Application Spotlight

Food Processing

Dust collectors used in the food processing industry often require modifications including ledge-free designs, stainless steel finishing and fire and deflagration suppression systems.

Special consideration should be taken when choosing an air cleaning system for food processing. Fugitive dusts from breads, cereals, snack foods and seasonings can migrate onto floors and expensive machinery, leading to slippery surfaces and increased maintenance problems. Additionally, it is important to determine the placement and accessories for a dust collector that will be containing combustible ingredients, like sugar and starches.

Parker Hannifin can provide the right dust collection package to help avoid safety hazards within your food processing facility. DustHog® systems provide cleaner air, longer filter life, easy maintenance and overall cost savings. Available in a variety of configurations, our dust collectors can be used in conjunction with all types of material handling, including bin vents, conveyors, chutes, bucket elevators and transfer stations.

- Blending
- Coating
- Cross-contamination
- Drying
- Granulating
- Mixing
- Packaging

DustHog SFC 32-4 with Safety Filter used for blending powdered cheese, baking mixes and tortillas.

Stainless ducting is used with this dump station. Ducting is attached to DustHog SFC 32-4 above.

DustHog SFC 12-3 with Cyclone used for blending dry dairy and other food ingredients for baked goods and snack foods.
DustHog SFC Collectors—Less Energy Usage

The DustHog SFC uses an obstruction-free, horizontal filter arrangement with our patented pulse cleaning mechanism to effectively clean the cartridge filters. At any point along the cartridge, the SFC provides 25% or more pulse cleaning power than other similar sized systems. As a result, fewer pulses are needed, and less compressed air is used—a significant savings over the life of the unit.

Protura® Nanofiber Cartridges Cost Less Long Term

The cartridge filters feature a special surface nanofiber layer made from synthetic polymers so extremely fine, they are measured in fractions of a micron (nanometers). This ultra-thin layer traps dust on the surface of the filter before it can embed deeper in the media—leading to better cleaning efficiency with fewer pulses and significantly less compressed air use. As a result, customers benefit from several advantages, including:

- MERV 15 filtration efficiency ensures capture of submicron particles and reduction of dust collector emissions for cleaner and safer workplace air
- Lower energy costs with reduction in compressed air from fewer pulses and filter pressure drop
- Nanofiber technology means superior surface loading to enhance dust cake release and longer filter life
- Protura nanofiber cartridges last up to twice as long as standard commodity filters

Parker Hannifin also offers a variety of media options to address challenging applications such as processing sugars, candies and other confections. These types of sticky ingredients tend to absorb moisture and require specialized cartridge filters.

- Bag in/bag out filter change
- Bin level indicators
- Clean in place (CIP)/wash
- Down capability
- Explosion vents
- HEPA safety after-filter
- Ledge-free design
- Polished finish
- Stainless steel 304 & 316
- Fire/explosion suppression system

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