

PROVIDENCE AT PAINTED LAKES WATER TOWER

What started as a routine interior and exterior coating project for a 200,000 gallon waterspheroid in the Village of Lake Villa, Illinois, ended up a source of pride for the entire community and the winner of Tnemec's prestigious 2008 Tank of the Year Award. Originally, the village name in standard block letters was all that was going to appear on the tank, but then the Lakes Community High School Booster Club raised funds so the school's logo and mascot could be added.

The project is also noteworthy for its use of Series 700 HydroFlon, an advanced fluoropolymer polyurethane coating that provides unprecedented long-term gloss and color retention and resistance to ultraviolet (UV) light. "This coating is becoming the standard exterior finish coat being used on virtually every new tank and nearly every repainting project in Illinois," according to Tnemec coating consultant Erik Otten. "Coating contractors love this product, which eliminates the need to apply a clear coat."

The contractor and owner worked together to choose an appropriate three-coat exterior coating system that would provide the longest life expectancy. The tank's surface was prepared in accordance with SSPC-SP10/NACE No. 2 Near-White Blast Cleaning for interior steel under immersion and SSPC-SP6/NACE No. 3 Commercial Blast Cleaning for non-immersion interior and exterior steel. The following coatings were then applied:

- Series 91-H2O Hydro-Zinc, a two-component zinc-rich urethane primer, was airless spray-applied on both interior and exterior steel and provides outstanding corrosion protection.
- Two coats of Series FC20 Pota-Pox, a fast-curing polyamide epoxy, were airless spray-applied over the interior primer. Series FC20 is certified by NSF International in accordance with ANSI/NSF Std. 61 for use on the interior of potable water storage tanks.
- Series 73 Endura-Shield, an aliphatic acrylic polyurethane, was roller-applied as an intermediate coat on the tank's exterior to provide additional film thickness for corrosion resistance.
- Series 700 HydroFlon was brush- and roller-applied as the exterior finish coat. Colors for the logo included Red, Yellow, Burnt Ends and Wild Cattail.

Coating contractor Kenneth Brend of Jetco, Ltd., duplicated the school's logo and 16-foot tall by 12-foot wide eagle mascot design by sketching it in pencil directly onto the tank using a sketch as a reference. He used 1/2-inch China bristle artist brushes for the detailed work. "We wanted to replicate the eagle as closely as possible, which required several layers of coating," Brend explained. "We tried to bring out every feather in the eagle's wing. It turned out beautiful."

FEATURED PRODUCTS

Series FC20 Pota-Pox
Series 73 Endura-Shield

Series 91-H2O Hydro-Zinc
Series 700 HydroFlon



PROJECT INFORMATION

Project Location
Midland, Texas

Project Completion Date
May 2013

Owner
City of Midland

Architect / Engineer
Parkhill, Smith & Cooper - Midland, Texas

Fabricator / Applicator
Landmark Structures - Fort Worth, Texas

The intricate design on the Lake Villa waterspheroid featuring Series 700 HydroFlon as the exterior topcoat was chosen as the 2008 Tnemec Tank of the Year.

