

#### **Dampney Company, Inc.**

# PROTECTIVE COATINGS AT WORK

Product application bulletin no.12

MAJOR UTILITY
REFINISHES POWER PLANT
FENCING WITH ENDCOR
4930 URETHANE
PRIMER/MAINTENANCE
COATING

When a major New England utility decided to refinish the rusting galvanized fencing around one of its power stations during the late fall, its specifications were particularly demanding.

After evaluating numerous coatings, the utility selected Endcor 4930, a state-of-the-art polyurethane primer/maintenance coating made by Dampney Company, Inc. The Endcor 4930 Series are single-package, moisture-cure, aluminum-pigmented urethane coatings that protect against severe weather, high humidity, salt air, and corrosive industrial environments. In addition, they are flexible and impact resistant.

#### PROBLEMS: SURFACE RUST, MARGINAL SURFACE PREPARATION, COLD WEATHER

The job presented significant challenges. The power station was sited next to a salt-water estuary with its corrosive, humid atmospheric conditions. The application of the coating, which was scheduled to begin in late fall, would be subject to cold temperatures. Thorough surface preparation by methods such as blasting or power tool cleaning was impractical because of the open configuration of the fencing. Portions of the fence had been replaced over the years, so that the coating had to adhere well to both new and weathered galvanized substrates, some of which had previously been coated with a conventional paint.

In addition, the coating would have to cure quickly, to prevent the surface



Painting crew at a major New England power station applies Endcor 4930 Series urethane primer-maintenance coating from Dampney Company Inc. to protect and improve the appearance of perimeter fencing. A single coat of the flexible, impact-resistant coating protects even marginally prepared rusted surfaces from corrosive salt air and industrial environments. Endcor 4930 cures under highly humid conditions in temperatures as low as 10°F (12°C).

from becoming contaminated with airborne dirt from traffic on an adjacent urban highway. And the utility requested that the coating be supplied in an attractive, light-green metallic finish. Finally, budgetary constraints permitted only a one-coat application.

## SOLUTION: MOISTURE-CURE POLYURETHANE

Dampney's Endcor 4930 coating met each of the utility's requirements. The coating can be applied under highly humid conditions, in temperatures as low as 10°F (12°C). Conventional coatings would not have been suitable because of their high cold-weather viscosities, which would have required excessive overthinning to make them suitable for

manual application, and because the resultant low film thickness would not have been adequate to provide the required long term weather and corrosion resistance. Nor would such coatings cure adequately in cold weather.

Endcor 4930 Series coatings are uniquely capable of performing under such conditions. Because of their inherent low viscosity, these coatings wet through sound rust, and quickly penetrate into microscopic crevices in the substrate. After application they react rapidly with atmospheric moisture and polymerize into tough, adherent, abrasion- and chemical-resistant films that physically lock into the substrate crevices. As a result, they provide excellent adhesion to marginally prepared, rusty surfaces.

## PREPARING AND COATING THE SURFACE

The fence was washed down to remove accumulated dirt. Old, loose coating and heavy rust deposits were removed by wire brushing. Then one coat of Endcor 4930 was applied to both sides of the fence by conventional means, using brushes and mediumnap fleece rollers.

#### A VERSATILE COATING

Endcor 4930 coating is particularly suitable for application to rusty steel, and to rusted and weathered galvanized substrates where surface preparation is impractical or cannot be allowed. It has a greater tolerance than conventional maintenance coatings and primers for marginal application and surface conditions.

These polyurethane coatings are recommended as general maintenance type coatings for use on a year-round basis and are suitable for use as complete one-coat systems in many interior and exterior exposures.

As a result of these unique capabilities, Endcor 4930 has a wide variety of application, including electric utility transmission towers and equipment, process equipment, compressor and pumping station equipment and piping, structural steel, bridges, marine and offshore equipment, and storage tank exteriors. They are an effective means of rejuvenating and protecting the galvanized surfaces of structural steel, building, platforms, catwalks, and fencing that have become rusted and discolored.

In addition, Endcor 4930 Series coatings bond well to various other substrates, including old, weathered (but sound) coatings, urethane foam insulation, and wood.

## FOR FURTHER INFORMATION

Additional information about Thurmalox 260 series coatings may be obtained from The Dampney Company at the address below



This section of power plant perimeter fencing had been rejuvenated with Endcor 4930 urethane primer/maintenance coating. The single-package, moisture-cure coating can be used as a primer or a one-coat maintenance coating, and is suitable for indoor and outdoor use on a year-round basis. Endcor 4930 can be used on previously galvanized steel surfaces that have become rusted and discolored, as well as on various other substrates, such as weathered (but sound) coatings, urethane foam insulation, and wood.



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