

PROJECT PROFILE



Featured Products

Series 66 Hi-Build Epoxoline
Series 73 Endura-Shield

Series 90-97 Tneme-Zinc
Series 91-H₂O Hydro-Zinc

Series 141 Pota-Pox 80



Both the interior and exterior steel of this standpipe in Post Falls, ID, are primed with Series 91-H₂O Hydro-Zinc, the first organic zinc-rich primer to be ANSI/NSF Std. 61 certified for use in potable water.

Post Falls, ID Standpipe

Post Falls is nicknamed “Idaho’s River City,” so municipal officials there know a good coating system for water immersion applications when they see one. That’s why they chose a zinc-rich coating system from Tnemec for the city’s new 3½-million gallon potable standpipe water tank constructed in 2003. “This was the first zinc-rich primer they had ever considered, so it was an educational process getting them to understand the advantages of that type of system,” recalled Tnemec coating consultant Scott McConnell. “Fortunately, the city’s engineer had some coating background and appreciated the toughness of the zinc-rich primer.”

Both interior and exterior steel was primed by the fabricator before delivery to the jobsite. Series 91-H₂O Hydro-Zinc, a two-component, moisture-cured zinc-rich aromatic urethane, was used on the tank’s interior steel. The first organic zinc-rich primer to be ANSI/NSF Std. 61 certified, Hydro-Zinc offers superior bonding to steel surfaces that are abrasive blast cleaned in accordance with SSPC-SP10 Near White Blast Cleaning. Exterior steel was primed with Series 90-97 Tneme-Zinc, a two-component, zinc-rich urethane primer. Both primers were spray-applied at 2.5 to 3.5 mils DFT.

For the tank’s interior, the field applicator spray-applied one coat of Series 141 Pota-Pox 80, a polyamine epoxy coating which offers high-build edge protection and excellent corrosion resistance, at 10.0 mils DFT. “The owner and engineer understood the benefits of using one coat of epoxy at 10.0 mils instead of two coats at 4.0 mils each,” McConnell noted. “Together with the zinc primer, they recognized this was a good system.”

For exterior steel, the field applicator spray-applied an intermediate coat of Series 66 Hi-Build Epoxoline, a polyamide epoxy, at 4.0 to 6.0 mils DFT, followed by a finish coat of Series 73 Endura-Shield, an aliphatic acrylic urethane at 3.0 to 5.0 mils DFT. “The lid of the tank was coated on the ground and lifted into place by a huge crane,” according to McConnell. “It’s much easier to paint and construct using this method.”

Today, both the project’s owner and engineer recognize the advantages of zinc-rich primers for the interior and exterior of steel potable water tanks. “They’re now using the same system on other water tanks, including a second tank in Post Falls,” McConnell added.

Post Falls is located on the Spokane River and on the Coeur d’Alene branch of the Northern Pacific railroad, 25 miles east of Spokane.

Project Name
Post Falls, ID Standpipe

Project Completion Date
August 2003

Engineer
J-U-B Engineers, Inc., Coeur d’Alene, ID

Project Location
Post Falls, ID

Owner
City of Post Falls, ID

Field Applicator
Extreme Coatings, Pasco, WA