



CLEAN AIR SOLUTIONS

Purafil Inc.'s air-treatment systems remove toxic chemicals and other pollutants in hospitals, museums, airports and someday even homes.

by Kathryn Jones

CEO James W. Mash says Purafil Inc.'s success has a lot to do with the fact that the Norcross, Ga., company sells a product that all living things depend on to survive or, at least, a product that will become increasingly important as the years go by – clean air.

Specifically, Purafil manufactures small purple-pellet media that use activated carbon and sodium permanganate-impregnated alumina to permanently remove toxic and hazardous gases in airstreams. This is performed through a process called “chemisorption,” during which,

PROFILE

Purafil Inc.
www.purafil.com
2006 revenues \$32 million
HQ Norcross, Ga.
Employees 67
Services Air-filtration
Jim W. Mash, CEO “[Others] cannot duplicate our expertise or our technology.”

Purafil manufactures systems that remove toxic and hazardous gases in airstreams.

Mash says, the media “adsorbs gaseous contaminants similar to how a sponge adsorbs water.”

Scientists began developing these pellets in the early 1960s with Dr. Richard Kuehner at the forefront. More than 40 years later, the company offers dry-scrubbing chemical filtration products to more than 20,000 clients in 60 countries.

THE INDUSTRIAL MARKET

“Because industrial facilities are extremely corrosive environments, the multimillion-dollar computer systems that control manufacturing processes are at great risk of failure,” Mash explains. Purafil systems seek to prevent lost revenues by protecting industrial equipment to ensure production runs smoothly.

The company has installed its media in facilities such as AMOCO Petrochemical in Singapore, Pacific Gas & Electric in California and Taiwan Power Co. in Taiwan.

It recently worked with engineers worldwide to develop a chemical filtration equipment package for gas and oil refineries in Kazakhstan to protect people and electronics from dangerous gases.

“We also are working on instrumentation small enough to be used in every laptop or desktop computer to evaluate the environment that computers are being used in,” he says.

Purafil also works with the commercial market and offers several air filtration products that have been installed in NASA's Johnson Space Center in Houston, Walt Disney World in Orlando, Fla., and Hong Kong University in Hong Kong. Also, Purafil media removes ethylene during the warehousing and shipment of produce and flowers.

Purafil OnGuard® Monitors measure environmental corrosion, temperature and humidity to protect some of the world's treasures, it says.

These monitors and a variety of other Purafil media have been installed in the Smithsonian Institution, the Tower of London, the Dutch State Archives and the Sistine Chapel in the Vatican City to preserve timeless artifacts.

Cleanrooms also benefit from Purafil's products. "Because the size of microelectric devices is rapidly decreasing, the concern over airborne molecular contamination has become as pressing as particulate contamination," Mash says. In order

to keep the air sanitary, Purafil has installed its dry-scrubbing media inside facilities such as China Pharmaceutical in China, St. Joseph's Hospital in Tampa, Fla., and Hyundai Electronics Industries in Korea.

Finally, for water and wastewater treatment facilities, Purafil manufactures dry-scrubbing media that removes chlorine, hydrogen sulfide, sulfur dioxide and other gases from the air.

WHAT'S NEXT?

Although Purafil products cover nearly every market, they have yet to make it to the residential realm. However, Mash says, that will soon change.

"We are working with some of the world's business leaders that furnish air-conditioning equipment to develop chemical filtration that will clean the indoor air of pollutants for commercial and residential applications," he states. "Someday, the same Purafil products that protect the Sistine Chapel and the

Hubble space telescope may be available for use in your home air conditioner to remove unwanted odors and to guarantee that you are breathing fresh air."

Mash also notes that the company is currently working with U.S. Army Corps Engineers to research products that may be used to assist against a terrorist threat.

"I think the trend we see is, since the 9/11 attack, everyone is more aware of odors and gases," he says. "This means people no longer let odors occur without question. That brings more attention to the source of these odors and what options may be available to eliminate [them]."

In the meantime, Mash says, Purafil will give competitors a run for their money by continuing to develop the world's most advanced air-cleaning technology. "Competitors have tried to imitate our product and claim to produce media as effective as ours, but they cannot duplicate our expertise or our technology," he says. **usbr**

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