

# THE IMPORTANCE OF FOOD PROCESSING PREFILTERS

Airborne environmental dust or debris constantly blows into HVAC/R systems at food processing facilities, overtaxing the equipment. As a result, food can easily get contaminated due to poor filtration. This also leads to exorbitant energy bills and high maintenance costs.

Contaminants should be captured before they enter food processing equipment. That's precisely what air intake filters, or prefilters, are designed to do. They attach to the outside of HVAC/R systems to protect the delicate coils, fins and electronics inside. They have been shown to significantly reduce maintenance, labor hours, costly line downtime and protect other process equipment that is vulnerable to breaking down due to impure air.

# The Pure Facts: The Need for Clean Air

Air quality and temperature must be carefully controlled and monitored to avoid airborne contaminates that can otherwise result in food spoilage, spur mold growth and even lead to large-scale outbreaks related to illness or infection.

#### **Prefilters Keep Lines Running**

Food processing equipment runs up to 20 hours a day, every day. Dirt, dust and ingredients can easily clog HVAC/R and other food equipment, necessitating downtime for cleaning and maintenance. This can be costly—unplanned downtime from equipment malfunctions can cost up to \$30,000 per hour.



# **Clean Air Requirements**

Clean air isn't only good business, but in many cases, it's mandatory. The AIB (American Institute of Baking) is just one organization that sets high sanitation standards for food processing and handling. They set steep penalties for violations, including those created by airborne dust, lint and fibers.



# Case Study: Food Processing Plant, Battle Creek, Michigan

A large cereal manufacturer discovered that their air circulator fan components and compressors were covered in airborne contaminants blown back into the facility and onto finished food products. The maintenance team was forced to disassemble 25+ fans weekly, clean all the components, and reassemble them. Still, fan burnout was common, leading to excessive replacement costs.

PreVent® bonnet filters solved the problem. Each is customsized to fit securely on the front or back of each fan or compressor. They are easily cleaned and don't restrict airflow.

## The Benefits of Permatron Air Filtration Products for Food Processing

Permatron works with food processing companies across the country who are looking to:

**Reduce energy costs** 

Lower HVAC repair bills by 30%

Cut HVAC maintenance costs by 2/3

Keep HVAC equipment running longer and reduce downtime

Improve air quality

Extend the life of high-efficiency pleats by 2-3X

Increase staff productivity and reduce sick days

PreVent filters are custom-made to fit your exact needs and can be installed in minutes with patented magnetic mounting. Plus, each comes with a five-year warranty.

## Make the Right Choice with PreVent®

Here is a snapshot of some of our most popular PreVent products.



#### **PreVent® Model U or Model BHA**

Electrostatic polypropylene or high abrasion PVC media encased in a flexible vinyl frame with grommet mount options like screw-in clips or patented MagnaMount® earth magnets.

#### **APPLICATIONS:**

Cooling Tower, Roof Top Unit, Make-up Air Unit, Chiller, Condenser, Louver, Fan Coil, Dry Cooler, Refrigerated Trailer, Cold Storage Enclosure



#### PreVent® Model R

Electrostatic polypropylene media encased in a rigid steel frame, slide-in or patented magnetic strip mount options available.

#### **APPLICATIONS:**

Compressor, Ice Machine, Reach-in or Walk-in Cooler, Refrigerated Display Case, Electronic Cabinet, Process Equipment, Portable Cooling, Power Generation, Cold Storage Enclosure



#### **PreVent® Model PF**

Electrostatic polypropylene media and heavy wire mesh encased in a rigid steel panel style frame that slides into existing filter banks, replacing metal mesh or disposable filters in harsh outdoor environments.

#### APPLICATIONS:

Fresh Air Handling Unit, Make-up Air Unit, Filter Rack System



# PreVent® Fan Guards, Fan Shrouds, Vent Caps, Socks, Diffusers and Bonnets

For intakes or exhausts. We offer a variety of 3D filters that keep airborne contaminants from blowing back into the facility, outdoor environment, or nearby rooftop cooling equipment.

#### **APPLICATIONS:**

Recirculating Fan, Cooling Tower Fan, Ceiling Vent, Motor Cooling Fan, Supply Fan, Exhaust Fan

# Protect Equipment and Lower Costs with PreVent®

For the ultimate equipment protection, you need PreVent—the most reliable, durable and dependable prefilters available. Each PreVent prefilter is custom-made and built to withstand the most extreme environments inside your food processing facility, and out.



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