

INDUSTRIAL COATING CAPABILITIES

HIGH-PERFORMANCE ASSET PROTECTION FOR CHALLENGING ENVIRONMENTS



TNEMEC INDUSTRIAL COATINGS

ENGINEERED SOLUTIONS FOR DEMANDING ENVIRONMENTS

In the most challenging environments where machinery and infrastructure are exposed to relentless stress and harsh conditions, Tnemec's industrial coatings stand as the first line of defense.

Tnemec's coatings are engineered for heavy-duty applications, offering unparalleled protection to assets in industrial manufacturing facilities, processing plants, refineries, power generation, storage terminals, and beyond. Whether it's process equipment, piping, tanks, or any other critical infrastructure, Tnemec's industrial coatings ensure long-lasting performance and durability.

Tnemec's comprehensive industrial coating line includes high-performance formulations such as primers, intermediates, finish coats, liners, and specialty coatings. These products are engineered to safeguard various service areas against corrosion, chemical attack, weathering, and mechanical damage. Wherever extreme conditions threaten an asset's integrity, Tnemec's coatings provide the reliable protection needed.

WITH OVER 100 YEARS of formulating expertise, Tnemec addresses the needs of key industrial service area requirements.

- | Exterior Exposures
- | Chemical Resistant Liners
- | Secondary Containment
- Insulative Coatings and Corrosion
 Under Insulation (CUI) Control
- | Concrete Repair and Protection
- | Buried Services



INNOVATION IN EVERY COAT.™

In 1921, a chance sighting of steel reinforcing bars sticking out of old concrete rubble piqued the curiosity of company founder Albert C. Bean, Sr. Inquisitive by nature, he noticed that the rebar was completely rust-free. After further investigation and testing, his discovery of the anti-corrosive alkaline conditions of cement led to a patent for a highly effective, rust-inhibiting coatings formulation. In tribute to his breakthrough, he changed the company name to Tnemec – cement spelled backwards. And, even though the name reflects on our past, our founder's legacy still pushes our company forward today.



EXTERIOR EXPOSURES

SUPERIOR DEFENSE AGAINST THE FLEMENTS



Exterior Exposures System Selection Guide

When industrial assets are exposed to the harshest conditions, Tnemec's external coating systems provide the robust protection needed to maintain their integrity. Designed to withstand site-specific challenges of weatherability, chemical exposure, mechanical stresses and abrasion, these coatings ensure that your assets remain resilient over time.

In addition to meeting exterior service requirements, Tnemec can offer extended service life and lower maintenance costs by addressing surface tolerant needs such as marginally prepared substrates and low-risk/high-reward solutions for overcoating.

- | Extend service life and lower maintenance costs
- | Surface tolerant and dry-fall capabilities

PERFORMANCE MATTERS™

Tnemec's commitment to quality is demonstrated through rigorous testing, including compliance with ISO-12944 standards. Many of our systems have successfully passed ISO-12944 C5 Very High (C5 VH) classification, indicating their ability to protect steel structures in the highest on-shore category of corrosive environments.

ELIMINATE OVERSPRAY CONCERNS

Tnemec dry-fall or "spray-safe" coating technologies dramatically increase production rates compared to brush and roll applications and eliminate the need for containment when compared to standard spray applications, making them an ideal solution for large or complex structures.



LINER COATINGS

BARRIER PROTECTION FOR CHEMICAL STORAGE AND EXPOSURE

Tnemec's liner coatings are engineered to provide a versatile range of barrier protection for a wide range of cargos and exposures. Whether you are addressing occasional contact up to full-time immersion, raw materials to finished fuels, process water to slurries, or strong acids to caustics, Tnemec has a comprehensive line of thin film, thick film, and reinforced options to address a broad range of applications, performance and cure requirements, all while providing the right level of protection for internal tanks and vessels, pipeline, splash/spill zones and more.

LOOKING FOR MORE?

Tnemec also offers **Epoxoline**® liner coatings that comply with NSF/ANSI/CAN 61 and 600, **ProPolymer**® FDA-compliant liners for food grade oils and chemical cargos, and **Vinester**® liner systems for aggressive and high temperature exposures.



Liner Coatings System Selection Guide

THIN FILM LININGS

Tnemec's thin-film coatings, featuring our flagship **Tneme-Liner**® technologies, provide effective barriers against corrosive and aggressive cargos, in less than 20 mils TDFT.

These high-solids, solvent-borne formulations are user-friendly and can be applied via standard airless equipment.

<u>Series 61 Tneme-Liner</u> offers immense cargo versatility, from crude oil to wastewater, and conforms to API 652.

Series 142 Tneme-Liner is a thin-film option that may be applied up to 20 mils in one coat. Reinforced with glass flake and aluminum oxide, this durable epoxy will stand up to dynamic cargos, including methanol.

THICK FILM LININGS

For environments where more robust protection is needed, our **Tank Armor**® line of 100% solids, thick-film technologies, deliver enhanced durability and resistance, offering a stronger shield against chemical attacks, abrasion, and mechanical damage.

Series 365 Tank Armor is a thick-film, highly crosslinked Novolac epoxy intended for aggressive chemical and solvent resistance that also stands up to 98% Sulfuric Acid.

REINFORCED LININGS

When maximum protection is essential,
Tnemec's reinforced liner options incorporate
our highest performance resin technologies
along with engineered additive packages or
reinforcement materials to fortify the coating or
system, making them capable of withstanding
extreme conditions while also extending service
life and inspection intervals.

Series 335 Tank Armor is a thick-film, reinforced liner specified for use with finished fuels, sweet and sour crude, brine immersion, and more. It has passed Diesel Exhaust Fluid (DEF) testing, in accordance with ISO-22241 and also stands up to steamout testing, mimicking typical cleaning cycles.





SECONDARY CONTAINMENT

RELIABLE LEAK AND SPILL PROTECTION

Chembloc® secondary containment coatings play a crucial role in preventing environmental contamination. In the event of a leak or spill from primary containment vessels, storage tanks, or process equipment, our reinforced lining systems provide the essential barrier protection needed to contain hazardous materials, safeguarding both the environment and your operations.

In addition to extreme chemical resistance, these systems are highly impact- and abrasion-resistant, durable for both interior and exterior exposures, thermal shock resistant, and offer the required flexibility to accommodate movement and settling of surrounding structures.

Not all containment requirements are the same. Themec offers companion products from thin- to thick-film liners and quick-cure polymer concrete technologies that can be tailored to fit your needs depending on the specific chemical resistance requirements and environmental conditions of your project.

- | Withstand impact, abrasion, and chemicals
- | Durable and tightly cross-linked
- | Thermal shock resistant

Series 239SC Chembloc is one of our most versatile containment options. Utilizing Novolac resin technology, this system protects against a wide range of harsh chemicals and corrosive acid solutions.



INSULATIVE COATINGS

FLUID-APPLIED THERMAL PROTECTION AND CUI PREVENTION



In industrial environments where energy efficiency, safety, and corrosion protection are paramount, Tnemec's line of insulative coatings, featuring **Aerolon**® technologies, provides essential solutions in service areas where traditional insulation and cladding are difficult to maintain or tend to fail. Our Aerolon coating systems address a variety of critical needs, including energy retention, condensation control, personnel protection, and Corrosion Under Insulation (CUI) prevention, delivering reliable performance across a range of applications.

I Personnel Protection Where elevated temperatures exist within reach of operators and other personnel, there is a risk for burns. Tnemec's insulative coatings provide a vital layer of protection in accessible areas operating at elevated temperatures, allowing a "safe touch" for workers.

- I **Energy Retention** Tnemec's insulative coatings help retain heat, reducing energy loss and improving overall efficiency. This is particularly crucial for facilities looking to optimize thermal management and reduce operational costs.
- I Condensation Control Condensation on surfaces, whether on the interior roof of a tank or exterior piping, can accelerate corrosion, mold growth, and other issues that compromise asset integrity and safety. Aerolon can mitigate condensation concerns on internal and external surfaces.
- I **CUI Prevention** Tnemec's insulative coatings are applied direct-to-substrate or over approved primers eliminating the corrosive environment between insulation and the substrate, effectively preventing CUI and extending asset life.



Complex Geometries | Where traditional insulation is difficult to apply or maintain

Tank Roofs | Reducing corrosive condensation environments on the inside of heated tanks while allowing access and not hindering inspection requirements

Hybrid Configurations | Utilizing strengths of different technologies to maximize performance

Accessible Areas with Elevated Temperatures | Providing personnel protection and "Safe Touch" accessibility

CONCRETE REPAIR AND PROTECTION

TAILORED SOLUTIONS TO REVITALIZE INTEGRITY

Concrete is the most-utilized building material on the planet. It is important to have reliable repair, resurfacing, sealing, and refurbishment options that meet the higher demands of industrial environments and offer key attributes.

- | Customized systems with premium performance
- | Chemical resistance and durability
- | Rapid-cure and setting

Tnemec's concrete repair solutions provide advanced durability and performance to extend the life of your assets. Our **MortarCrete**® hydraulic cementitious re-surfacer offers ¼" up to 4" build options while our epoxy-modified **MortarClad**® offers surfacing, patching, and filling capabilities up to 1" with the ability to feather edge down to 1/32".

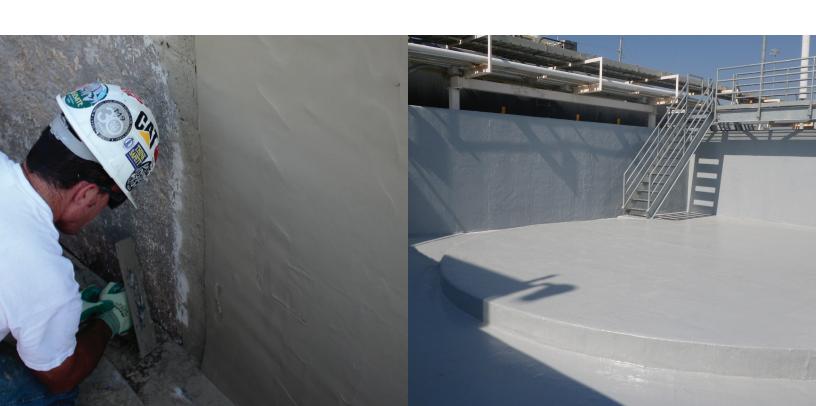
NEED TO LEVEL UP?

Tnemec's **LavaCrete**® polymer concrete systems incorporate polymer modification to achieve superior performance characteristics. These non-shrinking solutions are ideal for the rehabilitation of severely eroded concrete or for corrosion-proofing new concrete where severe chemical resistance is required throughout the complete topping system.

Rapid cure and setting allows rebuilding of sumps, pump pads, trenches, process floors, and secondary containment structures. From casting to standard placement, and versatile building from 3/8" up to 10" in a single pour, Tnemec's polymer concrete systems offer versatility, unparalleled protection, and return to service in hours, not days.

LEARN MORE

Concrete Repair and Protection System Selection Guide





BURIED SERVICES

ESSENTIAL DEFENSE AGAINST SUBTERRANEAN EXPOSURES

What lies beneath? When it comes to protecting buried pipe and valves, pilings, or below-grade storage tanks, Tnemec's coating solutions for buried services provide essential defense against the unique challenges posed by underground environments. These coatings are engineered to withstand the highest degree of abrasion, erosion, and effects of wet or corrosive soils. Our coatings ensure that buried assets remain protected and intact over time.

Series 425 Epoxoline ARO provides superior abrasion protection as a DTM for a variety of buried services, including horizontal directional drilling as well as overcoating FBE intended for directional and thrust bore drilling.

Utilizing modified and reinforced epoxies, coal tar, and hybrid technologies, Tnemec offers solutions for shop and field applications including specialized kits for field joint and weld repairs.

- | Essential defense for underground structures
- Withstands abrasion, erosion, and corrosive soils
- | Apply in the shop or the field



Buried Services System Selection Guide

RESEARCH AND DEVELOPMENT

WHERE COLLABORATION DRIVES PERFORMANCE

Tnemec is heavily invested in the research and development of innovative coatings designed to solve specific industry challenges – and has been for over 100 years. We strive for unparalleled excellence, and that is only achieved through working together with trusted experts and partners.

We manufacture more than 250 different coatings and linings for a variety of substrates, conditions and environments; each one as vital as the next. Reliable, long-term protection is based on performance; and at Tnemec, performance matters.

Collaboration with owners, applicators, engineers, raw material suppliers, and scientists, drive performance. All are required to develop, improve, and innovate our industry-leading coating solutions now and into the future.

From our Suppliers

"Tnemec is truly invested in its quality brand. When we present Tnemec with new materials for improved performance, their team completes extensive, long-term scientific study on the materials to ensure the performance is real and reproducible. From the lab to the field, Tnemec checks consistency and performance at every step to make certain their customers receive a high-quality product."

John Duggan, PhD

Vice President and General Manager Crosslinkers Americas, Evonik Corporation

LEARN MORE





EXPERT ASSISTANCE

PROJECT SUPPORT FROM START TO FINISH

FIND REP

Customers can expect a high level of support and expert assistance from our 100+ independent representatives located across North America and beyond.

Our representatives have wide-ranging industry experience and have received recognition and/or certification from notable coatings and construction-related organizations.

Tnemec representatives also go through extensive internal training. This gives them the necessary technical knowledge to complement their years of practical, field-based learning regarding the effects and threats posed by diverse geographic conditions.

From project vision to completion, these protective coatings professionals are prepared to assist you with product specifications and recommendations, coatings selection, cost analyses and project trouble-shooting, along with any additional support you require.

From our Customers "My Tnemec representative is extremely knowledgeable. He is a great resource for product advice in special situations that involve any issues that are out of the ordinary. He always recommends the right application for the job."

Jim Bethel

Owner, Bethel Specifications and Consulting



PROJECT SUPPORT FROM START TO FINISH

With over 100 representatives located across North America and beyond, you can expect a high level of expert assistance wherever you need it. Our local representatives understand the needs of industrial facilities and can work with you and your team to ensure that every part of your plant is protected.

Contact your local Tnemec representative today at <u>tnemec.com</u>.

FIND REP

Published technical data, instructions and pricing are subject to change without notice. Contact your Tnemec technical representative for current technical data, instructions and pricing. Warranty information: The service life of Tnemec's coatings will vary. For warranty, limitation of seller's liability and product information, please refer to Tnemec Product Data Sheets at tnemec.com or contact your Tnemec technical representative. © Tnemec Company, Inc. 2025 BROIND PP500JAN25