

Food & beverage

Comprehensive solutions for production and storage spaces



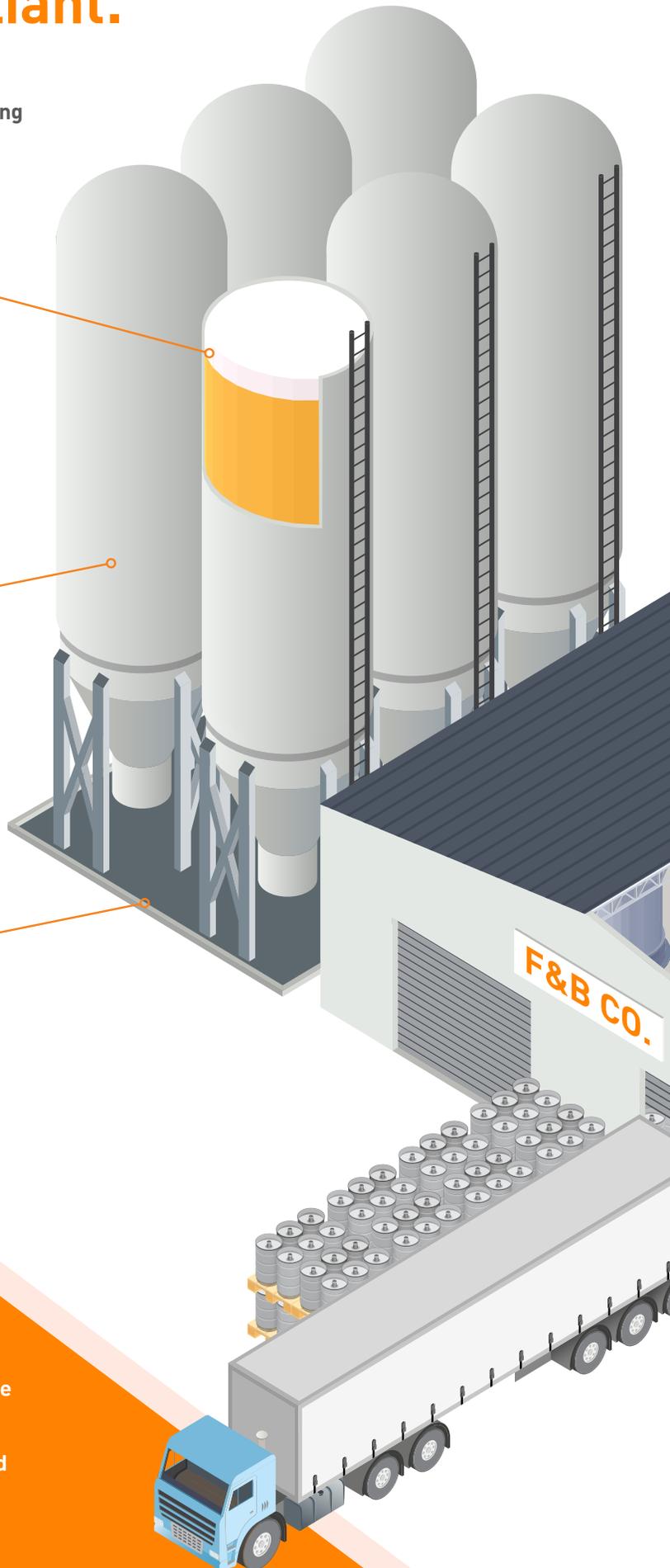
Stay clean. Stay compliant. Stay operational.

Simplify sourcing and streamline new construction or ongoing maintenance with the industry's premier source for coating, lining, and fireproofing solutions.

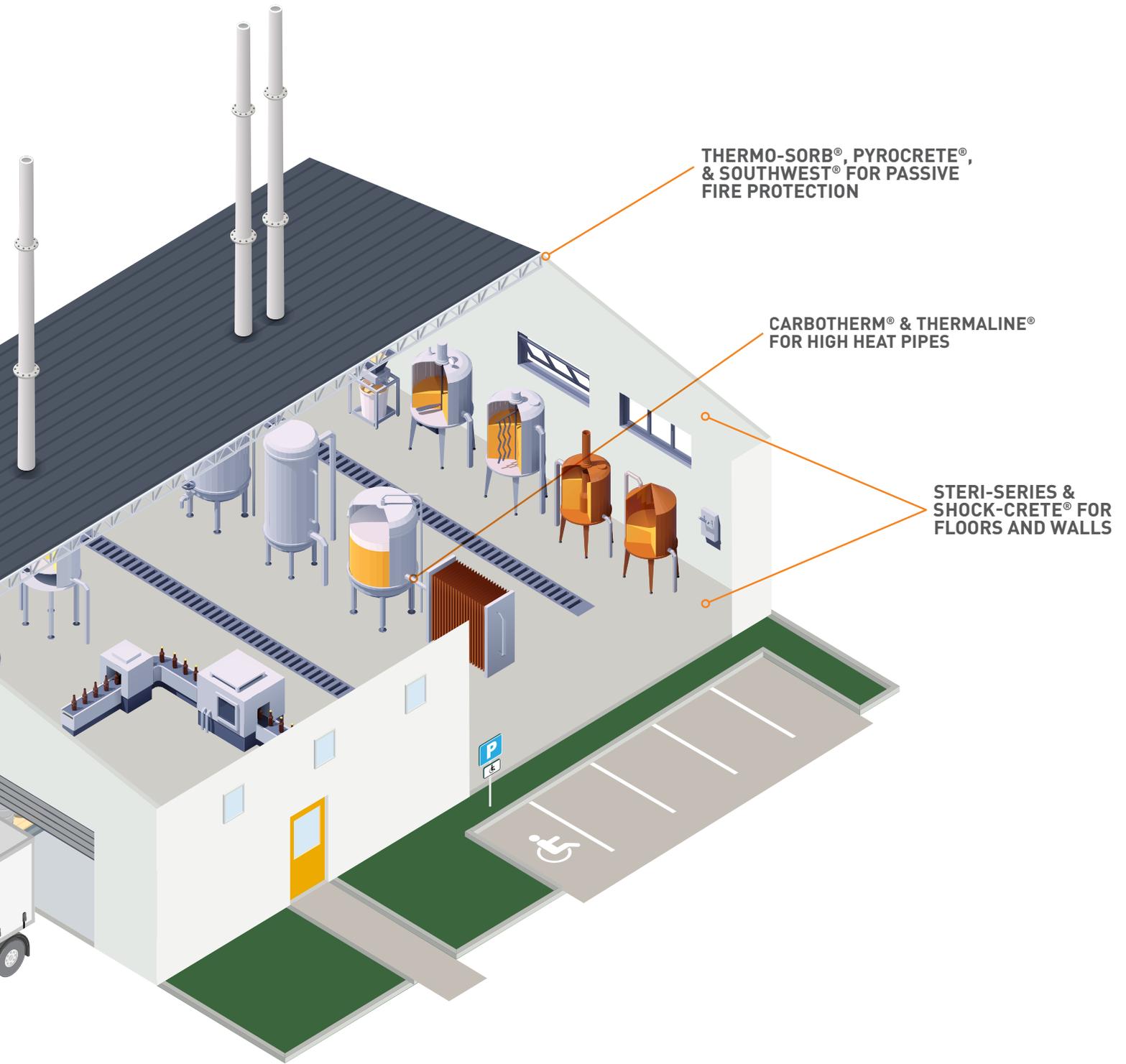
PLASITE[®], PHENOLINE[®], &
HYDROPLATE[®] FOR TANK LININGS

CARBOXANE[®], CARBOGUARD[®], &
CARBOTHANE[®] FOR ATMOSPHERIC
CORROSION PROTECTION

SEMSTONE[®] &
PROTECTO-FLEX SERIES FOR
SECONDARY CONTAINMENT



Our experts understand the matrix of hazards posed by the fats, acids, salts, and other by-products of food and beverage processing. With a strong product portfolio at our disposal, we use this knowledge to develop perfect protection tailored for what you make, and how it's made.



THERMO-SORB®, **PYROCRETE®**,
& **SOUTHWEST®** FOR PASSIVE
FIRE PROTECTION

CARBOTHERM® & **THERMALINE®**
FOR HIGH HEAT PIPES

STERI-SERIES &
SHOCK-CRETE® FOR
FLOORS AND WALLS

www.carboline.com





For safe, sanitary operations

Facility managers tasked with maintaining cleanliness and worker safety lean on our technical teams. Get guidance on high-performance products that:

- › Resist chemicals in food process ingredients
- › Withstand exposure to abrasion and harsh chemicals from constant cleaning
- › Perform in high-moisture, high-heat conditions
- › Exhibit aseptic properties and inhibit microbial growth
- › Include non-slip or insulative properties to keep employees safe
- › Cure quickly in moist or cool conditions for faster return to service

Certifications and listings

- › U.S. Department of Agriculture (USDA)
 - › U.S. Food and Drug Administration (FDA) 21CFR 175.300
 - › Canadian Food Inspection Agency (CFIA)
 - › UL- and NSF-approved products
- 

High performance in harsh service

Food and beverage facility floors take a beating from foot traffic, equipment, and exposure to harsh chemicals and abrasion from constant cleaning. We develop high-performance floor protection systems based on the chemistries of the acids, oils, and detergents used in production and cleaning processes.



Durable floor coating products

Steri series epoxy and hybrid epoxy floor coatings offer excellent resistance to abrasion and chemical attack. This dynamic product range includes 100% solids, low-emission options as well as flexible crack bridging formulas to ensure product purity is maintained and protective barriers are intact.

Shock-Crete urethane cement floor coatings offer high-performance protection in damp environments with a wide service temperature range from -350°F to 400°F (-212°C to 204°C). Heavy-duty formulas demonstrate extreme chemical resistance, withstand mechanical and thermal shock, provide UV-stability, and contain proprietary Polygiene® to inhibit microbial growth for the lifetime of the system.

SECONDARY CONTAINMENT

Versatile spill protection

Mandatory secondary containment presents a conundrum to food and beverage facility managers. A general-purpose solution might not be adequate for more severe environments, but a heavy-duty product is costly overkill in general purpose service. And yet, facilities often require protection of both kinds.

When addressing secondary containment in processing, storage, or loading/unloading areas, we give facility managers what they need the most: options.



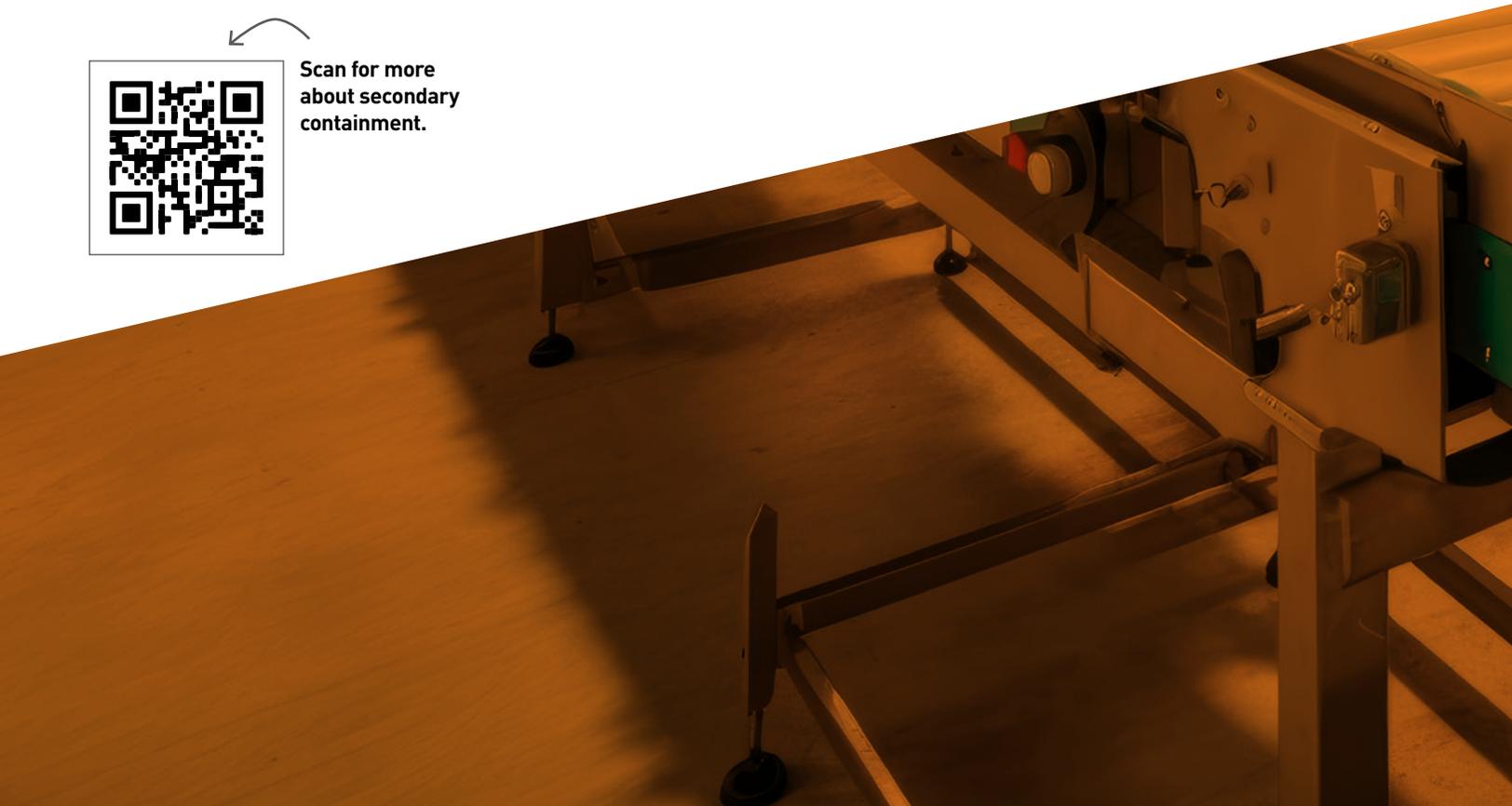
Semstone[®] series general-purpose products comprise a wide range of epoxy-, novolac-, and vinyl ester-based technologies suitable over concrete or steel and engineered to resist aggressive chemical exposure and stand up to physical impact and abrasion. Reinforced and aggregate-filled options are available. One of our technical experts can guide you to the ideal Semstone secondary containment based on the chemistries it will encounter.



Protecto-Flex[®] high-build, glass-flake reinforced, epoxy and novolac epoxy coatings provide exceptional resistance to the harshest chemical exposures. Depending on their resin base and finished DFT, Protecto-Flex products are suitable for mild atmospheric exposure to exceptionally severe immersion service. Variants include products specially built for FDA compliance and high temperature exposure. It's what you specify when something more ordinary is not up to the task.



Scan for more
about secondary
containment.



Sanitile®: tough finishes for tough service

To stay compliant and operational, food and beverage processing and storage facilities must be clean from head to toe. High-performance block fillers, sealers, and finishers provide superior protection in these challenging environments.

Block fillers and sealers

Water-based acrylics fill pores and seal masonry in light- and medium-duty service. Water-based epoxies offer improved resistance to a wider range of chemical exposures. High-build epoxy variants exhibit superior strength and demonstrate excellent resistance to harsh chemicals and cleaning procedures.

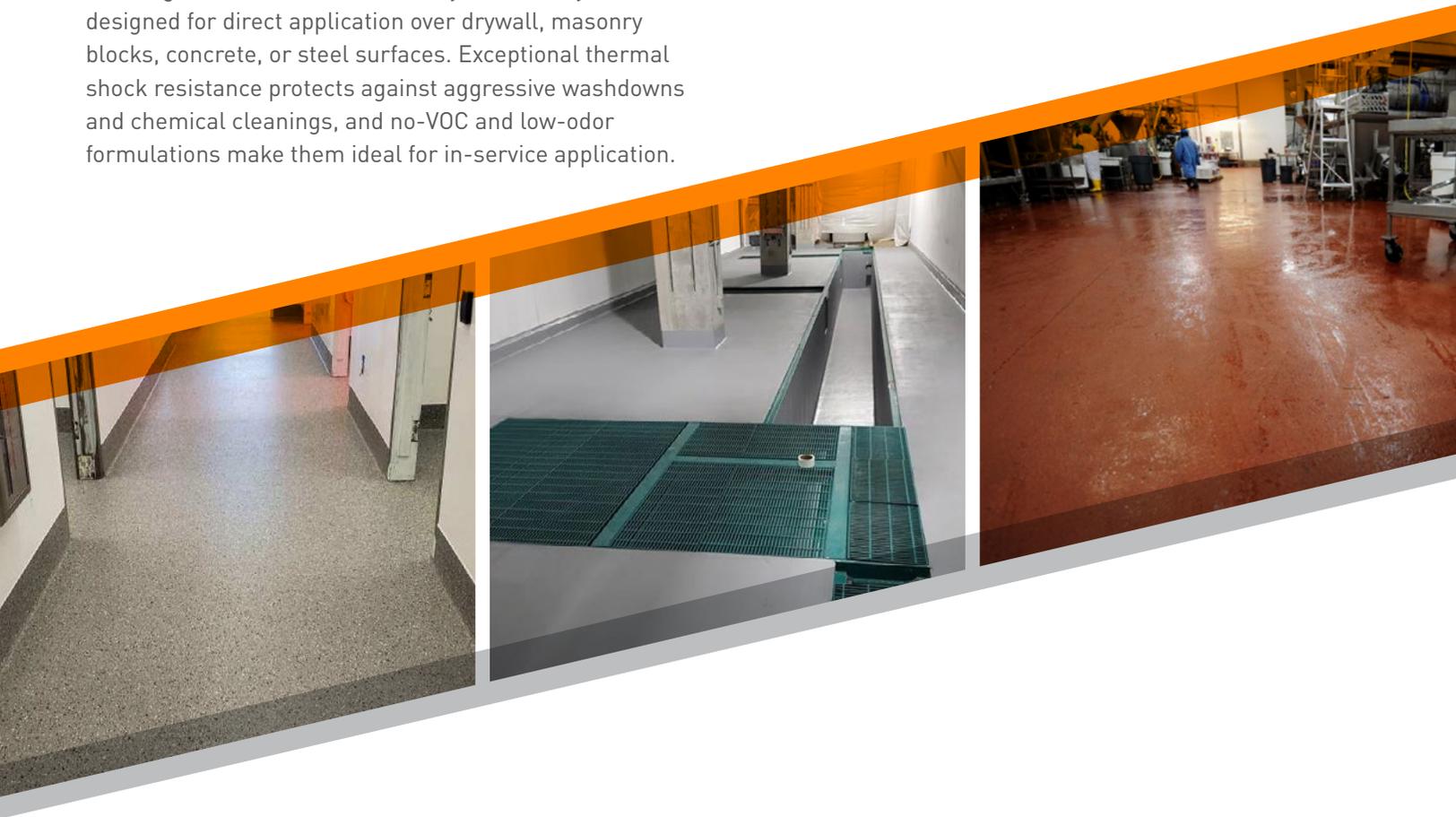
Fiber-reinforced epoxy

These fiber-reinforced epoxy systems can replace FRP or fiberglass mat-reinforced wall systems. They are designed for direct application over drywall, masonry blocks, concrete, or steel surfaces. Exceptional thermal shock resistance protects against aggressive washdowns and chemical cleanings, and no-VOC and low-odor formulations make them ideal for in-service application.

Wall and ceiling finishes

Water-based acrylics are easy to apply and offer excellent color stability. They feature good chemical and abrasion resistance for high performance in light-duty service.

High-solids epoxy finishes offer excellent durability and chemical resistance in heavier-duty service, along with outstanding color and gloss retention.



Atmospheric coatings and passive fire protection

Food and beverage facilities' coating needs don't end with critical food contact areas. Our portfolio of high-performance atmospheric coatings are suitable for all interior and exterior applications including doors, handrails, walkways, storage tank exteriors, and much more.

Further simplify how you source by specifying intumescent or cementitious passive fire protection (PFP) to meet mandatory fireproofing requirements. Our PFP product series are designed to meet a wide range of service requirements and include specialty products with multi-hazard protection capabilities for fires, explosions, and even cryogenic loss events.

Protect products and consumers

Linings serve a crucial function in food and beverage facilities, protecting assets and infrastructure from corrosion and other damage while also preserving the purity of products and processes.

Tank linings

Plasite series tank linings are engineered for extreme chemical exposure and high-pressure, high-temperature service. Variants include single-coat, high-build, or solvent-free options that cure rapidly for very fast return-to-service.

Phenoline series epoxy and modified epoxy linings offer excellent protection against a wide variety of contents including demineralized water, fuels, caustic solutions, and more.

Hydroplate high-performance potable water linings provide superior protection for steel and concrete storage tanks, potable water pipes, valves, and fittings while meeting many stringent AWWA standards and the NSF/ANSI/CAN 61-NSF/ANSI/CAN 600 standard. The series includes single- and multiple-coat linings that offer high solids and near solvent-free options with high-build capabilities, fast-cure properties, and rapid return to service.

Wastewater linings

Reactamine® 760 series advanced plural-component hybrid polyurethanes protect wastewater collection and treatment infrastructure from chemical attack in immersion service. The exceptional barrier properties displayed by the products in the series provide protection against microbiologically induced corrosion (MIC) and hydrogen sulfide (H₂S) corrosion.

Hydroplate 6500 is a glass-flake reinforced epoxy lining that offers excellent abrasion resistance and corrosion protection. Its ultrahigh build formulation allows for single-coat applications that maximize protective film build, ensuring increased service life and a lower overall lifecycle cost.



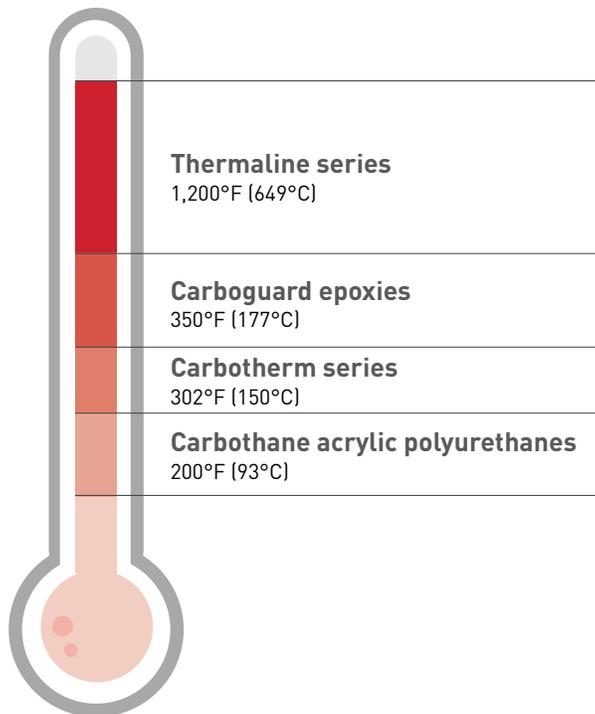
High heat? No sweat.

Food and beverage processing sometimes involves elevated temperatures, creating a more complex risk scenario where both assets and people must be protected. Specialty coatings address the unique challenges in these environments.

Thermaline series silicone, engineered epoxy, and inorganic polymer technologies are designed for corrosion protection of steel surfaces up to 1,200°F (649°C). They are suitable for atmospheric exposure as well as protection against corrosion under insulation (CUI).

Carbotherm series insulative coatings feature moisture-resistant and anti-condensation properties to protect steel assets from corrosion in addition to protecting workers from hot surfaces up to 302°F (150°C).

Carboguard epoxies offer strong chemical barrier properties over steel vessels, piping, and ductwork while **Carbothane** acrylic polyurethanes provide excellent color and gloss retention. Often specified together in coating systems, the products in these series are ideal for service at ambient and above-ambient temperatures.



What about cryogenic service?

Some of the products suitable for high-temperature service also perform in cryogenic conditions. Consult with our technical experts for specification guidance.

SPECIALTY SOLUTIONS

When every second counts

Profit or loss in food and beverage processing often comes down to time spent in production vs. time lost on maintenance.

Keep maintenance or emergency outages short, or eliminate them altogether, with:

Sealer 985, a high-solids polyaspartic providing excellent chemical, impact, and UV degradation resistance while boasting a very fast return to service (2-4 hours for foot traffic).

Floor Fix from Prime Resins, a two-component urethane resin system that mixes with sand to form a floor repair mortar ready for foot and vehicle traffic in as little as 10 minutes.

Vapor Stop is an aggregate-filled urethane cement moisture control barrier that develops a cure strength approximately double that of the concrete substrate to which it is applied. It can be applied to damp concrete or to concrete as new as five days old, and when used as part of a system, it replaces traditional epoxy and vinyl ester-based primers.

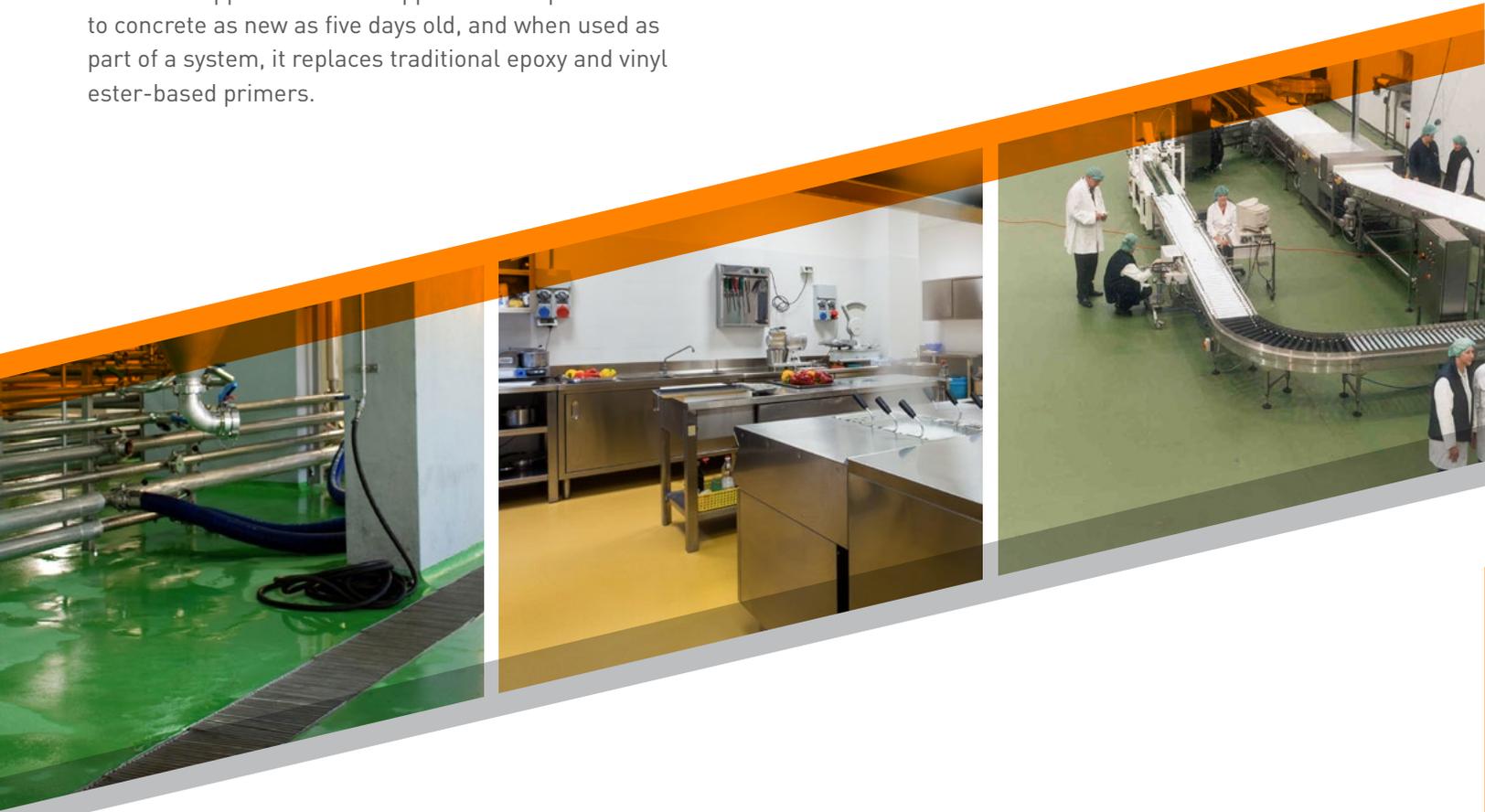
Tailored for your site and circumstances

No two facilities have identical temperature, chemical, abrasion, or ultraviolet exposures. You need options, not one-size-fits-all.

Shock-Crete HD, in addition to its rapid return-to-service time, is rated to resist temperature extremes, including exposure to cryogenic liquid nitrogen.

Shock-Crete IF (Iron-Filled) is recommended in areas in which exceptionally abrasive exposures are expected. This very-heavy duty cementitious urethane mortar withstands mechanical damage from heavy machinery and vehicles while also providing required chemical and microbial resistance.

Shock-Crete TCUV is a semi-gloss topcoat for urethane cement floor systems developed for excellent stability under persistent exposure to ultraviolet light.



Proven portfolio simplifies asset protection

By providing high-performance coatings, linings, and fireproofing solutions under one roof, we simplify food and beverage asset protection.



Concrete grain tank – Michigan, USA

This major American food company replaced an existing epoxy lining with Reactamine 760, an advanced hybrid two-component formula that complies with 21 CFR 175.300 Direct Dry Food Contact criteria. Its excellent abrasion resistance solved the company's problem of erosion of its prior lining.



Boiler stack – Finegand, New Zealand

A meat processor in coastal New Zealand installed a new boiler stack that would reach up to 302°F (150°C). A system consisting of Thermaline 450 and Thermaline 4900 Aluminum was specified due to strong past performance. The system provides exceptional barrier protection at high temperatures while withstanding severe industrial and coastal saline exposures.



Meat processing facility floor – Ohio, USA

An Ohio meat processor's facility expansion project included the protection of a total of 20,000 square feet of new concrete floor space. A system consisting of Shock-Crete SR, Shock-Crete Vertical, and Shock-Crete TCUV provides a durable, safe, visually appealing work surface that withstands impacts, chemical exposures, and frequent cleaning.

GLOBAL COATINGS LEADERS™

RIGHT PEOPLE • RIGHT PRODUCTS • RIGHT LOCATIONS

Exceptional products. Superior technical guidance.

Advancing a more durable, resilient, and sustainable built environment since 1947.

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.



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