

PANAMA CITY LEGGED WATER TANK

Overlooking Highways 231 and 77 in Panama City, Florida, a 1-million-gallon legged water tank went from being an unused and uninspiring liability to a community asset with a nautical mural design featuring an advanced technology fluoropolymer coating system from Tnemec. "The tank is the first thing you see when entering Panama City," explained Robert Crumbaugh of SteelCon Coating Systems. "The tank had become an eyesore until the city commission decided to refurbish it."

Given the proximity of the tower to a busy intersection and several businesses, work on the project was performed under a draped containment system. The tank's exterior was prepared in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning and primed with Series 91-H₂O Hydro-Zinc, a zinc-rich urethane, followed by a coat of Series N69 Hi-Build Epoxoline II, an advanced generation epoxy.

An intermediate coat of Series 1075 Endura-Shield II, an aliphatic acrylic polyurethane, was roller-applied to provide additional film thickness for corrosion resistance to all surfaces. A finish coat of Series 700 HydroFlon, an advanced fluoropolymer, was roller applied to provide outstanding resistance to ultraviolet (UV) light degradation and unprecedented long-term gloss and color retention.

Series 700 was also used for the lettering and mural, which consisted of 25 different colors that depict commercial boats, seagulls and other beach scenes. "The nautical design for the mural was donated by a local artist and approved by the Panama City Commission," according to Crumbaugh. "City officials are calling the restored water tower a landmark because of its impressive mural, which serves a dual purpose by protecting the structure from corrosion."

The tank's interior steel was prepared in accordance with SSPC-SP10/NACE No. 2 Near-White Blast Cleaning and primed with a coat of Series 91-H₂O. The interior received an intermediate coat of Series N140 Pota-Pox Plus, a polyamidoamine epoxy, and a finish coat of Series 141 Epoxoline, a modified polyamine epoxy with excellent corrosion resistance. Each of the interior coatings is certified by NSF International in accordance with NSF/ANSI Std. 61 for use on interior potable water tanks.

Approximately 500 gallons of the various coatings were required to complete the project, which was voted a runner-up in Tnemec's 2012 Tank of the Year competition. The tank was selected from more than 200 tanks that were nominated for the contest.

FEATURED PRODUCTS

Series 91-H₂O Hydro-Zinc Series 700 HydroFlon
Series N69 Hi-Build Epoxoline II Series 1075 Endura-Shield II
Series N140 Pota-Pox Plus
Series 141 Epoxoline



PROJECT INFORMATION

Project Location

Panama City, Florida

Project Completion Date

February 2012

Owner

City of Panama City, Florida

Engineer

City of Panama City, Florida

Field Applicator

Utility Service
West Memphis, Arkansas

The Panama City water tank was named a runner-up in the 2012 Tnemec Tank of the Year competition. The project was selected from more than 200 tanks and stands protected by a high-performance coating system from Tnemec.

