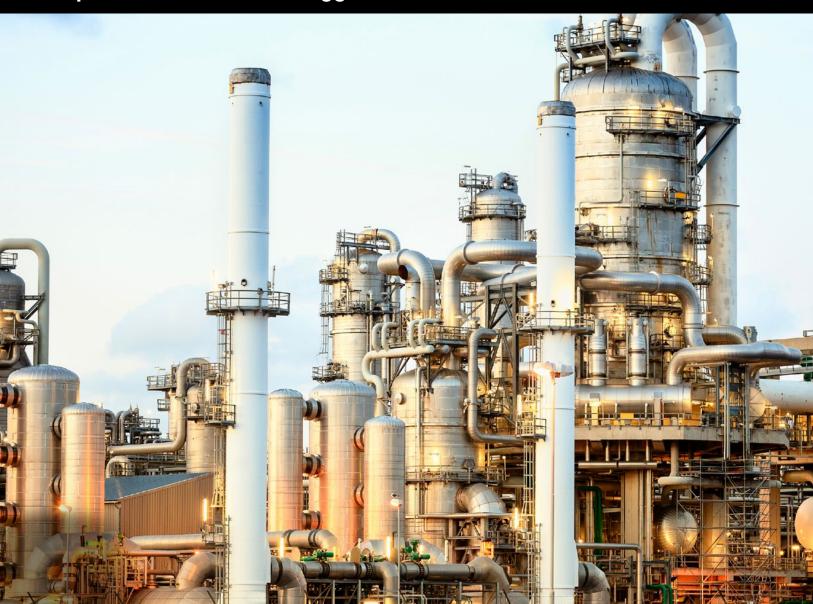


Petrochemical

Coatings, Linings, and Fireproofing

Superior Protection for Aggressive Environments



Solving our customers' problems is how we got started and after 75 years, it's still our focus at Carboline.

1947

Since 1947, we have been dedicated to delivering innovative coatings, linings and fireproofing products. We are driven to provide the best solutions, service and quality to our customers.



Our customers can be confident that behind every sale is a team of some of the most well-respected members of the industry, dedicated and determined to make your project a success.



Our global network of industrial service centers and distribution points are strategically located around the world to provide the highest level of service and support for your project.

Carboline is the leader in protecting the petrochemical industry. Our comprehensive product line offers the right solutions for new construction and maintenance projects for these harsh and demanding environments anywhere in the world. Our highly regarded products are fully tested, field-proven, and backed by a team of professionals focused on the needs of the petrochemical industry.

Product Line

- Outstanding corrosion protection products
- Surface tolerant coatings
- Moisture tolerant coatings
- Low temperature and quick cure products
- Ultra-weatherable finishes
- Chemical resistant linings
- > Intumescent and cementitious fireproofing

Certifications / Listing

- Det Norske Veritas
- > Underwriters Laboratories
- > National Sanitation Foundation
- > NORSOK
- Lloyd's Registry
- > American Bureau of Shipping

MAMPP

Affiliations





ATMOSPHERIC EXPOSURES HIGH HEAT APPLICATIONS

Structural Steel, Piping, and Equipment (Carbon Steel)

Includes all plant steel, piping and equipment operating up to 250°F (121°C) and exposed to a variety of plant fall-out, fumes, occasional splash/spills of moderately aggressive chemicals and ultra-violet radiation from normal weathering.

Primers:

Protective and Surface Tolerant

Carbozinc® Series

Carbozinc primers are zinc-rich primers with outstanding performance in petrochemical environments, showing excellent sub-film corrosion resistance and longevity to match the life of the structure.

Carbomastic® Series

Carbomastic coatings are surface-tolerant epoxies that can be applied over marginally prepared steel substrates, tolerate damp surfaces, and cure at low temperatures for year-round painting in some of the worst conditions.

Rustbond® Series

Rustbond coatings are surface-tolerant, cross-linked penetrating primers/sealers with excellent wetting properties. They are highly flexible with excellent adhesion to existing coatings, and will accept a variety of topcoats.

Barrier Coats: Chemical and Water Resistant

Carboguard® Series

Carboguard epoxies include a wide variety of excellent barrier coatings with chemical resistance. They are easy to apply and commonly used over zinc primers or direct to steel substrates.

Durable Finishes: Color and Gloss Retention

Carbothane® Series

Carbothane finishes are high-performing urethanes that provide long-term weather resistance, color and gloss retention, and chemical resistance to splash and spills.

Carboxane® Series

Carboxane siloxanes are ultra-weatherable and provide extreme long-term color and gloss retention due to their outstanding resistance to ultraviolet radiation.





High Temperature Coatings for Piping and Process Equipment

The elevated temperatures of a petrochemical plant require high- temperature coatings for corrosion protection. Insulative coatings keep workers safe, provide thermal efficiencies for processes and minimize corrosion under insulation for piping and equipment operating at higher temperatures.

Worker Protection and Insulation Needs: Operating Up to 350°F (177°C)

Carbotherm[®] Series

These insulative composite coatings are formulated in a high-temperature-resistant epoxy or acrylic binder. They are ideally suited as a protective heat barrier to shield personnel from hot surfaces. They also inhibit heat transfer into or out of a structure. This makes them ideal for keeping chemical storage tanks cooler. These products also prevent cold surfaces from sweating.

Uninsulated Steel: Operating From 300°F to 1000°F (148°C to 538°C)

Carbozinc Series

Carbozinc primers have outstanding sub-film corrosion resistance and high-temperature stability. They are particularly useful for protecting steel substrates during down times and thermal cycling events that would otherwise be detrimental to unprotected steel.

Thermaline® Series

Thermaline high-heat polymer coatings are used to protect and provide color for equipment operating at elevated temperatures. They are typically used over Carbozinc primers for long-term performance.







Coatings Under Insulation

High-temperature piping and equipment are often insulated for process requirements or energy conservation. Moisture and chemicals can eventually find their way inside the insulation, accelerating the corrosion process. Coating systems that handle aggressive chemicals and thermal, wet/dry cycling are critical for long-term performance.

Insulated Steel: Operating Up to 300°F (148°C)

Carboguard Series

Carboguard epoxies are outstanding barrier coatings to handle moisture and moderately aggressive chemicals often found under wet insulation.

Carbomastic Series

Aluminum-filled Carbomastic coatings are surface tolerant to power tool cleaned steel and provide excellent protection to steel under insulation.

Insulated Steel: Operating Up to 1200°F (649°C)

Thermaline Series

Modified epoxy phenolic, glass-flake filled epoxy novolac, and high performance inorganic polymer. Thermaline coatings are the ultimate in chemical resistance and wet/dry thermal cycling seen under insulation.

PETROCHEMICAL STORAGE FIREPROOFING

Linings for Storage Tanks and Vessels

The demands placed on a lining system are considered to be the most aggressive service for a coating. A lining system is often asked to protect a million-dollar investment from failure and/or remediation. As such, there should be no shortcuts or compromise in their selection, application, or use. Carboline linings have been fully tested and field proven to ensure the user the best possible asset and cargo protection in the industry..

Water & Potable Water Storage

Carboguard® Series

Thin-film epoxy linings are designed for mildly corrosive service in potable water, process water, and mild chemicals normally operating near ambient conditions.

Fuel Storage

Phenoline® Series

Highly functional epoxy and modified epoxy linings ideal for various petroleum storage products, including crude oil, demineralized water, crude/water mixtures, gasohol, ethanol, fuel oil, jet fuel, biodiesel, and gasoline.

Harsh Chemical Storage

Plasite® Series

A specialized series of ultra-high performance linings have been developed for extreme chemical exposure, high-pressure applications, and higher temperature service. This series includes single-coat, high-build, solvent-free products with fast-cure properties for rapid return to service.







Secondary Containment

Secondary containment of chemicals, wastewater or fuels is required by regulations and can be challenging to an owner since the most common substrate is concrete. Specially designed products and knowledge gained over decades in how to treat design details help ensure complete and long-term protection of the concrete and chemical retention in the event of a spill.

Semstone® Series

A wide range of epoxy and vinyl-ester-based technology that includes aggregate-filled and reinforced systems designed to handle aggressive chemical exposures and high physical demands. Our long history of knowing how to handle installation details - the right way; helps ensure proper sealing and protection around cracks, control joints, penetrations, junctions, tank rings, and the like.

Reactamine® Series

Elastomeric polyureas and hybrids are ideal for concrete protection against various petroleum-based products due to their crack-bridging capabilities and elongation properties.

Fire Protection of Steel

Epoxy intumescent and cementitious fireproofing products provide hydrocarbon and jet fire ratings for the petrochemical industry. They cure to a tough, durable, protective finish with high flexural and compressive strengths that can handle harsh petrochemical exposures.

Cementitious

Pyrocrete® Series

High-density, exterior grade, heavy-duty, cementitious fireproofing materials ideal for use in industrial and petrochemical environments exposed to hydrocarbon and jet fires and/or cryogenic spills.

Cable Coatings

Thermo-Lag 270

An FM (Factory Mutual) approved and IEC (International Electrochemical Commission) certified, water-based, fire-resistant coating that was specifically developed for the fire protection of grouped or bundled electrical cables.

Intumescent

Thermo-Lag® Series

The most efficient epoxy-based fireproofing product line on the market, with industry-leading hydrocarbon ratings.

Pyroclad® X1

Ultra-durable epoxy-based fireproofing with unsurpassed weathering characteristics, low thickness requirements, and excellent hydrocarbon and jet fire protection.





GLOBAL COATINGS LEADERS

RIGHT PEOPLE · RIGHT PRODUCTS · RIGHT LOCATIONS



GLOBAL MANUFACTURING PLANTS

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