

ADVANCED FORMULATION INDUSTRIAL COATINGS

PROTECTION IN THE MOST SEVERE CONDITIONS





left: NCRA Refinery
McPherson, KS

below: CITGO Petroleum Lake Charles
Manufacturing Complex
Lake Charles, LA

INDUSTRIAL ENVIRONMENTS DEMAND SUPERIOR COATINGS SOLUTIONS

You can count on Temec for industry-leading technology and innovation that has resulted in higher performing industrial coatings and linings. Since 1921, the company has developed a broad range of products featuring advanced formulations that defy the most relentless causes of substrate deterioration and decay.

These coatings preserve critical assets, reduce maintenance costs and improve life cycle value by protecting against damaging effects such as corrosion, abrasion, chemicals, oxidation and more.

REFINING PERFORMANCE

“Temec products have been the best coating products I have used at CITGO refinery in my 19 or so years working for the company.”
– JOHN JEWELL
Regional Operations Manager, Brand Services

BENEFITS THAT GO BEYOND PROTECTION

Temec offers a complete line of coatings for steel, concrete, and a variety of other substrates found in industrial facilities. They can be applied to piping or structural steel; used for primary or secondary containment; and endure chemical exposure, volatile atmospheric conditions and immersion.

Experienced coatings consultants and technical service representatives are committed to maximizing results and minimizing downtime while ensuring the requirements of each unique project are met.

REPUTATION MATTERS

“Everybody in my business knows about Temec. They are a major player in the coatings arena, and they are very well-regarded across the board in the on-shore or above-ground segment of the oil and gas industry.”
– MONICA CHAUVIERE
Consultant & Former Exxon/Mobil
Lead Non-Metallic Materials Specialist





TEST OF TIME · The Marathon Ashland Petroleum Refinery in Louisiana faced a dilemma in coating the exterior of aboveground storage tanks. Conventional spray applications can become wind blown, often causing property damage from overspray. However, rolled-on applications can be labor-cost prohibitive.

A Tnemec consultant recommended Sprra-Saf®, an advanced hydrophobic acrylic polymer with dryfall capability. Tanks required just one coat at 2.0 to 4.0 mils. Originally, five tanks were sprayed for roughly the same application cost as rolling one tank. Dozens of additional tank applications and over 10 years later, the Sprra-Saf coatings have continued to perform well, providing long-term corrosion protection in addition to resistance to organic buildup like mold and mildew.



EXTERIOR COATINGS GUARD AGAINST HARSH ELEMENTS

For decades, petroleum and chemical industry companies have specified Tnemec coating solutions. One reason is our constant development of new technologies, which has led to the most advanced coatings for aboveground storage tanks (ASTs), pipes and exposed structural steel at refineries, chemical plants, fuel terminals, biofuel facilities and power plants.

Another advantage is that Tnemec protection doesn't stop at one coat. As a protective layering system, coating performance is magnified and reinforced.

For greater durability, color and gloss retention, and ease of maintenance, base coatings are often topcoated with a variety of acrylic, polyurethane, and fluoropolymer formulations.

These long-wearing, high-build topcoats resist ultraviolet (UV) degradation, corrosion, abrasion and chalking to provide the ultimate barrier of protection.

left: CITGO Petroleum Lake Charles Manufacturing Complex
Lake Charles, LA

TANK ARMOR® COATING

- Excellent corrosion protection
- Resistant to chemicals & abrasion
- Rapid return-to-service

SUPPORT WHENEVER NEEDED

"Tnemec provided excellent support throughout the application process. The tank linings went on easy and there were no problems whatsoever."

—HOWARD MITSCHKE
Oil Industry Coatings Consultant

INTERIOR LININGS PREVENT EARLY DETERIORATION AND DOWNTIME

Tnemec linings have a reputation for providing excellent corrosion protection on the interiors of aboveground storage tanks and such vital assets as acid trailers and frac tanks. Tnemec will continue to provide advanced coating systems through ongoing research and development to keep infrastructures protected as fracturing methods change.

Specially formulated thin-film and thick-film (100% solids) linings are

applied using conventional airless spray or plural component equipment.

These linings are fast curing, which enables quick return to service and avoids higher costs due to added labor and excessive downtime. They also provide reliable performance under the most aggressive exposures and operating conditions.

left: Acid Frac Tank Interior

right: Shanghai Chemical Industrial Park
Shanghai, China

above: Tank Armor Application
right: Storage Tank Interior

TNEME-LINER

- User-friendly application
- Chemically resistant
- 30+ years of proven performance

INSULATING COATING OFFERS CORROSION AND THERMAL PROTECTION

Tnemec's insulating coating, Aerolon, solves commonplace issues that all industrial facilities face. It provides thermal efficiency while protecting various surfaces from heavy condensation and asset-damaging corrosion under insulation (CUI).

By combining the world's best insulating solid, aerogel, with superior acrylic resins, Aerolon offers qualities that rival conventional insulation while bonding tightly to pipes, valves, tanks and assorted hard-to-insulate surfaces, forming a versatile, thick-film coatings system.

Aerolon's benefits allow for a variety of useful applications, including condensation control, thermal stability, CUI-prevention, and personnel protection. Its single-component, low VOC, waterborne formulation makes the product easy to apply in enclosed areas or near occupied spaces. It can be paired with various high-performance primers and topcoats from Tnemec for added defense in the harshest conditions.

SOLVING PROBLEMS

"We were able to address the specific needs of our valued customers using the Aerolon technology."

– BRIAN SMITH
Vice-President, JP Smith Contractors, Inc.

AEROLON® COATING

- Ultra-low thermal conductivity
- Higher build and faster application
- Provides personnel protection



left and below: Refinery Piping
Bakersfield, CA



left: Cross Station Power Plant
Cross, SC

CONCRETE COATINGS FORM A BARRIER AGAINST CORROSION

Themec advanced concrete coating products provide a high-build, ceramic-like finish for floors, walls and support structures. They prevent wear and erosion; resist impact, scuffing and abrasion; and create a beautiful, long-wearing finish.

Surface finishes are not only visually appealing, they resist heavy use and

traffic as well as rigorous cleaning and wash downs, while preventing deterioration of underlying concrete. Versatile coating systems are available in primers, surfacers, fillers, broadcast laminates, epoxy topcoats and trowel mortars.

below: Chemical Building
Santa Fe, NM

THE NAME TO KNOW

“Themec has been a trusted supplier in the oil service industry for many decades, and they have a well-known name for quality products. Themec also has a reputation of working with industry leaders to ensure that their product line meets the changing needs of the industry.”

—JIM POER
Oil Industry Coatings Consultant

CHEMBLOC® COATING

Extreme chemical resistance

Highly impact-and-abrasion resistant

Suitable for interior and exterior applications

PRIMARY LINE OF DEFENSE FOR SECONDARY CONTAINMENT

Themec products can provide an extra measure of protection in critical, secondary containment situations at chemical plants; fuel, diesel and biofuel facilities; and virtually anywhere fuels, acids or aggressive chemicals are stored.

As a safety barrier against potentially hazardous leaks or spills, Themec reinforced containment systems prevent migration of caustic, toxic and destructive fluids into soil, water or any areas outside the containment area. These interior and exterior lining

systems are designed to safely contain accidental spillages for up to 72 hours while protecting the substrate.

Beyond their effective chemical and acid resistance, the lining systems are highly impact-and-abrasion resistant for reliable protection from the brutal exposure of industrial facilities. In addition, containment lining systems are tailored according to the types and exact concentrations of chemicals or harmful materials being stored.

right: Gorham Tissue Company
Gorham, NH

STRUCTURAL STEEL COATINGS LOCK OUT DAMAGING FORCES

Exposed steel and metal surfaces at most large industrial sites are vulnerable to the constant, detrimental effects of weather. Over time, these forces can exact a heavy toll.

That's why Tnemec developed special coatings formulations with powerful agents that shield against UV light, chemicals, high humidity and salt exposure. Your concern is our focus, and we're confident in our ability to recommend the right solution for your situation.

The Tnemec coatings systems process is efficient, effective and can save substantially on labor costs compared to conventional finishes. Whether applied as original protection or as recoating or overcoating, Tnemec can extend life cycles, reduce maintenance costs and substantially diminish the need for repair or replacement.

Bright, glossy color options also enhance aesthetic appeal and maintain the surfaces' clean, pristine appearance year after year.

SINGLE SOURCE SUCCESS

"Tnemec products are considered by our company to be the best on the market for the customers we serve. They have a wide enough line to meet most needs, and a focus narrow enough to allow for very specific applications."

—JIM POER
Oil Industry Coatings Consultant

WATER-BASED TYPOXY® COATING

All-purpose, low odor epoxy

High volume solids, yet thinned with water for application ease

Fast curing and rapid handling capabilities

TEST OF TIME - The Windgap Bridge in Pittsburgh, Pennsylvania, was painted in 1986 with a Tnemec zinc-rich polyurethane coating, an upgrade in specification recommended by a Tnemec coatings consultant. Tnemec Zinc provided superior corrosion resistance, a more user-friendly application and better curing tolerance at lower temperatures.

After more than 20 years of service, the Tnemec Zinc/Endura-Shield® system is still performing extremely well with no signs of corrosion, and many more years of service life are expected.





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 unnecessary 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 first used.

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

TNEMEC: PIONEER, LEADER AND INNOVATOR

For more than 90 years, Tnemec has been in the business of protecting vital and valuable facilities, tanks, warehouses, equipment and structures. Tnemec is a pioneer in the science of specialized coating technologies that stand the test of time.

Our focus and traditions have continued with the introduction of many new and innovative product formulations designed to protect a wide range of substrates – exposed

to all types of conditions – while also enhancing property aesthetics.

The performance of Tnemec products has been demonstrated in thousands of the most demanding real-world situations. That's why customers have come to trust and recommend Tnemec.

Whatever the need, challenge or concern, chances are good Tnemec has the solution.

EXTENDING LIFE CYCLES

"I must admit, I had little knowledge of Tnemec before I met their coatings consultant. But through his product expertise and recommendations, he has brought us a far better life cycle for coatings at CITGO than we have ever had in the past."

—JOHN JEWELL
Regional Operations Manager, Brand Services



PRODUCT SELECTION EXPERTISE AND COMPREHENSIVE TECHNICAL SUPPORT

Whether you are a fabricator, owner, engineer or applicator, it is reassuring to know that Tnemec's extensive product line is backed by outstanding technical support and customer service.

Tnemec coatings consultants have a thorough understanding of the products and, more important, the distinctive requirements of specific industries and substrates. Due to years of experience, they know how to account for the unique threats posed by diverse geographic regions and exposures. Working in collaboration with you, they will recommend the ideal system for the job.

Through a network of technical support experts, Tnemec is there for customers every step of the way, providing assistance with coating selection, cost analysis, performance data and application parameters. They take ownership of each project and personal pride in the accomplishment of successfully protecting customer assets.

Unparalleled service, responsiveness and site specific solutions from a single source are never more than a phone call away.

right: Cross Station Power Plant
Cross, SC





INNOVATION IN EVERY COAT™

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