

PROTECTIVE COATINGS FOR

POWER GENERATION FACILITIES

DURABLE PRODUCTS FOR MAINTENANCE AND NEW CONSTRUCTION



COATINGS TO MAINTAIN AND PROTECT YOUR INDUSTRY

To keep a power facility going strong, engineers and their crew need to keep maintenance costs to a minimum. But the conditions in power plants make maintaining equipment and processes a difficult task, especially when shutdowns are unacceptable.

On a day-to-day basis, the surfaces in most power plants face threats of corrosion, abrasion and chemical attack, alongside geographic and environmental conditions. Whether coal or oil, geothermal or hydroelectric, power generation facilities require tough, reliable protection against the varied but intense conditions throughout the plant.

Coatings and linings from Tnemec have been protecting power generation facilities for decades, providing long-lasting corrosion protection and aesthetic reliability across the globe, from Shanghai to Sioux City. Tnemec offers coatings to protect, preserve and refurbish infrastructure throughout a facility, including conveyor systems, water intake structures, fly ash pits, boiler and precipitator building structural steel and many other areas of concern.

SERIES 1 OMNITHANE®

Single-component zinc- and MIO-filled primer ideal for marginally prepared rusty steel and tightly adhering old coatings.

SERIES 971 AEROLON®

Fluid-applied thermal insulating coating utilizing aerogel particles to provide thermal improvement and personnel protection.

AFTER



BEFORE



COOLING TOWER SULFURIC ACID TANK - A facility near Little Rock, Arkansas, was having trouble keeping their sulfuric acid tank at a stable temperature. Rather than building a cover or installing costly traditional insulation, the owner chose to apply Tnemec's innovative Aerolon coatings system to the tank's exterior. The tank was primed with a user-friendly, water-based epoxy coating and followed by two spray-applied coats of Aerolon for a total of 80-100 mils dry film thickness (DFT). After a finish coat of Series 1028T Enduratone® in 02SF Safety Yellow, the tank looked like new.

right: Texas A&M Power Plant
College Station, TX



ENGINEERED SOLUTIONS FOR YOUR EXTERIOR SURFACES

Project managers and plant engineers need solutions that can resist the high heat and accelerated corrosion present on substrates in power generation facilities. Regardless of the type of power plant, equipment and infrastructure need long-lasting coatings that will resist corrosion and protect against weathering, while limiting downtime and unwanted maintenance.

Tnemec offers high-performance systems formulated to provide long-term protection in harsh exterior exposures. Whether coating surfaces in coal, nuclear or hydroelectric power plants,

Tnemec can provide entire coating systems from primer to topcoat that will outlast and outperform expectations.

From conveyor systems to tank exteriors, Tnemec products have been used to coat surfaces in power plants around the U.S. and beyond.

Whether you need fast-curing, tenacious primers or abrasion-resistant topcoats, or even dry-fall coating systems, Tnemec can supply you with a tailored solution that will keep your plant operating to its full potential.

SERIES 90-97 TNEME-ZINC

Time-tested, zinc-rich urethane primer with excellent corrosion protection that can be easily applied in the shop or the field and finished with a variety of high-performance options.

SERIES 1558 ENDURA-HEAT® DTM

High-build, heat-curing modified silicone coating that provides steel substrate protection up to 1000°F (528°C).

SERIES 30 SPRA-SAF® EN

Convenient spray-applied dry-fall coating formulated to resist corrosion and mildew growth while providing gloss and color retention.



TEST OF TIME - The Port Neal Power Plant in Sioux City, Iowa, was subjected to severe damage from a 1987 tornado. All areas of the plant required extensive repairs or resurfacing. Original construction specifications called for a conventional slow dry alkyd system requiring significant labor.

To get back in operation as soon as possible, plant owners needed a better option. Tnemec recommended Tneme-Zinc primer and Endura-Shield®, a high-build, quick-cure polyurethane. Only two coats were required at a substantial savings compared to the four coats previously used.

Visual surveys 20 years later show the coatings to still be performing effectively with very little maintenance required.



left: Cross Station Power Plant
Cross, SC

far left: Dry-fall coating systems
protect nearby equipment, buildings
and vehicles from overspray.

POWERFUL COATINGS TO HELP CONTAIN AND CONSERVE

All power facilities, from hydro to nuclear, are required to store and process a variety of chemicals and water. When selecting coatings for these areas, owners and engineers need to protect the surfaces from far-ranging exposures, from lime slurry to industrial wastewater. Whether acidic or alkaline contact, regulated heat or freeze-thaw environments, Tnemec offers coatings and linings formulated to withstand the rigorous conditions of the power generation process.

Since 1921, Tnemec has provided coatings built to guard important infrastructure, like storage tank interiors, reservoirs, processing pipes, plant floors and many other structures. From mat-reinforced secondary containment systems to vinyl ester tank linings, Tnemec products can help protect the surfaces in any power plant from falling victim to accelerated chemical corrosion.

SERIES 239SC CHEMBLOC®

A chemical resistant, reinforced coating formulated to provide exceptional protection in secondary containment environments, guarding the substrate from harsh chemicals, thermal cycling, impact and abrasion.

SERIES 370 TANK ARMOR®

High-build epoxy lining containing micro-fiber reinforcement. Applied using convenient single-leg airless spray equipment.

right: Applicators mix Tnemec's versatile zinc-rich primer, Series 90-97 Tnemec-Zinc.

below: Tank Armor protects the interior of a chemical storage tank.



below: Buckman Diversion CRC-1 Chemical Area Santa Fe, NM

YOUR REPUTATION IS OUR REPUTATION

Armed with an understanding of the maintenance problems that plague power facilities, Tnemec representatives can help you determine the best coating options for your surfaces. Our coatings experts can evaluate and recommend various coatings

systems and supply owners with support and high-quality products built to protect your process.

To get started, contact your local representative at tnemec.com.



cover: Cross Station Power Plant
Cross, SC



INNOVATION IN EVERY COAT™

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