Filtration Products & Accessories

Presented for: IAOM Southeastern Niagra, Ohio Valley and Wolverine Districts' Fall Meeting

About Us

- Founded in 1988 as a DBA of Sifter Parts & Service
- We specialize in custom filtration products
- Automated production lines
- Over 200+ different materials stocked at all times, including screen mesh
- Quick Lead times (rush service available)

AGENDA

- Air Filtration
- Transfer Sleeves and Rubber products
- Specialty Fabrics
- Sifting Equipment & Accessories

Air Filtration

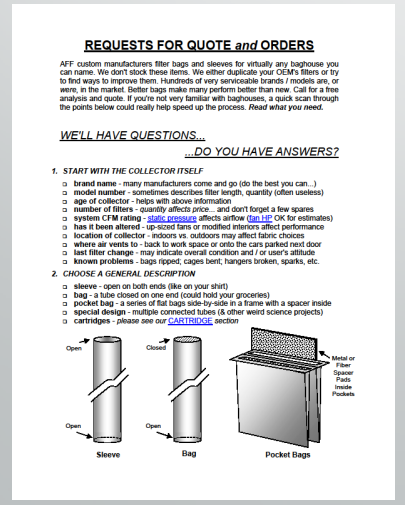
- Vent Bags
- Baghouse Filters
- Panel Filters
- Pleated Bags
- Cartridge Filters

Vent Bags

- During the process of milling, mixing, or pneumatically moving grain, flower, sugar or any other dry powder dust can escape into the facility and create a hazardous atmosphere. We stock a wide variety of materials to accommodate any dust type and setup. The proper material and size of the vent bag is critical in keeping machinery functioning properly and maintaining indoor air quality.
- One of the most common uses of a vent bag is during pneumatic conveying of a powder into a silo. As the product fills the silo, the displaced air needs to escape and properly sized vent bags are critical to the efficient operation. Vent bags are also used on mixers, vacuum discharges and depanners.
- American Fabric Filter can work with you on your specific application to design a filter bag that will operate efficiently no matter the dust type

Baghouse Filters

- Baghouses are air pollution control devices that remove particulates out of a gas stream released from an industrial process or combustion related to the generating of electricity. Although there are only three basic types of baghouses – shaker, pulse and reverse air, there are hundreds of different styles of filters that go into the systems.
- At American Fabric Filter Company we understand that a baghouse system works only as well as its filter performs. Filters require regular cleaning and periodic replacement to maintain peak performance and baghouse performance depends on an exact fit of the replacement filters to function properly. Let American Fabric Filter help you optimize the performance of your baghouse.
- We have a simple RFQ Form for Baghouse Filters. (see below)



REQUESTS FOR QUOTE *and* ORDERS

AFF custom manufacturers filter bags and sleeves for virtually any baghouse you can name. We don't stock these items. We either duplicate your OEM's filters or try to find ways to improve them. Hundreds of very serviceable brands / models are, or were, in the market. Better bags make many perform better than new. Call for a free analysis and quote. If you're not very familiar with baghouses, a quick scan through the points below could really help speed up the process. ***Read what you need.***

WE'LL HAVE QUESTIONS...

...DO YOU HAVE ANSWERS?

1. ***START WITH THE COLLECTOR ITSELF***
   - ❑ **brand name** - many manufacturers come and go (do the best you can...)
   - ❑ **model number** - sometimes describes filter length, quantity (often useless)
   - ❑ **age of collector** - helps with above information
   - ❑ **number of filters** - *quantity affects price...* and don't forget a few spares
   - ❑ **system CFM rating** - static pressure affects airflow (fan HP OK for estimates)
   - ❑ **has it been altered** - up-sized fans or modified interiors affect performance
   - ❑ **location of collector** - indoors vs. outdoors may affect fabric choices
   - ❑ **where air vents** to - back to work space or onto the cars parked next door
   - ❑ **last filter change** - may indicate overall condition and / or user's attitude
   - ❑ **known problems** - bags ripped; cages bent; hangers broken, sparks, etc.
2. ***CHOOSE A GENERAL DESCRIPTION***
   - ❑ **sleeve** - open on both ends (like on your shirt)
   - ❑ **bag** - a tube closed on one end (could hold your groceries)
   - ❑ **pocket bag** - a series of flat bags side-by-side in a frame with a spacer inside
   - ❑ **special design** - multiple connected tubes (& other weird science projects)
   - ❑ **cartridges** - *please see our CARTRIDGE section*

Pleated Bags

- Pleated filters are designed to replace traditional filter bag/cage configurations in pulse cleaning dust collection systems. Pleated filters can offer 2~3 times the filter area compared to a standard filter bag.
- Another benefit is that the pleated bags are shorter than the typical filter bag which means you will use less air when pulsing the filters and gives the baghouse a larger "drop box" for the material to fall out of the air stream prior to hitting the filters.
- We offer many different options in regards to media, pleat count & construction to suit your specific application. AFF can also help with a filter bag to pleated bag conversion.

Cartridge Filters

- AFF offers replacement cartridge filter elements for dust collectors. Our replacement cartridges fit most OEM units and are manufactured to the OEM specifications or higher from quality components to provide top performance.
- We can cross-reference virtually any product or modify a design to solve specific problems. Cartridge filters provide a very large filter surface area within a compact package and are especially effective in air filtration applications with limited space.

Panel Filters

- AFF is proud to offer a full line of panel and pleated panel filters; standard commercial or industrial grade. A panel/pleated air filter is a cost effective and highly efficient way to purify the air entering or exiting your business or facility.
- These filters are used in HVAC units but can also be used as intake filters for equipment as well as filtering plant/building exhaust.

Cartridges

- Cartridge filters are offered in a wide range of materials and configurations. They can be a surface or depth-type filter: depth-type filters capture particles and contaminants through the total thickness of the medium, while in surface filters (that are usually made of thin material like papers, woven wire and cloths), particles are blocked on the surface of the filter. Surface filters are best if you are filtering similar-sized particles.
- If all particles are five micron, a pleated 5-micron filter works best because it has more surface area than other filters. Compared with pleated surface filters, depth filters have a limited surface area, but they have the advantage of depth. We also offer membrane filters that provide sub-micron filtration for demanding applications

Transfer Sleeves and Rubber products

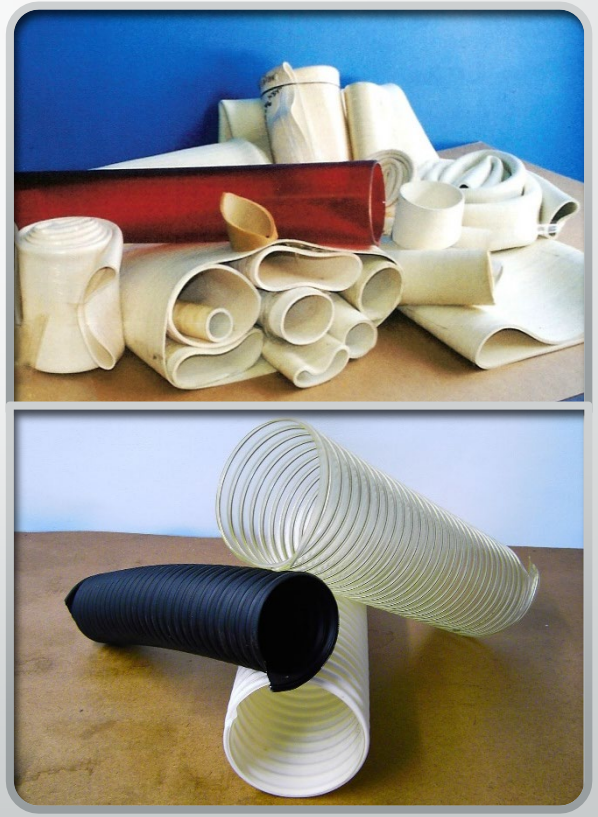
- Fabric
- Rubber/Poly
- Pressure Sleeve
- Corrugated
- Catch Cloths

Transfer/ Connection Sleeves

- AFF makes connecting / transfer sleeves to join movable equipment such as a vibrating sifter, to other equipment. Additionally, we specialize in designing and fabricating a very wide range of flexible, breathable and non-breathable connectors.
- We select fabrics (FDA-approved for food contact) for the best performance in your application. Each item is custom made for a precise fit, and we keep track of your designs for future orders

Rubber/Poly

- AFF supplies integral rubber & polyurethane connection sleeves that are utilized in a wide range of industries.
- Gum rubber tubing provides excellent abrasion resistance as a transfer chute for delivery of either dry powder cement or slurry. The tan tubing is available in a wide range of diameters, wall thicknesses, and lengths.
- Clear polyurethane seamless tubing offers outstanding abrasion resistance, full view of the product as well as excellent static-dissipation



Pressure Sleeve

- AFF manufactures heavy-duty pressure sleeves of FDA approved white gum rubber with reinforced cotton duck jackets for use in pressurized food processing applications.

Corrugated

- We carry a wide range of corrugated rubber boots to fit all OEM vibratory and gyratory sifters. We stock many different materials, styles, diameters & lengths so it is easy to choose the right sleeve for your application.

Specialty Fabrics

Antistatic

Membrane

Antistatic Materials

- Statistical data regarding industrial accidents point out that 1 out of every 10 explosions is due to static electricity.
- In dust collectors, the electrostatic load can grow both on filter media and on the dust cake, and it is facilitated by low moisture levels, high temperatures, high contact velocities and small particles. Materials like wood powder, grains, sugar, aluminum, magnesium, fiberglass & carbon fiber could generate explosive conditions: particularly if particle dimensions and other characteristics meet the criteria established in the CEI 31-5-6 classification.
- Conduction (Anti-Static) cloth is a synthetic material, most often a polyester, woven through with stainless steel wire to dissipate static. Commonly used in industrial applications where static is prevalent or a concern. The stainless steel scrim has no affect on micron or porosity readings. Anti-static Polyester multifilament is used to make filter bags, socks, chutes and sleeves for fluid bed dryer equipment, mixer vents, hoppers and discharge chutes.
- End Uses: Antistatic filter media are used in a wide range of industrial, chemical, metallurgical, mineral and agricultural applications where the dust and process tend to build static and where a potential ignition source is present

Tetratex® Membrane

- Tetratex® is a proprietary expanded microporus PTFE (Polytetrafluorethylene). PTFE is a hydrophobic thermoplastic polyester with unique properties to resist temperature, chemical degradation, mechanical action and electrical charge and has one of the lowest coefficients of friction against any solid.
- Temperature limit for gas stream 275°/135° C
- Inherently oil and water repellent (hydrophobic and oleophobic)
- Surface separation instead of depth filtration
- Excellent dust cake release
- High resistance to acids and alkalis
- High filtration efficiency
- End Uses: Fibrous dusts (both organic and synthetic); Sticky dusts; Applications requiring high filtration efficiency to meet strict emission standards.

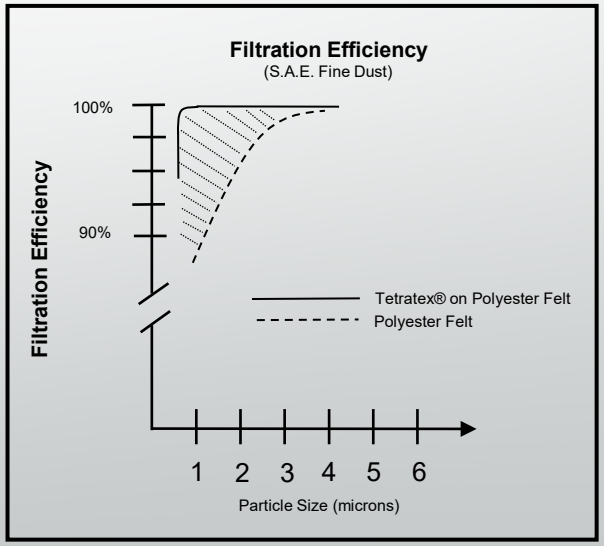


Fig.3 Tetratex® Membrane vs plain Polyester felt efficiency

Sifting Equipment & Accessories

RS-2

PolyBalls/Cubes

Screen Mesh

RS-2 Portable Reclaim Sifter

- AFF'S all new sanitary design Portable Reclaim Sifter incorporates many innovations to make this the easiest and most efficient tool available for your small batch sifting needs. It can be operated on top of a rolling base or mounted to a wall depending on your needs.
- A custom RCN output dust chute allows easy changes between containers while maintaining a clean working environment.
- The RS-2 ships with one screen, one dust chute and a rolling base. Optional items include a dust cover, wall mount and custom designed dust sleeves made to connect to your vessel of choice.

Polyballs & Cubes

- Polyurethane screen cleaning balls and cubes help prevent sifter screens from blinding or clogging with product. Screen "blinding" prevents the product form passing through the screen and results in a decrease in sifter capacity with an increase in sifter tailings or overs product.
- Polyurethane is extremely chemical resistant, non-porous, and durable. The addition of a stainless steel core to the ball and cube make them both magnetic and metal detectable. This facilitates the detection of a screen failure with the use of an inline magnet or metal detector.
- AFF carries a range of sizes, from ½" through 2" Dia, including stocking the 5/8" diameter balls and ½" cubes. The correct size will depend on the type of sifter. Sometimes a combination of cleaners will provide the best result.
- Proper screen cleaning increases screen life and saves money by ensuring good product doesn't get thrown out with the tailings. To get maximum benefit cleaner balls and cubes should be inspected annually for wear.

Screen Mesh

- We stock Nylon, Polyester, 304 Stainless, 316L Stainless and T430 Stainless
- We carry many different meshes and can sell by the roll, cut panel, finished screen and even offer rescreen services.
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