



FILTER MANUFACTURER SEES CLEARER WITH DUST COLLECTION SYSTEM

A leading manufacturer of HVAC filtration products for residential, commercial, industrial and HEPA applications discovered an air quality problem in its largest facility. This plant produces more than 30 million fiberglass furnace filters each year. United Air Specialists (UAS) solved their dust collection problem, reducing on-the-job injuries while also saving time and money.



FOCUS:

Large filtration manufacturer

CHALLENGE:

Capture fiberglass dust generated by multiple production lines

SOLUTION:

BDC Series Dust Collector

IMPACT:

- Decreases eye injuries
- Ensures workers' safety
- Saves money
- Reduces maintenance time

CHALLENGE

The large filtration facility uses seven different filter manufacturing lines throughout its 260,000 square foot building. Each production line created a thick haze of particulate where fiberglass rolls are cut, glass is broken and where fiberglass media is inserted into a cardboard frame. Because dust was released in several places, it made the fiberglass particulate difficult to capture. Also, standard air cleaning equipment designs are not equipped to capture the large amount of dust produced in this facility.

Dust settled on machinery as well as employees' clothing, hair and into their eyes. Even though employees wore safety glasses, fiberglass contaminants caused daily eye injuries.

"Nearly every day someone would require medical attention because of dust in their eye. That's \$40 to \$50 an incident, plus lost time," said the plant manager. "We really wanted to solve this problem."

In addition, a full-time employee was needed to sweep the dust that accumulated from the previous day.

The filter manufacturer needed a system requiring minimum maintenance and downtime and with limited space, the unit had to be under

11 ft. high. The manufacturer tried a number of solutions including exhausts, misting fans, wash stations and additional eyewear, but all these attempts proved unsuccessful.

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SOLUTION

UAS' engineers evaluated the facility and recommended the BDC-22T dust collection system. The unique BDC is a compact, self-cleaning, continuous-duty system that meets the needs of industrial dust collection applications. This advanced system uses a pulse-jet cleaning system to effectively "pulse off" captured dust and clean the filter while the system stays online. The BDC offers superior design with maintenance-friendly features.

Because the BDC Series offers the most efficient media filter options, UAS was able to meet their fiberglass collection needs with 2-in., 16-oz. polyester felted bags. This material provided the best durability and highest efficiency to capture the fiberglass dust, and allowed for easy maintenance as the filtration company requested.



Fiberglass is captured on 2-in., 16-oz. polyester felted bags.

UAS also custom engineered a larger hood to capture the large quantity of fiberglass dust. To meet height and sound requirements, UAS suggested a short 30-gallon discharge drum and a direct-drive blower and silencer to minimize noise.

For cleaning, the BDC was set to pulse clean on demand, as well as perform downtime cleaning. Pulsing on-demand allows trained employees to control the high and low points at which air is blasted through the cartridges.

During downtime cleaning, the unit goes through two cleaning cycles with the blower off, getting the most efficient cleaning.



UAS custom designed a hood to capture fiberglass dust directly at the source.

IMPACT

UAS' BDC dust collector produced dramatic results. Nearly all the fiberglass dust is now captured and removed from the workers' breathing zone. Most important, eye injuries have dramatically dropped since the installation. The BDC has increased the workers' safety and saved money on medical bills and maintenance costs. With the installation of the BDC, this facility greatly reduced routine service time. An employee no longer has to sweep up the dust every night. By using the pulse cleaning system, the BDC prolongs the filter life, which maximizes efficiency and saves money.



Clean air. It's what we do.™

To locate the UAS Rep nearest you, visit www.uasinc.com or call UAS Headquarters at 1-800-252-4647.