



FilterTalk

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FAST FACTS ON INDOOR AIR QUALITY FROM THE ENVIRONMENTAL PROTECTION AGENCY

The number one environmental health problem in the United States is poor indoor air quality

20 percent of employees have an illness related to indoor air pollution

18 percent of annual production loss is due to poor indoor air quality

40 percent of all buildings in the United States pose a serious health hazard due to indoor air pollution

EDITOR'S NOTE

Filtration Group is excited to continue bringing you industry information and insights as part of our FilterTalk newsletters. Please note that FilterTalk will now be published quarterly with issues distributed in spring, summer, fall and winter. Thank you.
-- FilterTalk Editors



KATRINA AIR QUALITY CONCERNS ESCALATE

New Orleans and the Gulf region are still experiencing the effects of Hurricane Katrina six months after the storm came ashore. Many of the problems are due to discrepancies with insurance companies, planning committees and lack of funding. But the distress goes beyond economic disruptions. One can only imagine what the mixture of humidity, standing water filled with floating trash, overflowing sewers and assorted debris can spawn.

Multiple factors from the storm and its aftermath are contributing to negative health effects caused by Katrina. Many of them are a result of airborne bacteria, viruses and mold. When inhaled, these microorganisms can put people at risk for lung disease and other sicknesses.

This poor air quality is not limited to the outside, many cases of people getting sick are from those coming back to restore their homes or work in their current offices. With warm weather, high levels of humidity can foster the growth of dust mites which can trigger allergic reactions and asthma attacks. Still, the biggest health concern haunting the victims of Katrina is mold. Mold spreads and reproduces by making spores and can affect people who breathe it, swallow it or get it on their skin.

In order to deal with this poor air quality, builders must take air circulation into consideration when reconstructing buildings, offices, hospitals, schools and homes. Filtering out the microorganisms and dust mite particles from the contaminated air inside as well as filtering the outside air coming into new buildings is essential in providing safe indoor air.



Filtration Group strongly recommends that those affected by Katrina take the filtration elements of the rebuilding process seriously. Filter products such as the TitanFP, FMV and GeoPleat-M can best handle the high humidity levels that residents are experiencing. These filters will help keep out many of the airborne problems that are going to affect the people of New Orleans. For high technology environments such as hospitals, labs and research facilities the FP-S line of filters is a solid choice due to its rugged design and ability to handle high humidity.

Health experts are taking the threat of indoor air quality seriously and those responsible for rebuilding should as well.

SOUTH CAROLINA PLANT UPGRADES TECHNOLOGY TO INCREASE PLANT PRODUCTION

There comes a time for every company to question whether its facility is running at the highest potential and if it should invest in the continually improving world of technology. When it develops into a matter of output and efficiency, looking at the long term benefits of investing in production line advancement become crucial. Filtration Group has made this investment and is now reaping the benefits of having automated controls managing its production line.

Problems in the Plant

Production lines in Filtration Group's non-woven filter media plant in York, SC, were not meeting the volume of demands from its customers. Time was lost switching settings along the line to meet the requirements for different media coming down the line for various filters. Accuracy was less than perfect because controlling machines by hand left opportunities for mistakes to be made.

Making the Change

By upgrading one of the two production lines in the plant, Filtration Group has seen the benefits of automated controls, saving both time and money. Computerized skill labor allows for more efficient production of filters, enabling for faster production and less down time.



Three work stations are located at the beginning, middle and end of the line and instead of manually turning the pods, workers now have complete control from touch screens. And because they are Windows based the computers are user friendly and simple to operate. The automated controls enable line supervisors to quickly adjust and manipulate the line mechanics produced. The data base can change the controls to work with specific styles of media, the width, loft and weight of each filter.

Lines that are controlled automatically have the capacity to rapidly change the required settings for the different media being produced.

Increased Production, Higher Quality

Output has increased significantly with the automated controls. The line runs faster, is more efficient and has more consistent production. With all of the setting changes throughout the day, the computer makes the process much quicker. In two shift periods the automated controls produce as much output as the company previously did during four shifts done manually.

Filtration Group is looking to expand its success with automated controls to the company's other existing production lines in the near future.



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GOT A QUESTION FOR US?

Q: Is it necessary to replace ventilation or air conditioning systems after a flood?
 A: If submerged in flood waters, HVAC systems can contain substantial amounts of dirt and debris and may also be contaminated with various types of microorganisms such as bacteria and fungi. Moisture can also collect in HVAC system components that were not submerged, such as air supply ducts and can promote the growth of microorganisms. Therefore, all components of the HVAC system that were contaminated with flood water or moisture should be thoroughly inspected, cleaned of dirt and debris and disinfected by a qualified professional.
 – National Institute for Occupational Safety and Health.

PRODUCT SPOTLIGHT: THE TOUGHEST FILTER FOR THE HARSHTEST ENVIRONMENTS

Finding a filter that can suit the needs of harsh airflow environments can be a long and tedious task. Trying to find one that's also lightweight, dependable and long lasting can add additional challenges.

That's why Filtration Group introduced the FP-S Mini-Pleat V-Bank filter to our customers. Constructed with a composite of synthetic filter materials and a high impact, all plastic frame, this filter is designed to be reliable, lightweight and extremely strong. The FP-S's durable construction



virtually eliminates the potential for physical damage during shipping and handling or installation. Its rugged design is perfect for use in the harshest environments, including everything from turbulent air flow to offshore applications.

With a 24 x 24 x 12 frame the extended surface and advanced synthetic media create a low resistance to air flow. This feature enables increased air flow and higher efficiency levels all without costly equipment. Additionally, because of the low pressure drop, energy costs are less and the filter has a longer life.

The FP-S is designed to handle all types of unusual circumstances including 100% relative humidity, turbulent air flow, intermittent exposure to water, repeated shutdown, and desert and marine installations. It's also designed for all HVAC applications and specially suited for variable air volume (VAV) systems.

Worldwide, the FP style filter is the most proven and reliable high technology air filter available and the FP-S is no exception.

MIDWEST AIRLINES CENTER FLYING HIGH WITH GEOPLEAT FILTERS IMPROVED AIR QUALITY, LOWER PRESSURE DROP REDUCES COST OF OPERATIONS

The Midwest Airlines Center (MAC) in Milwaukee, Wisconsin is one of the country's most architecturally interesting and technologically advanced buildings. With more than 188,695 square-feet of exhibit space and a 37,506 square-foot ballroom, this state-of-the-art facility is host to hundreds of trade shows, conferences and corporate gatherings each year.



As with any facility that caters to so many events, air quality is a top priority with the company's management. One unique challenge the MAC faced was that its steam coils were positioned close to the second filter in a two filter system. This forced the MAC to use large, bulky fiber glass filters because synthetic media would melt. For years, 12 inch deep rigid box filters with metal sides were used. Additionally, because they were using a fiber glass filter the pressure drop averaged about .65 inches.

That's why when Mike Perinovic of Filtration Concepts, the company that supervises the filtration systems at the MAC, saw Filtration Group's new GeoPleat at a trade show he knew it could immediately improve conditions

at the facility. After getting a better understanding of the product, Perinovic was convinced that the GeoPleat would dramatically improve the air quality of one of the most important buildings in Milwaukee and he ordered 550 for the facility.

Because the filters are only four inches wide, eight inches smaller than the old fiber glass ones they had been using, the GeoPleats were far enough away from the steam coils that they could use synthetic media.

"Size made it a heck of a lot easier for us because it adds another 8 inches of distance between the filter and the steam coils," said Perinovic. "Another advantage is that the GeoPleat filters are easier to transport to the units. We can haul six at a time compared to bringing up one or two at a time."

Size was not the only selling point for Perinovic and the MAC. Thanks to the GeoPleat the pressure drop was dramatically reduced as well. While the center had been using filters that caused a pressure drop of .6 or .65 inches, the Geo Pleats brought the pressure drop readings down to about .45 inches.

"The biggest plus for us is that we can deliver such a low pressure drop in a four inch package," said Perinovic.

Because of the GeoPleats' smaller size and reduced pressure drop the MAC was able to reduce its overall cost of operations, saving on energy, labor and disposal savings.

Filtration Concepts has now ordered another 2,000 GeoPleats and recommends them to almost all its customers.

"When you show a customer this filter and they see the size of it and then you show them the pressure drops and how it performs they smile ear to ear," said Perinovic.



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