

Cleaner Air for Southern Italy



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| Liner Resin: | Vipel® F085 epoxy novolac vinyl ester |
| Laminate Resin | Vipel® F010 bisphenol A epoxy vinyl ester |
| Composite Applications: | Scrubber shells Ducting |
| Manufacturing Process: | Filament Winding |
| Scrubber Dimensions: | 27 to 44 feet (15 to 25 meters) high 8.2 feet to 11 feet (2.5 to 3.4 meters) in diameter |
| Location: | Taranto, Italy |

A large scrubber system at a major manufacturing site in Taranto, Italy, converts highly corrosive waste fumes into emissions that meet Europe's strict air quality standards. To ensure high performance and durability, scrubber components were made of fiber-reinforced polymer (FRP) composites based on Vipel® resin technologies from AOC.

By reviewing AOC's range of corrosion-resistant resin chemistries, composite fabricator Foto Plastic Glass was able to develop the optimum material strategy for the application. For the scrubber system's large cylindrical shells and related ducting, two different Vipel resins have the required corrosion-resistant, thermal and structural properties.

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The resin also provided good wetting characteristics for filament winding large components with fiberglass roving, chopped strand mat and woven roving. The scrubbers range in height from 27 to 44 feet (15 to 25 meters) and in diameter from 8.2 feet to 11 feet (2.5 to 3.4 meters). The ducting is 3.3 feet (1 meter) in diameter.

Vipel® F085 epoxy novolac vinyl ester is specified for the inner liners of scrubber system components. The chemical backbone of the resin provides excellent resistance to acidic environments. The structural laminates were made with Vipel F010, a high crosslinked, bisphenol A epoxy vinyl ester with an excellent balance of heat resistance and flexibility.

