

LAKE MARY HYDROPILLAR

Selected by CNN/Money as one of America's "best small towns," Lake Mary, Florida, takes pride in its many attractive amenities, including an award-winning 500,000-gallon hydropillar built by Caldwell Tanks that features an eye-catching protective coating system from Tnemec. "The tank was originally coated in the first quarter of 2002 and was later chosen as the Steel Tank Institute/Steel Plate Fabricators Association (STI/SPFA) Tank of the Year," recalled Tnemec coating consultant Mike Kendig. "Lake Mary had not used this coating system previously, so we worked with the consulting engineer, Conklin Porter & Holmes, to recommend the coatings."

The interior steel plates of the tank were prepared by the fabricator in accordance with SSPC-SP10/NACE No. 2 Near-White Metal Blast Cleaning and shop-primed with Series 91-H₂O Hydro-Zinc, moisture-cured, zinc-rich aromatic urethane primer. The fabricator prepared the exterior steel in accordance with SSPC-SP6/NACE No. 3 Commercial Blast Cleaning prior to shop-applying a prime coat of Series 91-H₂O.

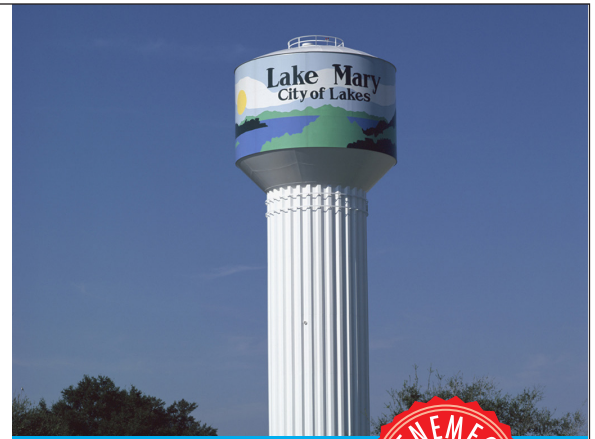
Field-applied exterior coatings included an intermediate coat of Series 66 Hi-Build Epoxoline, a polyamide epoxy, followed by a topcoat of Series 73 Endura-Shield, an acrylic polyurethane that's highly resistant to abrasion, wet conditions and weathering. A coat of Series 76 Endura-Clear, a clear acrylic polyurethane, was then applied to enhance the finish and provide ultraviolet (UV) light protection. "Indicator dye was used with Series 76 to aid in uniform application," according to Kendig.

Interior steel received two coats of Series 20 Pota-Pox, a polyamide epoxy which is certified by NSF International in accordance with ANSI/NSF Standard 61 for use on the interior of potable water tanks and reservoirs.

Located approximately 18 miles north of Orlando just off Interstate 4, Lake Mary was described by CNN/Money as "the Little Silicon Valley," a nickname that refers to the city's industrial park of computer software companies. The city's potable water facilities include six groundwater wells, three aeration towers, two ground storage tanks, one elevated storage tank and seven high service pumps. The fluted column elevated tank is 50 feet in diameter and stands 150 feet high, making its wraparound logo clearly visible from Interstate 4.

FEATURED PRODUCTS

Series 20 Pota-Pox Series 76 Endura-Clear
Series 66 Hi-Build Epoxoline Series 91-H₂O Hydro-Zinc
Series 73 Endura-Shield



PROJECT INFORMATION



Project Location
Lake Mary, Florida

Project Completion Date
May 2002

Owner
City of Lake Mary

Engineer
Conklin Porter & Holmes (CPH)
Sanford, Florida

Shop Applicator
Caldwell Tanks
Neunan, Georgia

Field Applicator
Ridge Runner Painting
Maryville, Tennessee

The interior steel of the Lake Mary, FL hydropillar was coated with Series 20 Pota-Pox which is certified in accordance with ANSI/NSF Standard 61 for use on the interior of potable water tanks and reservoirs.

