

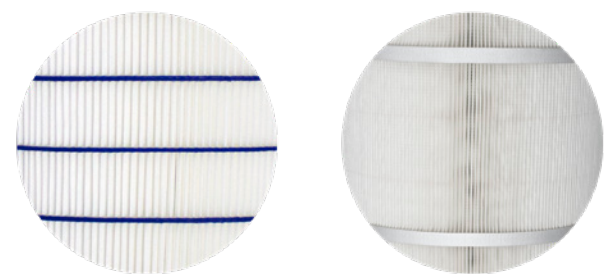
# MEDIA OPTIONS FOR DUST COLLECTOR FILTERS

Dust collectors are a critical tool for protecting your workers and equipment from harmful dust and fumes. However, your dust collector is only as strong as its filter cartridges, which makes filter selection vital.

Camfil APC filter cartridges are designed to capture the maximum amount of dust and air pollutants and then release them thoroughly when pulse-cleaned. However, filter cartridges also need to use the type of media that is appropriate for your specific application and dust. For example, your application may require media treated with coatings that promote dust release, flame retardance or conductivity. Using the wrong media causes high pressure drop and energy costs. Using the correct media creates a safer, cleaner work environment with less dust collector maintenance.



## HARMFUL AND TOXIC DUST

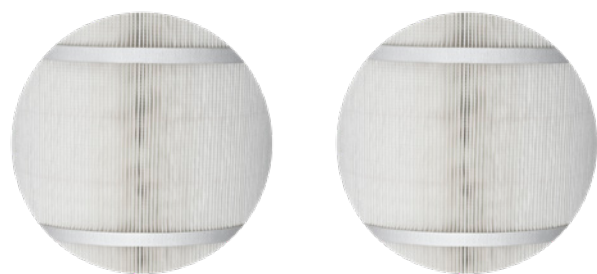


**HemiPleat®  
PTFE**     **Dura-Pleat®  
PTFE**

Many facilities produce airborne dusts and fumes that are hazardous to inhale. For example, welding certain metals sends hexchrome fumes that can cause lung disease. Pharmaceutical manufacturing can produce airborne potent compounds, and chemical processors can produce silica dust. Because of this, the EPA and OSHA might require higher efficiency filters, which can be achieved by using media that is chemically treated with a layer of nanofibers or PTFE.

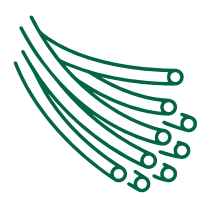


## HYGROSCOPIC AND STICKY DUST



**Dura-Pleat  
Hydro Oleophobic**     **Standard  
Dura-Pleat**

This type of dust absorbs moisture as it moves through the airstream. Once in the dust collector filter cartridges, this dust can become sticky like mud and cause the filters to plug. Hygroscopic dust is common in the food processing industry where ingredients contain fats and oils. It helps to use filter cartridges with wide pleats and to select media treated with an oleophobic coating that promotes dust release. The right selection can provide MERV 16 filtration even for very sticky dusts like sugar.



## FIBROUS DUST

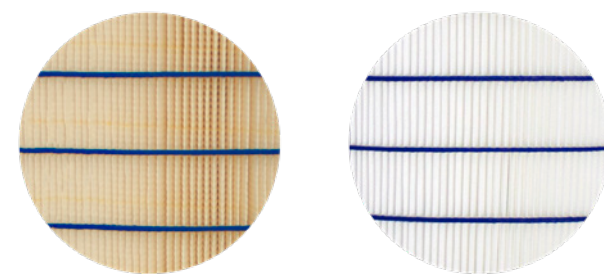


**Standard  
Dura-Pleat**     **Dura-Pleat  
PTFE**

Common in applications that process wood, paper, sand and cellulosic food ingredients. This type of dust resists release from the filter cartridge because the fibers attach themselves to cellulosic media fibers at the surface and cut edges. The solution is to use a spunbonded heavy-duty filter media that has a smooth surface. For extremely difficult cases, media can be used that is coated with air permeable, anti-stick surface coatings like PTFE. More dust is released with each pulse, keeping the filters operating efficiently longer.

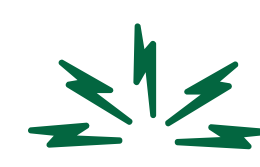


## FLAMMABLE DUST

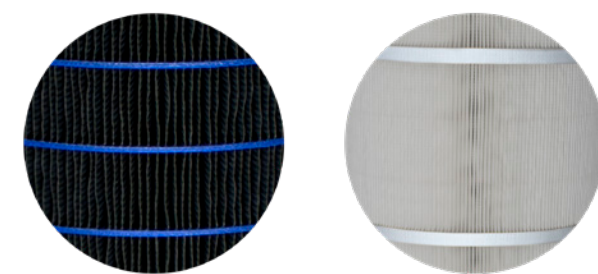


**HemiPleat FR**     **HemiPleat  
eXtreme FR**

In metalworking applications like plasma and laser cutting, grinding or welding, there is a higher risk of fire or explosion. Dust testing for burnability and flammability determines if flame-retardant media is required. If it is, you should select filter media that is saturated in a resin containing fire-retardant chemicals. Dust testing also determines the dust's minimum ignition energy so you know if you need media that is coated with a conductive aluminized finish.



## STATICALLY CHARGED DUST

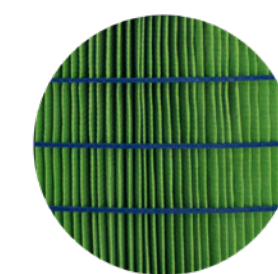


**HemiPleat  
Carbon**     **Dura-Pleat  
Aluminized**

Some types of dusts build up static electricity when it is collected and moved into the dust collector. These dusts include dry food products, fumed silica dust, PVC, and toner dust. The dust particles can attach to filters with a strong electrical bond, which prevents it from being released with pulse-cleaning. But even worse, it can ignite a dust explosion if it isn't dissipated. To safely conduct the charge and dissipate it, select cellulose filter media impregnated with a carbon coating or synthetic filter media coated with an aluminized material.



## ALLERGENS AND IRRITANTS

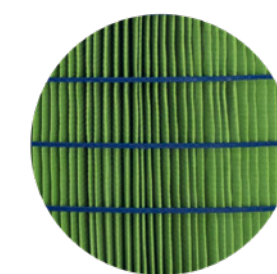


**HemiPleat  
eXtreme**

Food manufacturers must prevent cross contamination, especially when producing foods that are gluten-free and allergen-free. Also, the EPA may require high-efficiency filtration, which can be achieved with nanofiber filter media. Coating the media with a layer of nanofibers gives the base material larger pore sizes, which provides superior dust release and efficiency without increasing pressure drop. All eXtreme filter media offerings are rated MERV 15 per ASHRAE 52.2:2007.



## NUISANCE DUST



**HemiPleat  
Green**

These airborne particles in the workplace are not harmful to the human body if the levels of concentration in the air and the duration of exposure is kept below a specific level. This dust is produced from manufacturing activities such as grinding, sanding, and polishing. You can use standard filter media made from a nonwoven or cellulosic blend treated with a material to provide moisture resistance. It's the most economical choice for applications up to 160 degrees.



Learn more at [camfilapc.com](http://camfilapc.com)