

CaseHistory

Filament Wound Poles

Market Segment:	Infrastructure
Composite Application:	Poles
Resin:	Unsaturated Polyester
Manufacturing Process:	Filament Winding
Pole Heights:	14 to 70 feet (4.3 to 21.3 meters)
Location:	Washougal, WA

As wireless telecommunications technology expands, so do the opportunities for composite poles that Corrosion Controllers of Washougal WA, USA, manufactures with unsaturated polyester resin from AOC.

As the company name suggests, Corrosion Controllers is a foremost manufacturer of corrosion-resistant composites, primarily for the chemical, water and waste water treatment, pollution control, pulp and paper, and semiconductor sectors. Over time, the company leveraged its decades of experience in filament winding technology to diversify into lighting and utility poles. Corrosion Controllers got so good at making poles that “DuraPole” has been established as a separate division to serve the special customer base.

“Users all across the United States have several reasons for choosing DuraPole products over poles made of steel, aluminum or concrete,” says Chris Kellogg, President of DuraPole. “Our composite utility and lighting poles are non-conductive, lightweight and cost-competitive and have excellent resistance to corrosion, high wind and UV degradation.”



The lightweight DuraPole utility pole is easily lifted in place.



An installed DuraPole product.

Filament Wound Poles, continued

Most DuraPole products are 14 to 30 feet (4.3 to 9.1 meters) tall. The tallest products are cell towers that reach up to 70 feet (21.3 meters). The company's poles are designed to be wider in diameter at the base and taper toward the top. Exterior surfaces are protected using a proprietary material and application technique that result in improved weatherability and luster retention.

Typical pole customers are utility companies, municipalities and contractors. With lower mortgage rates and increased housing starts in recent years, residential housing developers have increased demand for decorative fluted poles and standard mounting mast arm poles.

“DuraPole is also meeting the needs of the wireless phone, Internet and ‘WiFi’ networking markets,” Kellogg points out. “The types of poles that are becoming the most interesting combine a light pole and cell tower in one. We are told that cell towers are getting shorter because wireless transmission technology is improving. The trend to shorter towers will help composites better compete with steel whose lower flex properties can be an advantage for taller cylindrical structures.”

DuraPole products are filament wound of fiber glass strand and specialty fabrics that are impregnated with unsaturated polyester resin supplied by the Perris, CA, plant of AOC. “We really like the resin’s wet-out characteristics which help us maintain a very consistent glass-to-resin ratio. We appreciate the technical service we received from Dr. Frank Cassis, and Dan Poremba has been outstanding with process improvement assistance. The team of Composites One and AOC delivers on time and with consistency. It’s nice when we don’t have to worry about stock and can concentrate on the business.

About DuraPole

DuraPole is the lighting and utility pole business of Corrosion Controllers, a 50-year-old pioneer in the

manufacture of corrosion-resistant composites. In the early 1960s, Corrosion Controllers became one of the first companies to use the filament winding process. Experience in producing pipe, ductwork, shafts, tanks and missile tubes led to the technical superiority that goes into the filament winding of DuraPole products. For more information, contact DuraPole President Chris Kellogg in Washougal, WA, USA, by phoning (360) 835-2171, faxing (360) 835-2173 or e-mailing chris@ccifrp.com.

About AOC

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

