

Wastewater Duct System

Market Segment(s):	- Pipes/Ducts - Water/Wastewater
Composite Applications:	- Cylindrical and rectangular ducts; - Shutoff and balancing dampers, - T sections, elbows, fan transitions; - Duct supports, guides and anchors
Resin:	Vipel® F010 Bisphenol A Epoxy Vinyl Ester
Manufacturing Processes:	Filament Winding Hand Lay-Up
Cylindrical Duct Diameter:	5 feet (152 centimeters)
Installed	2001
Location:	Jefferson County, Alabama



Through its Plastics division, the JTI Companies, Inc., turned to the vinyl ester resin technology and service of AOC to help build a durable new odor control ducting system. JTI provided the detail design, support system engineering and composite cylinders and fittings for a new duct system.

The composite ducting is a critical component of the odor collection system of the new Valley Creek influent pump water station for Jefferson County, Alabama. Components of the duct system is connected using flanged and butt-and-wrap joints. To complete the system, JTI provided filament wound composite cylindrical sections as well as open-molded composite shutoff and balancing dampers, tee sections, elbows, fan transitions, rectangular ducts and the JOVE™ support system.

For this job, Vipel® F010 vinyl ester from AOC provided good fiber wetting of both the continuous fiberglass roving used in filament winding and the chopped strand mat and woven roving used in hand lay-up. The resin processed well over a wide 40 to 100°F (4.5 to 38°C) temperature range.

“Viscosity has been consistent throughout the project, and we were able to achieve all our required gel times which ranged from ten minutes to two hours,” says Jerry Winters, Plant Manager for JTI.

“This resin has been user-friendly in either the hand lay-up or filament winding operations,” Winters adds. “We could not have asked for a better performing resin or more helpful technical support from AOC.”

Wastewater Duct System, continued

Their support was extremely helpful in determining the promoters and inhibitors to use with out catalysts.”

About JTI

Located in Birmingham, Alabama, The JTI Companies, Inc., is a blend of companies that serves the corrosion market. JTI Companies provide non-metallic specialty engineering, construction, plastics fabrication and metal working services and products. More information is available on the Internet at www.jtijove.com.

About AOC

AOC is a leading global supplier of resins, gelcoats, colorants, additives and synergistic systems for composites and cast polymers. AOC knows technology, lives quality and delivers service better than any other resin supplier. For more information, e-mail corrosionresins@aac-resins.com, phone (901) 854-2800 or go to CorrosionResins.com or AOC-RESINS.com.

