

FIRST IN CLEAN AIR

ENGINEERED<sub>4</sub>

COMMERCIAL

APPLICATIONS



## PURAFIL FIRST IN CLEAN AIR

is dedicated to providing superior clean air solutions through the continuous improvement in people, products and quality systems. Purafil pioneers air quality standards, invests in research and development and is focused on the engineering and manufacture of innovative, value-added gas-phase air filtration media, systems and monitoring instrumentation. Recognized as an industry leader, Purafil is trusted worldwide to protect people, preserve history and improve the reliability of production process.

## THE CHALLENGE

Urbanization and technological advances create adverse effects in commercial facilities. Poor indoor air quality (IAQ) stems from automotive exhaust fumes, tobacco smoke, industrial gases and other sources of outside air pollution.

Used in most commercial buildings, common particulate filters cannot solve all problems related to poor IAQ. Gaseous contaminants — not particulate — are the true sources of odor complaints and can only be controlled through gas-phase air filtration.

## THE PURAFIL SOLUTION

At the heart of Purafil's gas-phase air filtration systems are small, air-cleaning "pellets." These pellets remove contaminants through a process known as chemisorption. During this instantaneous process, gases are adsorbed, or captured on the surface of the media.

Unlike adsorption, during chemisorption the contaminants are chemically transformed into harmless solids that remain trapped inside the media. Once the gases are removed from your environment, they cannot re-enter the air stream.



#### PURAFIL MEDIA HAVE NUMEROUS BENEFITS INCLUDING

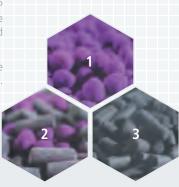
- UL Classification for non-flammability
- Non-toxic and non-hazardous ISO 9001:2000 guidelines
- Engineered according to strict
- Superior removal capacity Analysis value-added service
- Life-testable with Purafil's Media Life
- Landfill-disposable

In most cases, we recommend Purafil® SP Blend media because it removes the widest variety of odors and gases. SP Blend is a combination of Purakol® media, a premium grade activated carbon, and Purafil® SP media, an activated alumina substrate impregnated with the active ingredient sodium permanganate. While Purakol is highly effective at removing VOCs, it performs poorly against hydrogen sulfide, sulfur dioxide, and oxides of nitrogen. By using these media in combination, Purafil can ensure the removal of all odors.

Purafil manufactures a wide variety of media to remove specific pollutants from specific sources. Because we offer a variety of media, we can customize your system to meet the unique challenges in your environment. Using a combination of Purafil media allows you to target each and every contaminant of concern.

#### **PURAFIL** offers the following MEDIA for specific gas challenges:

- Purafil® SP Media to remove a broad range of internally and externally-generated contaminants in commercial facilities.
- 2 Triple-Blend Makeup Air Media to remove jet fuel odors, diesel exhaust and automobile emissions.
- Purakol® AM Media to remove cleaning odors and ammonia/urine odors.





## PURAFIL SIDE ACCESS SYSTEM

Gas-phase and particulate filtration system designed for general odor control.



## J-TRACK™ TECHNOLOGY

A patent-pending, self-sealing technology that prevents air bypass ensuring the highest filtration efficiency.



#### FRONT ACCESS SYSTEM

Modular filter bank designed to remove odors and gases within commercial buildings.



# CK-12/24 MEDIAPAK MODULE

Factory-filled disposable media module featuring an integral one-inch header.



## PK-18 MEDIAPAK MODULE

Factory-filled disposable media module incorporating the patentpending J-Track™ Technology.



#### PURAFILTER

A combination chemical and particulate filter designed to replace existing particulate filters in retrofit or rework applications.



16X MAGNIFIED



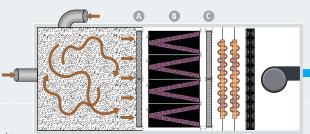
# SHELTER IN PLACE SYSTEM

The Purafil Shelter in Place System offers localized protection against biological and chemical contaminants.





# PURAFIL APPLICATIONS WITHIN THE AIR HANDLING UNIT



# A : PREFILTER

A prefilter section is needed to remove semi-volatile particulate contaminants.

## B: MEDIAPAK DISPOSABLE PLASTIC MODULES

Purafil manufactures several media containers, or modules, that easily slide into and out of Purafil equipment on tracking. Modules are disposable and come pre-filled with your choice of Purafil's engineered media. The module's distinctive "V-Shaped" design increases the media's contact time with gases, which optimizes removal capacity, lowers pressure drop and minimizes energy costs.

#### C : FINAL FILTER

The final section of the filtration system is a final filter to catch any dust which may be generated during the maintenance of the system.

 $X_1 = X (t_1/t)^A$ 

# MEDIA LIFE ANALYSIS

Because Purafil believes in complete customer satisfaction, we offer Media Life Analysis (MLA), a value-added service that projects the remaining life of your dry-scrubbing media. Our laboratory technicians analyze media samples from your Purafil system to project when your media will need to be replaced. This service helps to maximize system efficiency.

Purafil spends more time assessing problems and verifying system performance than any other company in the industry. Purafil has invested in a comprehensive, in-house laboratory and is one of the few organizations to offer life testable systems.



www.purafil.com

