

MIDLAND COMPOSITE ELEVATED WATER TANK



FEATURED PRODUCTS

Series 20 Pota-Pox

Series 91-H₂O Hydro-Zinc

Series 700 HydroFlon

Series 1075 Endura-Shield II

Rising out of the Permian Basin area in western Texas, which produces one-fifth of the nation's total petroleum and natural gas output, Midland's two-million-gallon composite elevated tank was built to provide a physical necessity to those around it. In 2012, this area of Texas was experiencing the third-worst drought it had ever seen; its reservoirs were running low while the town of Midland was experiencing a rapid growth in its population. The City of Midland decided its best bet for fresh water would be to tap the aquifer located beneath the T-Bar Well Field, a ranch that was purchased in the 1960's and had since remained undeveloped.

Along with various treatment infrastructure and 67 miles of pipeline, the elevated potable water tank was constructed onsite at the project's location just off of Highway 191. The tank, once completed, would have little downtime in the decades to follow, and the design team wanted a coatings system with a life-cycle to match.

"Throughout the years, the engineer has come to trust Tnemec as both a supplier and technical resource for coating needs," recalled Lane Salvato, coating consultant with The Barry Group, LLC. "We were able to recommend low maintenance coating systems, which was a priority for everyone involved in this project."

The tank itself included a concrete pedestal and a steel bowl. Interior and exterior steel was primed with Tnemec's zinc-rich urethane, Series 91-H₂O Hydro-Zinc, an NSF/ANSI Std. 61 certified primer for use on interior potable water tanks. The tank's interior steel was then lined with two coats of Series 20 Pota-Pox. This epoxy lining has been the industry standard epoxy lining for potable water tanks for nearly 40 years.

Following the exterior's prime coat, Landmark applied an intermediate coat of Series 1075 Endura-Shield II and a finish coat of Series 700 HydroFlon. HydroFlon was selected for the exterior because it provides outstanding resistance to ultra-violet light degradation and unprecedented long-term color and gloss retention.

"The project team chose HydroFlon to keep the hometown logo shining for many years to come," said Salvato. "The logo was a big reason this tank in Midland was chosen as Tnemec's 2014 Tank of the Year."

During the annual Tank of the Year contest, 235 water tanks were nominated from all over the United States and Canada and 14,694 total votes were registered during the three-week voting period. After the top twelve tanks were determined by the public, a panel of water tank enthusiasts determined the Tank of the Year based on aesthetic value, significance of the tank to the community, and other project details.

The T-Bar Well Field water project, including the Tank of the Year, was completed in less than twelve months and is estimated to provide the area with water for the next 25 years or more.

PROJECT INFORMATION

Project Location

Midland, Texas

Project Completion Date

May 2013

Owner

City of Midland

Engineer

Parkhill, Smith & Cooper
Midland, Texas

Fabricator/Applicator

Landmark Structures
Fort Worth, Texas



Midland, Texas, is now home to the 2014 Tank of the Year. During the annual competition, the tank was voted by the public into the top twelve tanks and then chosen by the designated panel of judges as the winner.