

CABELA'S WATER TANK

When specifying protective coatings for a 500,000 gallon pedestal water tank outside Cabela's retail store in Tridelfphia, West Virginia, the project's engineer wanted a system befitting the 'World's Foremost Outfitter.' "The tank does double duty as a means of water distribution to the store and as a billboard to draw customers, so aesthetics were important," according to Tnemec coating consultant Sean Carlin. The engineers chose an exterior three-coat system known for its durability, color options, gloss retention and ease of application.

Water storage tanks are normally erected with portions of the steel plates left unprimed to allow for welding. These unprimed areas along with the welds need to receive spot surface preparation and field application of the shop primer.

Corrosion Control, the painting contractor for the Cabela's project, began work on the tank in the spring of 2004. The tank's interior and exterior exposed steel had already been primed in the shop by the tank fabricator with Series 91-H₂O Hydro-Zinc, a two-component, moisture cured, zinc-rich urethane. The painting contractor began surface preparation by first using power tools to remove all weld spatter. The exterior of the tank was then spot abrasive blast cleaned in accordance with SSPC-SP6/NACE No. 3 and spot primed with Hydro-Zinc at 2.5 to 3.5 mils DFT. An intermediate coat of Series 73 Endura-Shield, an aliphatic acrylic polyurethane, was then applied at 2.0 to 3.0 mils DFT, followed by a finish coat of Series 700 HydroFlon, a fluoropolymer polyurethane, roller-applied at 2.0 to 3.0 mils DFT.

The interior of the tank was spot abrasive blast cleaned in accordance with SSPC-SP10/NACE No. 2 and spot primed with Hydro-Zinc at 2.5 to 3.5 mils DFT. Full coats of Series 20 Pota-Pox, a polyamide epoxy, and Series N140 Pota-Pox Plus, a polyamidoamine epoxy, were then spray-applied at 4.0 to 6.0 mils DFT per coat to complete the interior.

"A full teepee containment system was used throughout the surface preparation and application work," Carlin noted. "They needed a containment system because of the tank's proximity to Interstate 70 as well as the Cabela's store, which was under construction. The site is in a little valley with some hills, which creates a wind tunnel. And to make matters worse, the tank is 172 feet to the top of its roof. When you're painting at that height and the coating becomes airborne, the wind can carry it a significant distance and onto a car or a building. You would have had dust and debris from your blast media, along for the potential for overspray or splatter coming off of the rollers."

Weather was another factor, Carlin recalled. "When you're into spring and on a deadline, you are running into rain and evening temperatures that don't provide the best conditions for painting."

FEATURED PRODUCTS

Series 20 Pota-Pox

Series 73 Endura-Shield

Series 91-H₂O Hydro-Zinc

Series N140 Pota-Pox Plus

Series 700 HydroFlon



PROJECT INFORMATION

Project Location

Tridelfphia, West Virginia

Project Completion Date

June 2004

Owner

Cabela's Outfitters

Engineer

Vaugh, Coast & Vaughn - St. Clairsville, Ohio

Field Applicator

Corrosion Control - Pittsburgh, Pennsylvania

To protect the exterior of the Cabela's water storage tank in Tridelfphia, West Virginia, Series 700 HydroFlon was chosen for its excellent color and gloss retention.

