

# HARVARD WATER TANK

When the City of Harvard, Illinois, decided to overcoat a 500,000 gallon water tank with its "Home of Milk Day" logo, the owner wanted a protective coating that wouldn't sour due to weathering and ultra-violet exposure. "Specified for the overcoat was a three-coat epoxy/urethane/urethane clear-coat finish system," recalled Tnemec coating consultant Erik Otten. "Based on the condition and the generic I.D. of the existing coating, we suggested to the contractor that a new waterborne acrylic polyurethane system be applied instead."

Prior to the new coating system being applied, the entire exterior of the tank was prepared in accordance with SSPC-SP12 Low Pressure Water Cleaning, up to 5,000 psi, with a water and detergent solution to remove surface contaminants and loose paint. Rusted and failed areas were prepared in accordance with SSPC-SP11 Power Tool Cleaning to Bare Metal and spot-primed with Series 135 Chembuild, a polyamidoamine epoxy. A complete intermediate coat of Series 30 Spra-Saf EN, a hydrophobic acrylic polymer, was spray-applied at 2.0 to 4.0 mils DFT followed by a finish coat of Series 1080 Endura-Shield, a two-component, waterborne acrylic polyurethane which was roller-applied at 2.0 to 3.0 mils DFT.

"Typically, an overcoat system would have been two full coats of Series 30 Spra-Saf EN over the spot primer," according to Otten. "For this tank, we used the new waterborne Endura-Shield as a topcoat instead of a second coat of Spra-Saf EN. The reason being is that the City of Harvard wanted to match the appearance of a water tank they had completely repainted a couple years earlier with a urethane and clear-coat system. They wanted to achieve a similar high gloss appearance, so the waterborne Endura-Shield was the only overcoat option available to achieve that result."

Aesthetics was important due to the location of the water tank in downtown Harvard, Otten noted. "This is where the annual Milk Day celebration is held, which attracts thousands of visitors, so they went all out with their logo," he acknowledged. "The tank was painted in a two-tone color scheme with Purple Haze on the 100-foot riser and belly of the tank while the ball of the tank was finished in White. The logo was brush-applied by Jetco using various colors of Endura-Shield."

In addition to providing color and gloss retention, Endura-Shield provides abrasion and chemical resistance and features low odor and volatile organic compound (VOC) content.

## FEATURED PRODUCTS

**Series 30 Spra-Saf EN**

**Series 135 Chembuild**

**Series 1080 Endura-Shield**



## PROJECT INFORMATION

### Project Location

Harvard, Illinois

### Project Completion Date

June 2006

### Owner / Engineer

City of Harvard

### Applicator

Jetco, Ltd. - Prospect Heights, Illinois

Series 1080 Endura-Shield, a waterborne acrylic polyurethane, was chosen to protect the exterior of the City of Harvard, Illinois water tank because of its ability to achieve a high gloss appearance.

