAPTURE™ PE16ZU

efficiency performance

is incredible for a

non-membrane filter.

Control of PM 2.5 Particle Emissions by Baghouse Filtration Products and Relative Price



CAPTURE™ PE10ZU

Typical woven polyester or cotton filters may not be picking up the fine particles that often cause respiratory problems and other health hazards for plant workers. The new 10 oz. CAPTURE™ Filter Media removes these particles without the need to invest resources in building new baghouses.

The new 10 oz. CAPTURE™ Filter Media has been specially designed for lightweight, large volume filter requirements, including woodworking operations, food and grain milling, and select stone cutting applications.



PlantMix®

MIXLink™

Communicate. Alert. Control

Valuable data that once terminated at the gauges and displays in the control room can now be securely moved throughout the organization.

Key process indicators (KPI's) can now be funneled real-time to the desktops, smartphones and tablets of HMA personnel who need to know. It's the next logical step in cloud-based computing for asphalt plants ...and it takes less than a day to be up and running in most cases.



MIXLink from Plant-Link.net allows Hot Mix Asphalt (HMA) plants to remotely monitor and report day-by-day production data through a cloud-based dashboard application. MIXLink is designed to offer users real-time visibility into key process indicators (KPI's) such as Btu/ton, energy cost/ton, etc. In addition conditional alerts, technician routing and compliance data gathering become automated. Bottom Line: MIXLink will show you the way to lowering your cost per ton!

Base Unit-The MIXLink base unit connects directly to the PLC that runs the HMA plant. Anything the PLC interacts with can now be transferred to the cloud and the MIXLink dashboard. The base unit has 50 tags but more can be added.

Touch Screen- MIXLink data can be viewed in the control room via an installed touch screen. Not only do the KPI's appear here but also any 3rd party data from add on systems (warm mix additives, weigh scales, camera load outs, etc) can be brought to this screen thereby consolidated system info into ONE place.

www.mymixlink.com
**Lower Your Cost
 Per Ton**

DustLink™

Communicate.Alert.Control

You can now manage your baghouse or dust collector from anywhere, have it tell you when it needs attention, and even turn on cleaning and other critical relays all from your computer or mobile device.

Your plant site does not even have to have Internet on site. One box, one solution. No matter where you or your dust collector are located, DustLink will connect the two of you.

If State Environmental inspectors need data from your baghouse, you are guilty till proven innocent. No data means you are in violation. Accurate, complete and right there to show them. DustLink captures your environmental data for you. No human errors or omissions.

Alert: Rapid Response to an upset condition at your dust collector saves you money. Real-time SMS text alerts notify the right personnel that that dust collector is losing a battle to keep you in compliance. A down baghouse often means production is halted. Now you can log all incidents, persons responding and corrective actions taken.

Relax: You have air pollution controls for a reason. You don't need to spend your manpower watching over it. Let DustLink provide you the peace of mind you have been looking for.

Everything is taken care of by the DustLink system including



getting the data back and forth from the plant to you wherever you may be. All this data is secured and encrypted in the cloud through servers trusted by Fortune 500 companies and military throughout the globe. The dashboard of the DustLink is designed so you can manage up to 100 plants all on our secure custom-built website. Completely scalable, completely configurable to you own unique needs.

www.mydustlink.com
**Relax - We Got
 You Covered**

Cartridges



Standard Filter offers a wide variety of industrial and commercial cartridge filters. In most cases cartridges can be custom made in various sizes and constructions to fit your specific requirements, along with high temperature capabilities, fire retardant, PTFE membrane, conductive and high efficiency type materials. Standard Filter also provides various pleat spacings and pleat depths.

Below is a brief listing of available filter materials and top and bottom constructions.

Samples of the 100% Cellulose, 80%/20% Cellulose/Polyester and Spun Bond Polyester materials are available upon request.

Paper

- 100% Cellulose
- 80/20 Cellulose/Polyester
- 50/50 Cellulose/Polyester
- 100% Cellulose Flame Retardant

Synthetic

- 100% Spun Bond Polyester
- 100% Spun bond Polyester w/PTFE
- 100% Polyester Hydro/Oleophobic

Felt

All types, please call for details

Tops

- Round • 14"x16" Rectangular
- Flange • Screw Mount • Gaskets

Bottoms

- Open Closed • Closed with Bolt Hole

Supports

Various internal and external supports are available upon request

100% Cellulose

Basis Weight (lbs per 3000 sq. ft.)	79 lbs.
Frazier Permeability (CFM/sq. ft. at 0.5 inch H2O).....	12
Caliper Overall (inches)	0.015
Corrugation Depth (inches)	0.032
Mullen Burst Dry (PSI).....	54
Temperature Limit.....	200° F

80% - 20% Cellulose/Polyester

Basis Weight (lbs per 3000 sq. ft.)	80lbs.
Frazier Permeability (CFM/sq. ft. at 0.5 inch H2O).....	14
Caliper Overall (inches)	0.029
Corrugation Depth (inches)	0.017
Mullen Burst Dry (PSI).....	50
Temperature Limit.....	200° F

Spun Bond Polyester

Basis Weight (lbs Per 3000 sq. ft.)	81lbs.
Frazier Permeability (CFM/sq. ft. at 0.5 inch H2O).....	28-33
Mullen Burst Dry (PSI).....	287
Temperature Limit.....	275°
Efficiency (depending on application)	99.95%

Average values listed. Specifications are subject to change without notification.



Cartridges

Standard Filter supplies aftermarket replacement cartridges for numerous OEM collectors. Here are just a few:



American Air Filter (AAF)

Dustex

Dynamic Air

Farr

Fisher-Klosterman

Flex-Kleen

Max Equipment

Mikropul

PneumaFil

Torit/Donaldson

United Air Specialist (UAS)

WAM

Wheelabrator-Frye

Pleated bag filters, too!



Cages

Standard Filter supplies dust collector cages as well as filter bags. We provide a wide range of configurations to best fulfill your needs. Cage constructions consist of 10, 12 or 20 vertical wires. The horizontal ring spacing on the cage is either 4", 6" or 8". If plenum height restrictions are a problem, multi-piece cages are available.

For areas where moisture or acid corrosion is present, Standard Filter provides a wide range of protective coverings.

Top load cages are available with a T-flange, ring top or several styles of rolled flange tops. Cage diameters range from 4" to 6 1/8". Wire thickness ranges are 9 gauge, 10 gauge and 11 gauge. Bottom load cages are constructed with a split collar or split ring top. Cage diameters range from 4" to 6 1/8". Wire thickness ranges are 9 gauge, 10 gauge and 11 gauge.

For more efficient cleaning, venturis are available for all diameter cages. Venturis come in 3" to 6" lengths. Venturis are made in a variety of materials: aluminum, carbon steel, galvanized and stainless steel.

Standard Filter supplies both standard and customized cages to meet your specific needs. Call for more details on Standard Filter cages solutions.

Materials

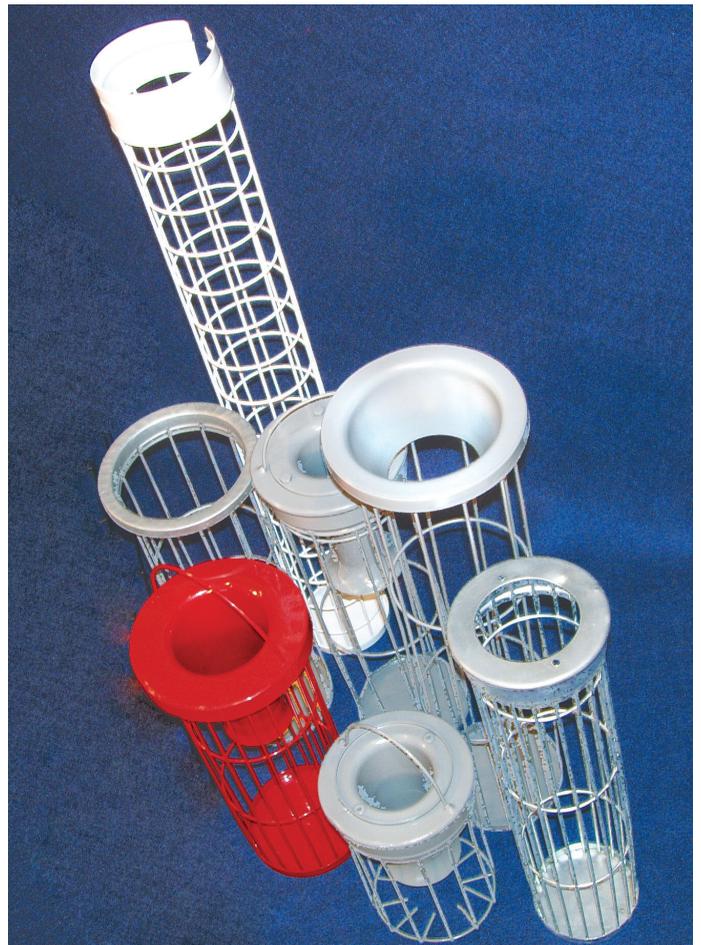
- Carbon Steel
- Galvanized Steel
- 304 Stainless Steel
- 316 Stainless Steel

Finishes

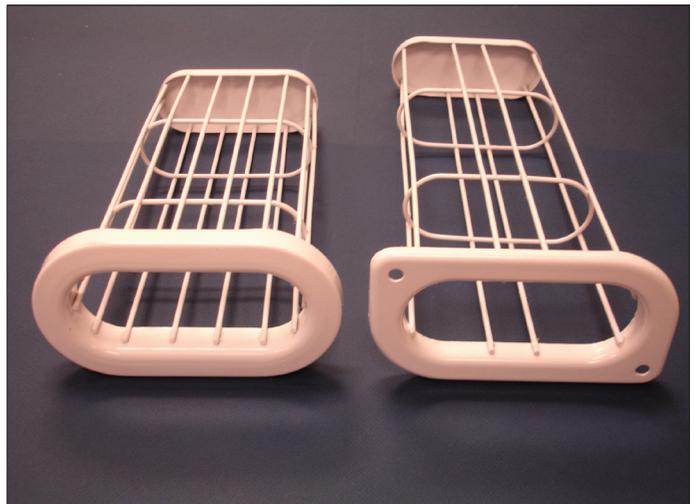
- Epoxy
(250° - 350° F service temperature)

Packaging

- Cages are packed in custom designed cartons.
- All cartons are rated at 275 lb. test.



Cages

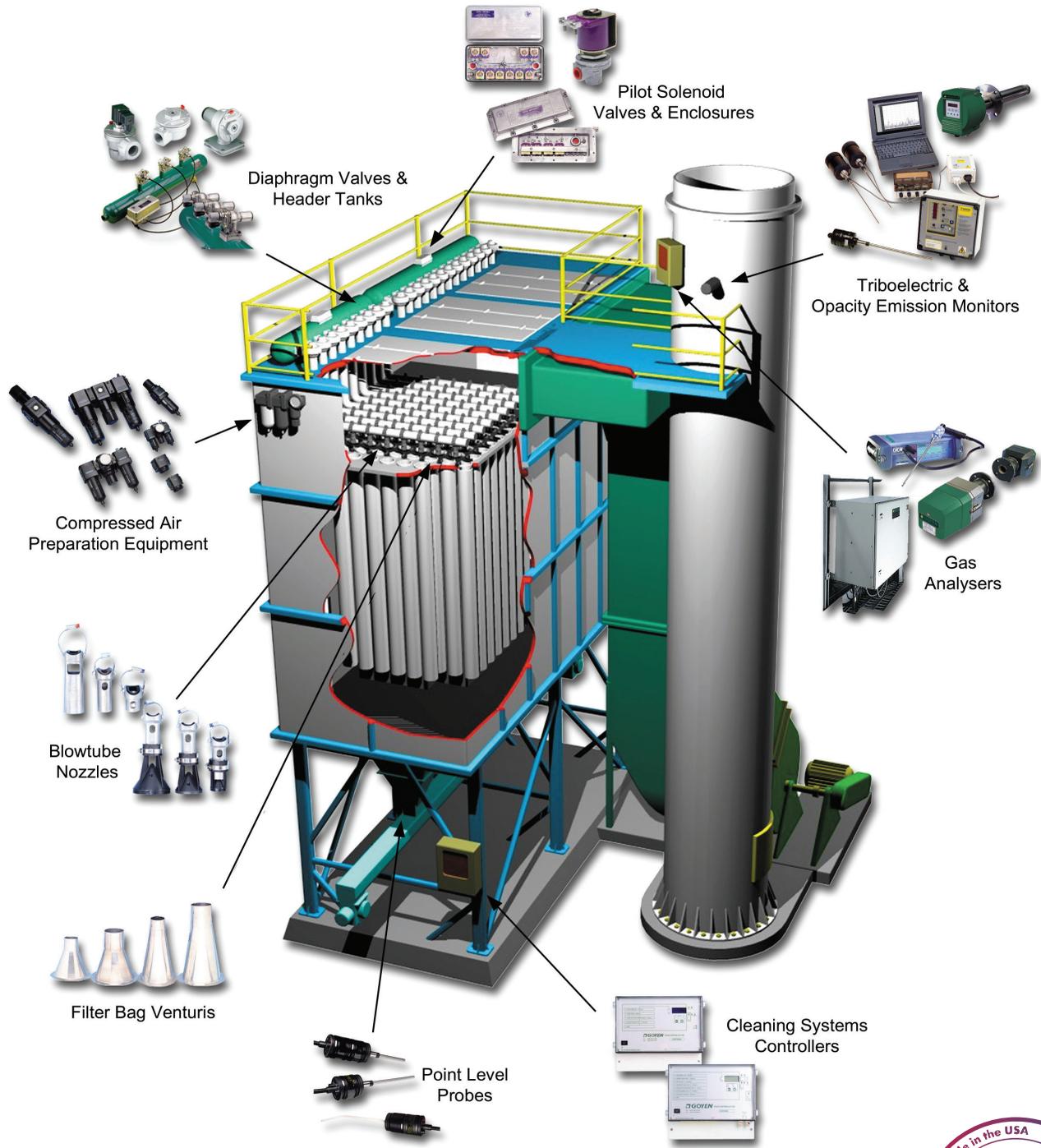


We can supply replacement cages to fit nearly every collector.

- | | |
|----------------------|---------------------------|
| Aerpulse | Mac Equipment |
| Amerex | Mikropul |
| American Air Filter | Murphy-Rodgers |
| Astec Industries | Pneumafil |
| BACT Engineering | Redecam |
| Barber-Green | Research-Cottrel |
| Carter-Day | Ruemelin Mfg. |
| Cedar Rapids | Scientific Dust Collector |
| CMI/Terex | Seneca |
| DCE Volkes | Staclean |
| Dustex | Standard Havens |
| Fabrics Filters N.W. | Tarmac |
| Flex-Kleen | Torit/Donaldson |
| Fuller | Ultra Industries |
| GenTec | US Air |
| Gencor | W.W. Sly |
| Kice | Wheelabrator-Frye |

Accessories

Standard Filter is a *Master Distributor* of the finest line of baghouse pulse valves, solenoid valves, timers, and emission monitoring products manufactured by Goyen and Mecair. We offer the full line of valves, solenoids, timer boards, repair kits and accessories for the Baghouse cleaning systems. In addition we offer the full range of Goyen broken bag detectors, emissions monitoring devices, and opacity monitors for preventative maintenance or environmental monitoring compliance.



Accessories



Goyen® Valves

Diaphragm Valve Models

PIPE SIZE	MODEL			CA or RA
				REPAIR KIT
.75"	20T	DD*	FS	K2000
.75"	20T3	DD3	FS3†	K2016
1"	25T	DD	FS	MM K2501
1"	25T3	DD3	FS3†	K2529
1.5"	35T*			K3500
1.5"	40			MM K4000
1.5"	45T+	DD	FS	K4502
2"	50T+			K5004
2.5"	62T+			K5004
3"	76T			MM K7600

* Single Diaphragm + Double Diaphragm †Millennium

Pilot Solenoid Valves

PIPE SIZE	MODEL
1/8"/M3 NPT	RECA3D2T

Multi Valve Enclosures

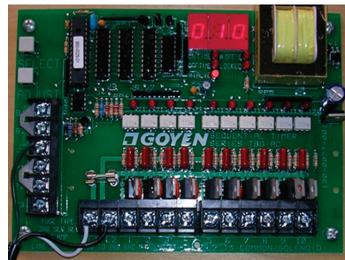
DESCRIPTION	MODEL
5 Valve Encl.	RCA3-5V2, 3, 4, 5
8 Valve Encl.	RCA3-BV6, 7, 8
12 Valve Encl.	RCA3-12V9, 10, 11, 12

NEW!

Opal Opacity Monitor



Timer Boards



MECAIR Valves



Goyen valves fit a variety of reverse pulse filter designs and precisely control airflow through the filters for optimal cleaning. Goyen valves are suitable for dust collector applications, in particular for reverse pulse jet filter cleaning and its variations including bag filters, cartridge filters, envelope filters, ceramic filters, and sintered metal fiber filters.

Pilot Valves



Repair Kits



Baghouse Maintenance / Sonitec 2000™ Nozzles

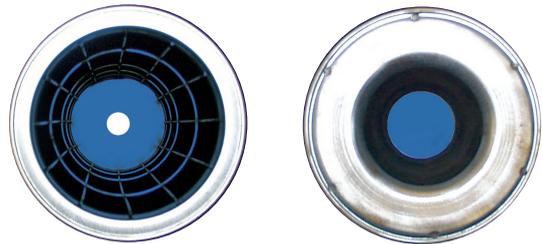


Available in brass and stainless steel.

Sonitec 2000™ Nozzles

Sonitec 2000™ Nozzles are a new advancement in baghouse and dust collector cleaning. They can be retrofitted into your existing collector blowpipes. Immediately you will see a difference with increased flow and reduced differential pressure drop across the baghouse.

The Sonitec 2000™ Nozzle may be used for new and retrofit installations. No more venturis means a larger flow area and less pressure drop without sacrificing cleaning efficiency. The concentrated air blast from the Sonitec 2000™ provides cleaning action for bags up to 20 feet in length. Sonitec Nozzles screw directly into the blow-pipe and never need replacing.



Replacing a venturi with a Sonitec Nozzle increases the effective open area 220%. This reduces the static delta P, increases the flow and reduces energy costs.



Available in carbon steel, stainless steel, cast aluminum or galvanized steel.

Venturis

For those wishing to continue using the venturi, Standard Filter offers a wide variety of styles and sizes for both top and bottom removal cages. Venturis add to the cleaning efficiency of pulse-jet baghouses. We can supply either spun or cast venturis manufactured from carbon steel, stainless steel, aluminum or galvanized steel.

Clamps

With Standard Filter's Snap-Lock clamps, installation time is reduced considerably over that of traditional worm gear clamps. Simply insert the band, pull tight, lock and with 2-3 turns of the screwdriver you're set. The clamp features a 1/2" 301 stainless steel band, 410 stainless steel bridge and a 5/16" hexhead screw. Clamps are used on raw edge top bags or cord bottom bags fitted to a thimble.

Available in sizes to fit most any bag diameter.



Baghouse Maintenance / Powders



LDP™ is available pink, green, yellow, purple, orange and blue.



Leak Detection Powder

LDP™ (Leak Detection Powder) is an aid in finding those troublesome leaks in your baghouse. When you inject the leak detection powder into your baghouse inlet, the powder travels throughout the baghouse, making the leaking area visible when you use a black light. The faulty area shows up as a bright colored powder marking.

Formula

For leak powder quantities: using inches for measuring diameter and length:

$$\begin{aligned} & \text{diameter of bag} \times 3.14 \times \text{length of bag} \\ & \times \text{quantity of bags} \div 144 \\ & = \text{total sq. ft. of filter cloth area.} \end{aligned}$$

1 lb. of leak detection powder per 1000 sq. ft. of filter cloth is required to perform the leak detection test, so total sq. ft. of filter cloth area, 1000 sq. ft. = 1 lb. of LDP needed.



PRE-GUARD™ powder is available in approx. 30 lb bags.

Pre-Start Powder

PRE-GUARD™ (Pre-Start Powder) is used as an initial protective layer on the filter bags. It also helps in the release of the dustcake during the cleaning cycle, improves initial efficiencies and protects the bags during critical initial startup after rebagging.

Formula

For Pre-Guard powder quantities: using inches for measuring diameter and length:

$$\begin{aligned} & \text{diameter of bag} \times 3.14 \times \text{length of bag} \\ & \times \text{quantity of bags} \div 144 \\ & = \text{total sq. ft. of filter cloth area.} \end{aligned}$$

1 lb. of Pre-Guard powder per 20 sq. ft. of filter cloth is required to pre-coat the bag, so total sq. ft. of filter cloth area, 20 sq. ft. = 1 lb of Pre-Guard powder needed.

Reference Information / Measuring a Filter Bag

A large number of collectors operating today have been in service for 10 years or more. New permit applications are often difficult to obtain. They have forced existing baghouses to be modified and upgraded, changing the OEM configuration of the filters. To obtain replacement filters for these units is not as simple as looking on the side of the collector for a part number or pulling the original print. It is always better to confirm any part numbers that you may have on a filter bag or the baghouse with actual measurements of the bag.

Usually, if there are spare bags that have not been installed, obtaining a sample to measure is simple. If all available bags are already in the collector, a used bag will do. Be aware of the type of dust you are dealing with when handling a used bag and take appropriate precautions such as gloves and respiratory equipment, if necessary. A bag pulled directly from the collector is your most reliable source simply because you can be certain it was in and functioning. Bags pulled from stock or from a pile of used bags may be mistakenly attributed to the wrong collector if the site has various dust collectors.

Measuring is fairly straightforward for most bags. You want to get the diameter and the length of the bag, then physical descriptions of the end constructions. Lets start with the diameter measurement:



Measure flat width of bag...

Diameter

The diameter of the bag is important for both the fit and proper functioning of the bag. For instance, on pulse-jet filters (those with an inner cage) the relation of the bag diameter to the cage diameter has a direct influence on both bag life and the ability to clean down the filter. Too big a differential and the bag will wear quickly and force dust through the media (bleeding), too tight and the dust cake does not release sufficiently leading to high pressure drop, high fan load, and low suction at the pickup point in your system.

Begin by placing the bag on a flat surface and flatten the bag out. Measure across the “flat width” of the bag for an edge to edge measurement. Take this measurement as near to the opening of the bag as practical.



Measure length from top edge of stitch...

Now to convert the flat width to bag diameter simply multiply:

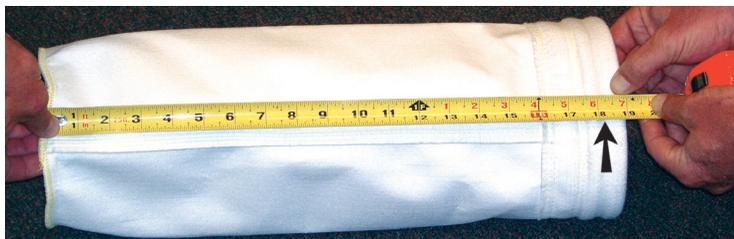
$$\text{Bag flat width} \times 2 \div 3.1415 = \text{Bag Diameter}$$

Length

The length of the bag is usually determined as the distance from top edge of stitch to attachment point. This may be different than the (OAL) overall length. For example see the image at the bottom of the page. Here you see a measurement from the center groove of the snap ring to the disc bottom.



...to attachment point (center of snap ring)



Pull bag tight to measure entire length along the seam.

Measurements should always be made with the bag under slight tension (most bags 10 lbs, glass reverse-air bags 30-50 lbs typically). The measurement should be taken at the longitudinal seam if possible as this is the shortest part of the bag. Try for 1/4” increments. If there is any rounding of the measure always round up. A long bag is better than a short bag.



Reference Information / Snap Band Installation

STEP 1



Insert filter bag through hole in cell plate.

STEP 2



Hold bag just below snap band while pushing through being careful not to scrape the bag exterior (especially important for membrane bags.)

STEP 3



Pre-shape the snap band into a kidney bean shape.

STEP 4



Place the snap band groove into the cell plate setting the seam of the cuff first.

STEP 5



Release snap band. If it does not self seal, use only thumb pressure to seat seal.

STEP 6



Make sure the seal is even and the bag does not spin within the cell plate.

Reference Information / Filter Bag Change Out Tips

Installing filter bags is not the most sought after task at a plant. It is a dirty job by nature. It can also be dangerous if you don't know what you are doing. If you are the least bit hesitant Standard Filter has professionals in your area that can perform this task for you at a reasonable rate. If you feel you can manage the change-out on your own, here are a few tips for executing a bag change out with minimal headaches. This should not be considered a complete list. There are many precautions unique to certain industries for the dust collected such as lead, coal, etc., that require extensive training and safety precautions. If in doubt use a professional service. (These tips are based on changing out a pulse-jet unit but in some cases may be applicable for shaker and reverse-air collectors as well).

Planning

Set aside plenty of time for the bag change-out. If the baghouse is run at elevated temperatures add in extra time for cool down especially if the design of the baghouse requires entry inside. Check stock for both bags and cages. Also have on hand diaphragm valve repair kits in case any of the pulse valves are found not to be firing.

Shut Down

Run a clean gas stream through the baghouse prior to shutting down the fan. Clean down bags after fan has shut down for maximum cleaning. Be certain all dust has been conveyed from the hoppers to prevent cementing or compaction.

Access

First and foremost is safety for the workers involved. Baghouse interiors are often elevated areas with confined entry ways. Proper training and certifications are necessary before entering to begin bag installation. Full respiratory gear and eye protection are required. If you have doubts Standard Filter can send a professional installation crew to your site to perform the work.

Interior Clean-up

After you have opened the access doors look around the tube sheet floor for accumulations of dust. Identify these locations and pay extra attention to the bags you will remove from those areas. Also note accumulations along the sides or any seams of the baghouse. These may indicate a leak in the baghouse structure itself. If possible record digital photographs before beginning work.

Cage/Bag Removal

Before pulling all the bags out of the collector take out a handful first and test the intended replacements, both bag and cage. Pay attention to fit of the bag onto the cage and the snapband fit of the bag into the collector. If all is well continue on. At times, crews have ripped out and discarded an entire set of bags only to find the replacements are incorrect, mislabeled or not in stock. Work methodically one row at a time. If the cages are to be re-inserted, handle them with care.

Bag Insertion

Pulse-jet baghouses are classified typically as bottom or top removal. This means bags are removed and installed from the dirty side (bottom), or clean side (top) of the tube sheet. Baghouse designs have moved away from bottom load in favor of the cleaner and easier installation available through the top load process. For snapband/snapping bags, be sure to clean (wire brush) the cell plate hole to insure a proper seal. The bag should snap in using hands only (see page 27). Take extreme care when inserting membrane bags. Use a protective sleeve to prevent damage to the membrane.

Cages

Cages in general should last 3-5 change outs before being replaced. In a highly corrosive atmosphere they may need to be changed at every re-bagging. Check the cage for broken stringers, bad weld or excessive corrosion before re-inserting into the bag. A loose stringer or bad weld may create only a pin hole but that will grow over time to a significant hole as dust takes the path of least resistance.

Close Up

Be sure to account for all tools brought into the collector. Check the hopper section especially for dropped tools and bags. Items like those will not do well with your rotary airlock or screw conveyor system. Verify all door seals are seated properly to prevent outside air/moisture from being drawn into the baghouse.

Leak Check

After you have installed all the bags it is time to check your work. This is done through the use of LDP™ tracing compound. This specially formulated fluorescent pigmented powder is added to the inlet based on a specific formula (see page 25).



Reference Information / Filter Bag Change Out Tips

Baghouse Start Up

All the hard work involved with re-bagging a dust collector can be ruined in minutes by an improper start-up. The first resource to go to for detailed start-up instructions is the baghouse manufacturer's (OEM) documentation. In the absence of the original documentation, following are some guidelines. Filter bags, generally speaking, perform at their lowest efficiencies when new. They are also most susceptible to being damaged when new. The build up of a proper dust cake offers protection and increases the collection efficiency of the filter. To aid in protecting the bags at startup pre-coating the bags with a specific dust agent such as Pre-Guard™ (see page 25) is recommended. While pre-coating and at initial start up the operating velocity of the gas stream must be reduced below the typical running values. This will allow the dust cake to form properly and not drive particles into or through the filter. Allow the dust cake build-up to cause a noticeable increase in the differential pressure (1"-2"). Special consideration should be given to the startup and operation of a "hot" baghouse. These are units that run around the mid 200°F and higher. The concern here is condensation that is created when passing through the dew point. Pre-heating these hot baghouses using clean fuels such as natural gas prior to going on line is best.

Running State

Once the collector has reached a steady state you should see a noticeable improvement in pick up and a lower differential pressure. A good rule of thumb is to be operating in the 3-5" delta P range.

Cleaning Problems on Pulse Jet Collectors

Pulse jet collectors first and foremost need a clean dry compressed air source. Many problems can be traced back to the presence of either oil or water in the compressed air stream. If this contamination is repeatedly sent back into the filter bags both the bags and the cleaning system will suffer. Cleaning off line is preferred but not necessary. The setting of duration and frequency is critical for proper cleaning and dust cake management. The desire is to create a sharp "fist of air" that moves in a wave down the bag. Typical pulse durations should be around .15 seconds. Cleaning intervals (frequency) are difficult to optimize to one value setting. For this reason the use of "clean on demand" technology has been adopted as best practice. Here a Photohelic® or Digihelic® gauge (see page 23) is installed to monitor the pressure drop across the baghouse. When the upper setting is reached the cleaning process will continuously loop until the baghouse improves flow enough to reduce the pressure drop to the low set point. It will then shut down until the upper value is reached, cleaning only as required. This translates into both longer bag life and energy savings due to better management of compressed air. Sequential cleaning of rows should be programmed to clean every other row to reduce the re-entrainment of sub-micron dust onto the adjacent bag.

Shaker Collector Cleaning

Shaker collectors have been around for a long time. The cleaning process is similar to shaking out a throw rug. Mechanical grids or bars at the top of the baghouse oscillate rapidly to create a shaking motion. This dislodges the dust cake into the hopper. As with other types of filters the breaking in (seasoning) of the new filter bag is critical. Be certain to turn off the cleaning circuit during the initial start up of the collector. This will allow a proper dust cake to form and build up protection for the filter media. Proper bag length adjustment plays a big role in cleaning. Too slack a bag and the bag will not clean down. Too tight and the strain on the seam will cause leakage through the sewing needle holes. As bags can stretch with use, a secondary adjustment of the shaker bars may be required after the break-in period.

Quick Reference / Resistance to Chemicals

	Dacron® Polyester	Polypropylene	P84®	Nomex®/Conex®	Draylon® Acrylic	Teflon®	Torcon®/Procon® PPS	Fiberglass	Cotton
Temperature Limit F°	275°	190°	450°	400°	260°	500°	375°	500°	212°
Resistance to Acid									
Hydrochloric	G	G	F	N	G	G	G	F	N
Sulfuric	F	G	G	N	G	G	G	F	N
Nitric	F	G	G	N	G	G	F	G	N
Chromic	G	G	N	N	G	G	N	G	N
Aqua Regia	F	G	N	N	G	G	N	G	N
Acetic	G	G	G	F	G	G	G	G	G
Formic	G	G	G	F	G	G	O	G	F
Resistance to Alkali									
Anmonium Hydroxide	N	F	G	F	F	G	G	G	F
Sodium Hydroxide	N	G	F	F	F	G	G	N	G
Potassium Hydroxide	N	F	F	F	N	G	G	N	G
Resistance to Salt									
Calcium Chloride	G	G	G	F	G	G	O	F	G
Sodium Chloride	G	G	G	G	G	G	O	F	G
Zinc Chloride	N	G	F	F	F	G	O	G	F
Resistance to Oxidizing Agent									
Hydrogen Peroxide	F	G	F	O	G	G	O	G	G
Sodium Hypochlorite	G	N	G	F	G	G	O	N	F
Chlorine	F	G	N	N	F	G	O	N	F
Fluorine	F	G	N	O	F	G	O	N	N
Resistance to Organic Solvent									
Acetone	G	F	G	G	G	G	O	G	G
Carbon Tetra-Chlorite	G	F	G	G	G	G	G	G	G
Ethyl Alcohol	G	G	G	G	G	G	G	G	G
MEK	G	F	G	G	G	G	O	G	O
Tri-Chloro Ethylene	G	F	G	G	G	G	O	G	G
Toluene	G	N	G	G	G	G	F	G	G
DEG	G	G	G	G	G	G	O	G	O
Resistance to Mineral Oil	G	G	G	G	G	G	G	G	G

G = Good F = Fair N = Not recommended O = No data available



Quick Reference / Finishes

Finishes

Fibers	Finishes							
	SINGE	CALENDAR	6% OLEOPHOBIC	PTFE MEMBRANE	2% SILICONE IMPREGNATION	6% PTFE IMPREGNATION	PTFE COATING	10% FLAME RETARDANT
DACRON® POLYESTER	X	X	X	X	X	X	X	X
POLYPROPYLENE	X	X	NA	X	X	NA	NA	NA
P84®	X	X	NA	X	NA	X	X	NA
NOMEX®/CONEX®	X	X	X	X	X	X	X	NA
DRAYLON® ACRYLIC	X	X	X	X	X	X	X	X
TEFLON®	NA	X	NA	X	NA	NA	X	NA
TORCON®/ PROCON® PPS	X	X	X	X	X	X	X	X
FIBERGLASS	NA	NA	NA	X	NA	NA	X	NA

X = Available NA = Not Available

Testing Services



**FREE USED
BAG ANALYSIS!**

As part of our commitment to ensure that you get the Right Bag for your filtration needs, Standard Filter can perform a NO-CHARGE detailed analysis on your current filters. We will provide information on the estimated operational life remaining in the filter in order to help customers analyze when periodic filter bag maintenance and replacement should be performed. A comprehensive analysis is performed and the details are shared with you along with recommendations to improve baghouse efficiency and maximize filter bag performance.

For failed bags we provide a detailed analysis using ATSM D461 test methods. Test data is given to customers with recommendations for material and construction modifications that will provide improved performance and prolong the life of your filters. We provide:

- Air Permeability
- Mullen Burst Strength
- Tensile Testing
- Microscopic Photography

We draw upon our experience with filter bags to give solutions that solve your problem. We know what's available in new fabrics and finishes, hardware improvements and baghouse maintenance to give you a truly complete analysis. At Standard Filter we seek to be solution providers for our customers.



FAQs

Q: On my pulse-jet collector every time a row of bags is cleaned I get a puff of smoke up the stack. Other than that it runs fine. What can I do to eliminate “puffing” ?

A: If your baghouse is operating fine except during the cleaning cycle then you might be cleaning too frequently, have too light a dust loading, or the material collected is not conducive to building a dust cake in which case you should consider using a pre-coat material (see Pre-Guard™ page 25) or modifying the operation of the baghouse. If there is little or no dust cake on the bags the pulse action is doing nothing more than “working” the dust particles through the cross section of the filter media. Check your differential pressure at the time of cleaning. If you have “on demand” pulsing set the values to a higher delta P. If you have timed cycle cleaning lengthen the time between cycles.

Q: How often should I change my bags?

A: Filter bags are a consumable item. They do wear out, blind off, burn up and get attacked by chemicals. Just like the oil and air filter in your car they need to be replaced to keep you running at optimum performance. A differential pressure that remains high even after cleaning is a key indicator. If the differential pressure cannot drop below 7” it is time to change bags. If you observe a constant dust stream from the stack, it is time to change your bags. **Send in your bags for free analysis (see Testing Services on page 32).**

Q: How long should my filter bags last?

A: Many factors affect bag life. Often collectors that were built with certain production rates in mind are now operating at twice their design load. Moisture and chemical upsets can easily take a set of bags out at startup. Typical design criteria on new installations should allow for 2-year bag life. However, for difficult applications you may expect no more than 3 months life if there are no other alternatives. If you are changing your bags more often than once a year you need to have Standard Filter look into your baghouse performance. We can perform a complimentary used bag analysis and determine the right type of filter for your current application to give you the length of service you desire.

Q: Is there a formula that I can use to determine the collection efficiency of my baghouse?

A: To determine collector efficiency divide the emissions (grains\SCFM) or mg\Cubic Meters by the incoming Grain Loading (grains\SCFM), then multiply by 100. This will be the collector efficiency in percentage. Regulator agencies like to see this number for their records. In reality, unless you perform costly emissions testing, it is difficult to determine a true number. Most collectors can easily provide efficiencies over 99%.

Q: I just installed a new set of bags in my baghouse. Do I need to do anything special when I go to start it up for the first time?

A: Baghouse start-up after re-bagging is extremely critical. Improper start-ups are a leading source of immediate or premature bag failure. A well-executed start-up will insure a long useful bag life and optimum baghouse performance. Start-up procedures vary with both the temperature of the gas stream and the type of particulate being collected. Unless the baghouse is being used as the actual product recovery station for the powder, it is recommended that bags be conditioned with a pre-coat powder (see Pre-Guard™ page 25). This powder is introduced near the baghouse inlet and coats the filter bags with a permeable cake. This acts as a filter enhancement and protects the filter surface in case of abnormal particulates at start-up. Additionally you may elect or be required to leak test the baghouse. Check out our Maintenance Powders section (page 25) for more information on leak detection and our bag change-outs section on page 28.

Glossary

Acrylic

Synthetic polymer fiber that goes by trade names Orlon, Draylon, and is composed of at least 86% acrylonitrile. There are two groups: Modacrylics and Homopolymers.

Baffle

A plate, grating, or refractory wall used especially to block, hinder, or divert a flow. The baghouse inlet typically has the highest velocity. Particulate will sandblast the lower portion of the bags in the baghouse in the absence of a baffle.

Bleed-through

Particulate migrates through the filter media and is discharged up the stack.

Blinding

Particulate accumulates within and/or on the surface of the media such that the flow passages for the gas are blocked restricting the flow and resulting in high pressure drop.

Can Velocity

Velocity of the baghouse process air as it flows upward through the rows of bags. Formula: Area of the Baghouse in Square Feet minus the area of the diameter of the filter bags divided by the ACFM of the process air. Excessive Can Velocity can cause premature bag wear due to abrasion and can cause more dust to be carried upward to the bags overloading the bags and the cleaning system. Conversely a Low Can Velocity can cause segregation of the incoming dust carrying only the finest of particles which can prevent the formation of a good Dust Cake.

Capture Velocity

The air velocity at any point in front of the hood or at the hood opening necessary to prevent particulate material and contaminant gases from escaping into the working area.

Diaphragm Valve

A compressed air operated valve that is used to deliver air in short bursts to pulse clean bags.

Differential Pressure

In a Dust Collection System usually refers to the difference in pressure (typically measured in inches of water column W.G.) between the dirty side of the baghouse and the clean side of the baghouse. Essentially this yields the pressure drop or resistance to the air-flow through the filter bag.

Dust Cake

Essential buildup of porous dust layer on the surface of a filter, which significantly increases the efficiency of the filter. Proper management of the dust cake also effects useful life of the filter.

Dust Loading

The amount of particulate (by weight) that is suspended in a gas stream at the baghouse inlet. Usually expressed in grains per cubic foot.

Epitropic Fiber

Fiber whose surface contains embedded particles to modify one or more properties of the fiber, typically electrical conductivity.

Felled Seam

Vertical seam in a filter bag, typically a non-woven, which requires an overlap of the material.

Filter Cake

The accumulation of dust on a bag. Often assists in the filtration process.

Filter Media

The permeable barrier employed in the filtration process to separate the particles from the fluid stream.

Fly Ash

Finely divided particles of ash entrained in flue gases resulting from the combustion of fuel. The ash particles consist of incompletely burned fuel and a variety of mineral constituents.

Grain

The amount of particulate (by weight) that is suspended in a gas stream at the baghouse inlet. See also Dust Loading.

Ground Wire

Braided metal strip, usually copper or stainless steel, placed on or in the seam and grounded to the collector to assist in dissipating static build-up caused by the gas flow.

Hydrolysis

A chemical reaction in which water reacts with another substance, either dust or the filter media, breaking the chemical links and creating two or more substances. The presence of water in a baghouse is a significant detriment to the filter media.



Glossary

Hydrophilic Fiber

Fiber that readily absorbs water.

Hydrophobic Fiber

Fiber that does not readily absorb water.

Magnehelic® Gauge

Instrument to measure the differential pressure between the dirty (inlet) and clean (outlet) sides of a baghouse. As a general rule differential pressures greater than 7" W.G. indicate serious performance problems with the unit and require investigation (See page 23).

Mullen Burst Test

Standardized ASTM test method to measure the strength of a filter material under multidirectional pressure expressed in pounds per square inch.

Permeability

A measurement of the ability of air to flow through a filter at a given differential pressure. The value is expressed as (U.S.) cubic feet per minute at .5" water gauge differential or (Metric) liter/min at 20mm water gauge differential.

Plenum Chamber

An air compartment maintained under pressure, and connected to one or more ducts. A pressure-equalizing chamber.

Pre-coat

Pre-coat is good insurance for operations that may have issues during start-up that could impact the bags, such as unspent hydrocarbons and excessive moisture. The pre-coating also enhances the initial efficiency of the baghouse reducing bleed through of particulate.

Pulse-jet

Type of baghouse design where dust is collected on the exterior of a filter tube, supported by a cage, and cleaned with a rapid pulse of compressed air driven down the interior of the filter tube.

Scrim

A very loosely woven fabric onto which felt is needed to add dimensional stability and strength. Use of scrims are declining as high performance textile equipment is allowing for creation of 100% fiber media with the same or superior strength characteristics.

Singeing

Passing of the filter medium over an open flame, thereby removing the protruding surface fibers. Singeing the collection side of the filter allows for easier dust cake removal.

Sonic Cleaning

Sonic energy from air-powered horns produces shock waves, which enhance dust removal from fabrics. Sonic cleaning is typically used in reverse-air application involving fiberglass bag.

Specific gravity

The ratio of a mass of a unit volume of a substance to the mass of the same volume of a standard substance at a standard temperature. For gases, dry air at the same temperature and pressure as the gas is often taken as the standard substance.

Staple Fiber

Short fiber cut to specific length in synthetics to either form yarns or non-woven felts. The size, distribution and type of fibers used in filtration vary to suit process needs. Selecting the right combination is essential for maximum performance.

Tensile Strength

A measure of the ability of yarn or fabric to resist breaking by direct tension.

Tube Sheet

The steel plate that bags are suspended from in a baghouse. Both the diameter and thickness are crucial data to ensure a dust tight seal.

Venturi

An air affect passage that gradually contracts to a smaller opening and expands again at a different rate thus causing acceleration of flow and gradient pressure change. Venturis are typically used in pulse-jet cages to enhance the pulse clean cycle. However they also restrict normal flow as well and add to system delta P. (See Sonitec 2000™ Nozzle page 24 for a different approach.)



Standard Filter Corporation - The Right Choice

We do it all from fiber to filterbag, ensuring you get the

Right Filter, at the **Right Price**, **Right Now!**

The Right Filter

Our experienced sales team will ensure that the materials used and the filterbag construction will meet your precise specifications. As the manufacturer, we are in a unique position to tightly control production time, costs, and product quality because:

1. We manufacture the bags at our plant – ensuring the highest quality standards are met and the bags you get perform to your standards
2. We manufacture the materials from which the bags are made – vertical integration helps us control costs and ensure quality
3. We design and build the machinery that makes our products – with over 35 years in the business, Standard Filter is one of the most respected firms in the industry

The Right Price

In-house manufacturing and production process control give us the ability to keep our pricing competitive. We offer more choices in filter materials allowing you to get the best value for your dollar.

Right Now!

Our primary benchmark is customer responsiveness. We will meet your delivery timeframes for scheduled change-outs or get product in your hands immediately in a baghouse crisis or plant shutdown situation. Sales, customer service, engineering, production, quality control and shipping are all under one roof — put our team to the test and you'll come away pleasantly surprised as to what we can do and how quickly we respond.

Satisfied customers is the goal of every Standard Filter employee. We satisfy by getting you the **Right Filter, at the Right Price, Right Now!**

*“Please accept my sincere appreciation for your **professional response** to my bag crisis last week...your excellent timing saved me considerable days of furnace operation... I also wish to acknowledge the **quality of the workmanship** on the bags...each and every bag we installed fit with **exact precision.**”*



Standard Filter Corporation - Our Promise

Vision

To continue to serve our customers for decades to come with committed and responsive service and innovative solutions in air pollution control.

Mission

SFC is committed to **our customers** by offering to them the experience of a reliable dedicated team that strives to respond to the customers' needs. We will be as responsive as possible to meet or exceed our customers' expectations. Our goal is to furnish the solution for our customer that provides the best value to them. We will not sell something they do not need. It is our mission to get it right the first time and every time.

SFC is committed to **our vendors** by working together to achieve the common goal of satisfying the end user of the product or service. They are partners in our mission to serve the customer. We not only expect but require the same responsiveness and dedication from our vendors that we offer to our customers. We, in turn, are committed to being good stewards of the credit offered by our vendors and to repay our obligations in a timely manner.

SFC is committed to **our team members** by offering a friendly, family-centered workplace. We require respect for fellow team members be shown across all levels and departments. We encourage dialogue for constant improvement. We focus on maximizing strengths and correcting weakness with leadership tempered with forgiveness. We care about each other and support one another.

SFC is committed to **our community** by supporting various organizations that seek to comfort and heal both physically, psychologically and spiritually, those whose lives have been torn apart by circumstances out of their control. We encourage and support time away from work for our team members to support community service and to make a meaningful contribution for others.

Values

Honesty—There is truth, and then there is everything else.

Integrity—To mean what we say and do with sincere intentions.

Respect—To treat those with whom you engage as your neighbor.

Family—To balance work and what it provides with the reasons why we work.

Faith/Belief—To know one's purpose and place in life.



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Headquarters

Carlsbad Research Center
5928 Balfour Court
Carlsbad, CA 92008



South Carolina Plant

1353 East Black Street
Rock Hill, SC 29730
(Charlotte, NC)

800.634.5837

www.standardfilter.com