

# Industrial Dust Removal

**Vertical Cartridge  
Filter (VCF):  
Easy maintenance  
collector for  
nuisance dust  
applications**





- >> **No confined space entry for easy cartridge removal**
- >> **Vertical cartridge design cleans more efficiently**
- >> **Industry leading Pred of 6.4 psi**
- >> **Carbon or stainless steel reinforced construction**
- >> **Multiple inlets for all applications**
- >> **Rated for 30" W.C. and 250 °F (121 °C) standard temperature**
- >> **HEPA options are available**

Long filter  
media life.  
Efficient  
dust  
collection.

#### **Vertical Cartridge Filter (VCF)**

The Schenck Process Vertical Cartridge Filter (VCF) is a pulse jet filter designed to handle medium to high air volumes for industrial dust removal. It is typically used as a nuisance dust collector in applications with light dust loads and a high volume of air flow. An easy to-use cartridge clamp system on the hinged front doors of the baghouse provides easy access to and rapid replacement of the filter media. This minimizes downtime during scheduled maintenance decreasing overall cost of operation.

The filter is equipped with a smart timer, which includes an on-board sensor that reads the pressure drop across the filtering elements for on-demand cleaning. This results in reduced compressed air consumption and greater cartridge life. The standard radial inlet allows for excellent material separation during moderate air volume applications while the optional high entry inlet with a pre-separation chamber is designed for optimal performance in high volume systems. The chamber separates the largest powder particles safeguarding the media from excess loads of pollutants and guaranteeing longer media life.

**The ease of cartridge removal saves time and reduces costs.**

[VCF Cartridge Removal & Installation Video Link](#)

## Vertical Cartridge Filter Media Options

### Spunbond Polyester Media

Spunbond polyester is manufactured by layering and calendaring fine fibers. This method creates a tight pore structure that resists particulate penetration but also remains permeable. It is physically rigid holding the pleated structure without any support or backing material. Very good for moisture applications or where filters need to be manually cleaned on a regular maintenance schedule. Good for applications up to 265 °F (130 °C).

### Spunbond Polyester with ePTFE Membrane

Base spunbond polyester with ePTFE membrane thermally laminated to the filtration side. ePTFE membrane is true surface filtration providing MERV 16 efficiency. It is a 3-dimensional, microporous, web like structure that keeps fine/fume particulate from penetrating the depths of conventional media. Superior dustcake release for high moisture or sticky dust. The ePTFE membrane is still permeable so pressure drop is not sacrificed. In fact, with ePTFE membrane you will run at a lower consistent differential pressure than conventional medias. Good for applications up to 265 °F (130 °C).

### HEPA Media

Base polyester with ePTFE membrane laminated to filtration surface providing E12 HEPA efficiency. All the benefits of the spunbond polyester and ePTFE with the addition of providing E12 HEPA efficiency. Good for applications up to 265 °F (130 °C).

### Antistatic Polyester

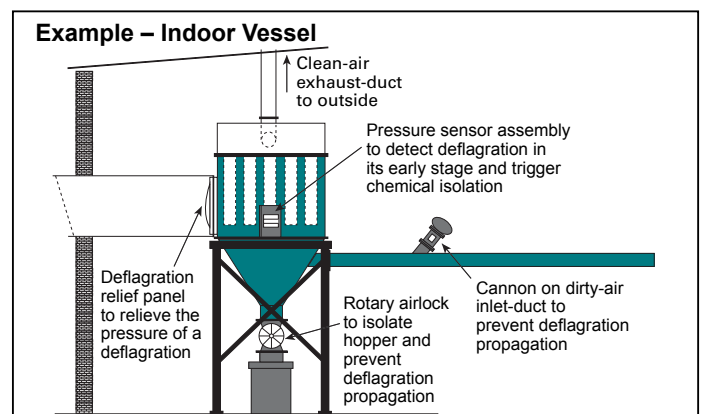
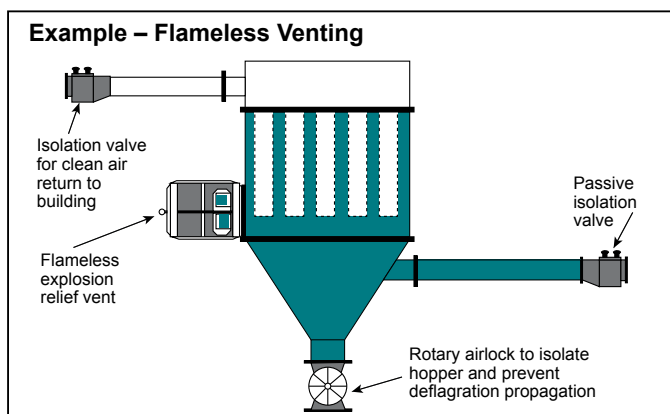
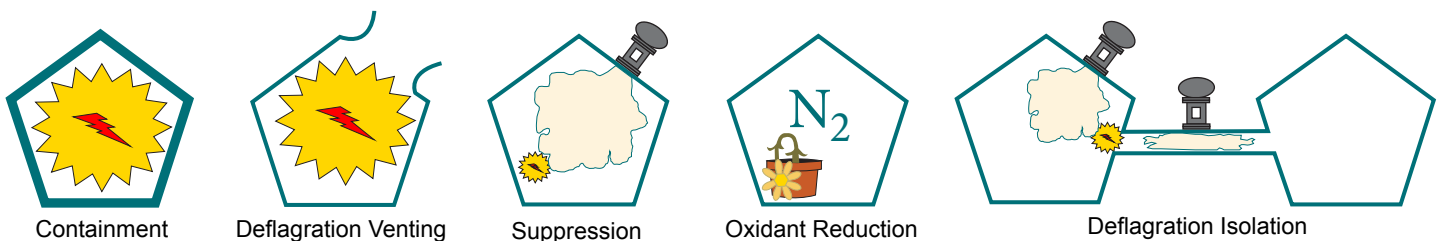
Pleated polyester with fine stainless steel mesh incorporated in the depth of the media. This provides anti-static properties through the filter's media from filtration side to non-filtration side. Good for applications up to 265 °F (130 °C).

## NFPA Compliance

In today's bulk handling systems, nearly all materials are combustible under the right conditions. With the right mixture of fine particles, oxygen and an ignition source an explosion could happen at any time. It is up to the end user to make sure their system is safe and compliant with the applicable NFPA standards. Schenck Process reviews each air filtration application with the customer to select the best explosion mitigation strategy for the application.

### Protection Options

- » Explosion venting
- » Ducted venting
- » Flameless venting
- » Containment
- » Inert gas/oxygen reduction





**The program includes the following key components:**

- >> **On-site dust collection analysis**
- >> **Particle size analysis and emission testing**
- >> **Field measurement of dust producing equipment and plant layout**
- >> **Preliminary sketches of plant/equipment layout as it exists today**
- >> **Preliminary drawings of the plant/equipment layout to include appropriate NFPA recommendations**
- >> **Pictures, data, details and all pertinent information required to evaluate current condition of dust systems**
- >> **Evaluate physical conditions of existing filters, fans and airlocks**
- >> **Evaluate existing ductwork layout and sizing, duct discharge design, and pneumatic transfer system**
- >> **Provide quotation for new and upgraded solutions**

Schenck Process offers a wide range of engineering services that facilitate optimum air filtration design, installation, and operational efficiency. Our On-Site Surveys are a key component to assuring your dust collection system is operating at peak performance.

# Air filtration on-site surveys

