



Hydro-Zinc

INTERIOR AND EXTERIOR CORROSION PROTECTION FOR STEEL POTABLE WATER TANKS

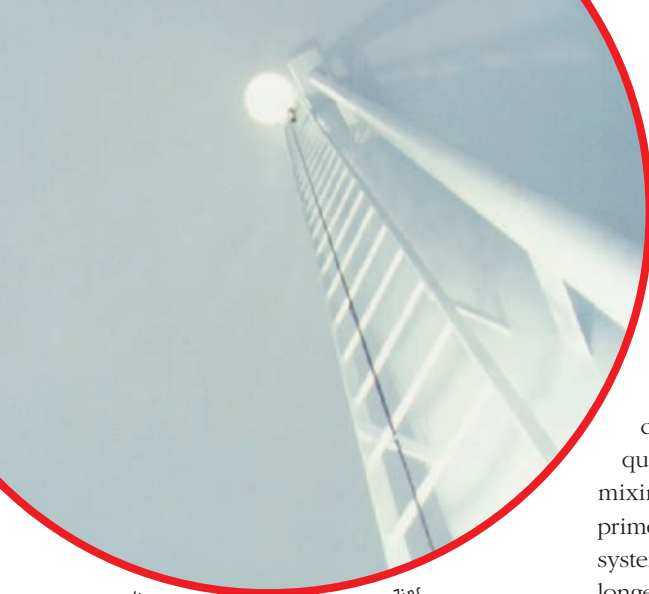
Potable water tanks are essential to the daily operation of towns and cities across the country. They are also highly susceptible to corrosion. Detrimental not only to a tank's functionality but to a tank owner's budget as well, corrosion is an extremely costly issue due to the extensive labor, materials and downtime involved with tank repair. Fortunately, there is an easy way to protect tanks against such corrosion—Hydro-Zinc™ from Tnemec.

The first in the industry to use organic zinc-rich primers in potable water immersion, Tnemec's unrivaled success is apparent by the thousands of water tanks and millions of square feet that have been coated with Hydro-Zinc since 1997.

The Products

Series 91-H₂O™ and Series 94-H₂O Hydro-Zinc are moisture-cured urethane primers, both ANSI/NSF Std. 61 certified for use on potable water tanks. In fact, Series 91-H₂O Hydro-Zinc was the first organic zinc-rich primer to be ANSI/NSF Std. 61 certified. Both primers provide unparalleled corrosion protection to both the interior and exterior of steel water tanks, eliminating the need—and cost—for two primers. They also cure quickly and can be topcoated at surface temperatures as low as 35° F.





Water tank interior featuring Hydro-Zinc

Both Hydro-Zinc primers offer outstanding corrosion protection, varying only in the number of components. Series 91-H₂O Hydro-Zinc is a two-component primer, and Series 94-H₂O Hydro-Zinc is a single-component primer, the latter being quicker to apply given minimal mixing is involved. Each Hydro-Zinc primer—when topcoated as part of a system—can be expected to last 50% longer than the conventional three-coat epoxy system, giving your tank the extended protection it needs.

Regulation Friendly

Besides its ease of application, Series 94-H₂O Hydro-Zinc also contains a low level of Hazardous Air Pollutants (HAPS)—less than 1.7 lbs./gallon of coating solids—and low VOCs—less than 100 grams/litre, making it perfect for use where there are strict environmental regulations.

HYDRO-ZINC BENEFITS

- Galvanic protection to steel substrate
- Easy application—brush, roll or spray
- Abrasion resistant
- Tenacious adhesion
- Certified in accordance with ANSI/NSF Std. 61
- Meets AWWA D102 Standard for Inside System No. 5 & Outside System Nos. 4 & 6
- Fast cure for improved shop/field throughput
- Low temperature application (35° F)
- Unlimited maximum recoat window



Primed



Completed

Both the interior and exterior of this new 400,000 gallon Waterspheroid in Fairbury, IL, was primed with Series 91-H₂O Hydro-Zinc to keep it protected against corrosion for years to come. The exterior was then coated with an epoxy/urethane system and sealed with a clear coat, providing long-term corrosion and aesthetic performance.

SALT SPRAY EXPOSURE TEST



One coat of Series 91-H₂O Hydro-Zinc, then two coats of two-component epoxy



Standard three coats of two-component epoxy

Both panels were SSPC-SP10 abrasive blasted, coated and then placed in a salt fog cabinet (ASTM B 117). After 10,000 hours of Salt Spray (Fog) exposure, the panel primed with Tnemec's Series 91-H₂O Hydro-Zinc (left panel) exhibited no failure on the plane surfaces and excellent protection at the scribe. The standard three-coat epoxy system on the right did not measure up nearly as well.