

KIRK ROAD HYDROPILLAR

There's no hiding a 209-foot-tall, 2 million gallon hydropillar that sits 30-feet from a major thoroughfare and is surrounded by a residential area, which is why engineers for the new water tank in Austintown, Ohio specified a coating system from Tnemec known for its high gloss and color retention. "The product engineer likes high performance and long service life from a coating system," according to Tnemec coating consultant Sean Carlin. "That's a real attribute of Series 700 HydroFlon, a two-component, fluoropolymer polyurethane. It provides a very high level of aesthetics, excellent application characteristics and superior ultraviolet light protection."

The coating system, which the project's engineering firm has used for years, featured Series 91-H₂O Hydro-Zinc, a two-component, moisture-cured zinc-rich aromatic urethane, as the primer on both interior and exterior steel. Interior steel was prepared in accordance with SSPC-SP10/NACE No. 2 Near-White Metal Blast Cleaning prior to spray-applying Hydro-Zinc. Exterior and interior dry steel was prepared in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning before priming.

Following assembly, the tank's interior received two coats of Series 20 Pota-Pox, a polyamide epoxy, which was spray-applied. Exterior steel received an intermediate coat of Series 73 Endura-Shield, an aliphatic acrylic polyurethane, which was roller-applied, followed by a finish coat of HydroFlon that was also roller-applied. HydroFlon is an excellent alternative to four-coat systems since it eliminates the need for a clear coat.

The 50,000-square-foot surface of the tank required approximately 450 gallons of Hydro-Zinc, 400 gallons of Pota-Pox, 200 gallons of Endura-Shield and 150 gallons of HydroFlon, Carlin estimated.

"This was a difficult tank to paint given its proximity to nearby houses and Kirk Road, which has a high level of traffic," Carlin added. "On a tank that tall, even when you're using rollers the wind can carry a droplet of paint onto a house or passing vehicle. The job required a lightweight containment tarp and had no overspray complaints. It was really a super-human effort."

FEATURED PRODUCTS

- Series 20 Pota-Pox
- Series 73 Endura-Shield
- Series 91-H₂O Hydro-Zinc
- Series 700 HydroFlon



PROJECT INFORMATION

Project Location
Austintown, Ohio

Project Completion Date
October 2005

Owner
City of Youngstown Water Department

Engineer
MS Consultants - Youngstown, Ohio

Fabricator
CB&I - Clive, Iowa

Applicator
CB&I - Chicago, Illinois

Chosen for the exterior of the Kirk Road Hydropillar in Austintown, Ohio, Series 700 HydroFlon is an excellent alternative to a four-coat system because it eliminates the need for a clear coat.

