



Your Formula for Success
RESINS | GEL COATS | COLORANTS

CASE HISTORY



Pipe Dreams: An Odor Control System Built to Last

Market Segments:	Ductwork/Pipes Water/Wastewater
Composite Application:	Odor Control Equipment
Resin:	Vipel® K022
Manufacturing Process:	Filament Winding
Diameter range:	72 inches - 12 inches
Length:	1,000 feet
Chemical Exposure:	Hydrogen sulfide, ammonia, sulfuric acid
Installed:	2012
Location:	Austin, TX

AOC and ECS Environmental Solutions worked together to create an integral part of the city of Austin’s complex wastewater infrastructure project. The new 3.9-mile wastewater tunnel increases capacity for the downtown district and facilitates residential and business growth in the area. An important part of the project is an odor control system.

ECS Environmental Solutions provided the odor control equipment and relied on AOC’s Vipel resin for more than 1,000 feet of fiberglass ductwork and additional accessories. The ductwork ranges in size from 12 inches to 72 inches in diameter. Approximately half of the ductwork is buried below ground and had to be able to withstand thousands of pounds of high-density traffic driving over the site. Additional elements of the project include field joint kits, flexible connectors, control and back-draft dampers, bolt gaskets and two fiberglass exhaust fans rated at 40,000 cubic feet per minute (CFM).



ECS field service technician Phillip Johnson, left, assists in the start-up, balancing and training of the biofiltration unit.



ECS supplied more than 1,000 feet of fiberglass ductwork and fittings, incorporating AOC's Vipel K022

Long Life Cycle

ECS manufactured all of the fiberglass ductwork using a state-of-the-art computerized filament winder. The fiber was impregnated with AOC's Vipel® K022 corrosion-resistant vinyl ester resin, which is ideally suited for filament winding. "The K022 resin was the best choice for this project," says Jeff Jones, president of ECS. "Some of the gases in the air stream are corrosive – hydrogen sulfide and ammonia. There's also sulfuric acid. Pipes built with this resin are very resistant to what goes in them: They will not easily corrode."

To help ease installation, ECS prefabricated and sub-assembled the duct system at its facility, then shipped it to Austin about an hour away. A field crew of five from ECS traveled to the construction site and handled all the field layout. That's when AOC's service became invaluable, says Jones.

Unparalleled Service

"We work in a controlled environment in the shop, but in the field you are open to the elements," says Jones. "Some of the days we were in Austin were cold and others were really hot. We had to adjust promotion levels and add inhibitors to work with the resin long enough to do a quality job under tough conditions." AOC's Scott Lane, product leader, offered technical assistance that helped ECS re-formulate the resin. Eric Stuck, AOC sales representative, also assisted ECS in meeting the demands of this material-intensive project. "With the long runs and thick pipes, we went through material much faster than normal, and AOC was very good at meeting this fluctuation in demand," says Jones. "If we ran out of resin on this job, it would have put the project to a halt. AOC got materials here when we needed them. They were fantastic to work with!"

About ECS Environmental Solutions

ECS, Belton, Texas, is the nation's leading supplier of odor control equipment and accessories. A division of family-owned TexGlass Industries, ECS designs and manufactures products at its 100,000-square-foot facility in central Texas. Its odor control systems have been installed across North America. For more information, visit www.ecs-env.com for environmental solutions or www.ecs-frp.com for manufactured offerings.

About AOC

AOC is a leading global supplier of resins, gel coats, colorants, additives and synergistic material systems for composites and cast polymers. For more information on AOC technology, quality and service, e-mail corrosionresins@aoc-resins.com, phone (866) 319-8827, or go to AOC-RESINS.com.

