

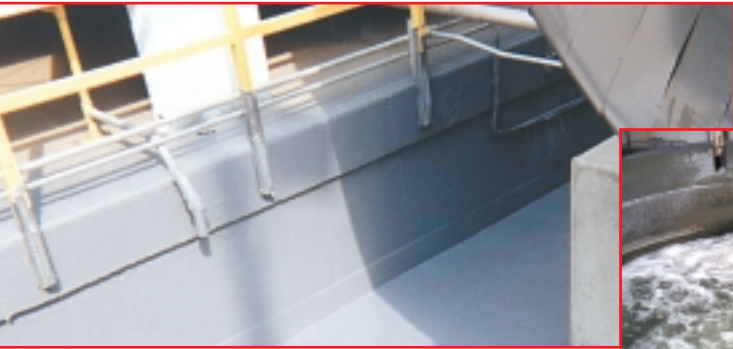


# **BARRIERS OF PROTECTION**

**COATINGS & LININGS FOR CONCRETE AND STEEL**



**SAUEREISEN**



*Secondary Containment*



*Immersion*

## **Sauereisen... a Leader in Protective Coatings and Linings**

*When it comes to corrosion-resistant linings, Sauereisen is the pre-eminent choice. Our mission is to provide barriers against corrosion. We do this by providing a vast selection of protective coatings and linings for steel, concrete and other substrates.*

*Sauereisen protective linings prevent corrosion in a wide range of difficult applications and environments. They're specified for immersion conditions, secondary containment, flue gas atmospheres and flooring.*

*These linings serve the needs of customers in a number of industries where corrosive environments are an everyday occurrence. They include food and beverage/pharmaceutical; power generation; pulp & paper; chemical processing; and wastewater treatment.*

*Sauereisen linings offer a number of benefits: chemical resistance, low permeability, physical durability and economical installation. They're formulated to meet the specific needs of each application and can be applied by a variety of methods.*



*Flooring*

## A Broad Variety of Polymer Materials

### Protective Barriers for Concrete and Steel

Manufacturers define coatings and linings in several ways. At Sauereisen, we offer protective monolithic barriers of many thicknesses. Thin-film coatings are classified in 10 to 20 mil thickness ranges. These are specified as additional topcoats or stand alone barriers. Trowel or sprayed polymer linings range in thickness from 30 mils to 1/4 inch. Within this family of linings we offer a multitude of options.

### Fiber-Reinforced Linings

This category of linings includes fibers that are encapsulated in chemical-resistant resins to provide reinforcement and flexibility. Sauereisen **FibreCrete** epoxy and **FibreLine** vinyl ester linings exhibit outstanding durability and extremely low permeance. At a thickness of 40 mils, these systems are proven to limit permeability to thresholds lower than 0.0008 perm-inches... and that's without adding one of several optional topcoats.

Another major advantage afforded by fiber-reinforced technology is the installation method. These systems are spray-applied. Production rates greatly outpace the alternative glass mat reinforced linings that require a labor intensive, multi-step process. Consider the impact of this on facility downtime and cost.

*Coatings and Linings are used for  
plant-wide corrosion resistance.*



## Specifications for Fiber-Reinforced Technology

The need for structural and anti-corrosion requirements make Sauereisen's **FiberCrete** or **FiberLine** a popular choice in the Power Generation and Chemical Processing industries. Our expertise in stacks and scrubber modules is well established.

Applications of these linings are diverse. Holding tanks for process fluids and ducts subject to corrosive flue gas are ideal structures for these products. In general, the need for abrasion resistance while allowing for structural movement can add to this challenging environment.

Primary and secondary containment also benefit from low-perm, fiber-reinforced linings. Whether conditions involve immersion or simply incidental spills, the ramifications of failure dictate selection of only the highest quality materials.



*Scrubber modules are ideal structures for fiber-reinforced linings.*



*Tile chest awaiting Fast-Trak application.*



*Spray applied  
SewerGard Lining*

## Extending Fiber-Filled Polymers to Several Industries

Sauereisen's alternative for the Pulp & Paper industry is the **Fast-Trak** series. These linings provide a means of restoring compromised tile chests in a way that requires minimal repointing of mortar joints. Vinyl ester or novolac epoxy variations of Fast-Trak are sprayed directly over the tile substrate. Knowing that tiles are supplied with only a thin glaze to resist aggressive wood pulp liquors, a Fast-Trak application improves the entire structure.

The Municipal Wastewater market is another area where the resin/fiber technology offers utility. Sauereisen **SewerGard** is an epoxy polymer specifically

formulated to resist the corrosive environment originating from microbiological sources. The sprayable version of SewerGard is fiber-reinforced and commonly applied at a 60 mil thickness. It is most appropriate for protecting structures at the treatment facilities.

Variations of SewerGard applied by trowel or spincast equipment contain traditional fillers and are more suitable for less accessible areas like manholes, wet wells and lift stations. SewerGard is one of only a few products to have passed the study conducted by the City of Los Angeles simulating the corrosion environment.

## Linings For Floors

Sauereisen linings are specified for floors where a paint is simply insufficient and a troweled topping is considered excessive. We offer a "happy medium" in the form of polymers applied by pour-and-spread methods.

**ConoGlaze SL** is a self-leveling epoxy that can be applied by most applicators familiar with fundamental surface preparation techniques. As far as the flooring installation goes, it's easy and fast. This system typically uses a broadcast of sand to build preferred thickness and skid-resistance.

A better choice in physical durability is **ConoSpread**. The major difference is that ConoSpread is a heavier slurry distributed using a screed rake. The viscosity and thickness of ConoSpread is customized by project allowing for the convenience of bulk packaging. This also minimizes cost for large areas.



*Self-leveling ConoGlaze floor.*

## For Those with a "Bend but Don't Break" Mentality

Sauereisen has formulated innovative elastomeric compounds for niche lining applications. **Fib-R-Thane** is an asphalt-modified urethane material that may be specified as a membrane beneath other products or as a stand-alone lining. Its uses are broad, considering the product's ability to maintain nearly 100% recovery to mechanical stress while tolerating temperature swings from -30°F to 300°F. Specifiers of Fib-R-Thane should think versatility. This membrane/lining may be applied to concrete, steel, brick, or block by trowel or spray to resist acids, alkalis, salts, and solvents. It is used in places previously reserved for rubber linings.



*FiberCrete spray application inside a scrubber module.*

## **Tailoring Linings For an Exact Fit**

### **The Difference Begins with Quality Resins**

Not all resins are created equal, especially when it comes to chemical resistance. The one-size-fits-all concept doesn't work with linings. At Sauereisen, we employ a variety of chemistries. Sauereisen uses only the highest grade resins. We offer two primary Bisphenol A Epoxy formulations, differentiated as general purpose or chemical and food grade.

Where a novolac epoxy is required, our Epoxy NovolaK is a thoroughbred, not a watered-down hybrid. And for higher temperature or strong oxidizing environments, Sauereisen vinyl ester linings meet temperature challenges as high as 250°F. We commonly modify our core formulations and pursue new technologies to assure an exact "fit."

### **Reinforced to Assure Low Permeability**

Sauereisen doesn't compromise the effectiveness of the high-quality resins in its linings by overloading them with sub-standard aggregates. Rather, we reinforce them with proprietary fibers, glass flakes and/or fine-grain powders. This permits the permeability of our lining products to be extraordinarily low. And after all, that's the most basic requirement of a lining.

## Compatible with All Installation Methods

Sauereisen also recognizes that there is no single "best" way to install coatings and linings. Selection of application method is contingent upon many considerations. Our products are tailored to be compatible with a variety of application methods including airless spray, spincast, trowel, roller and pour-and-spread.



*Trowel and backroll*



*Pour and Spread*



*Airless Spray*



*Spincast*

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## Protecting Your Business is Our Business

Specifiers, contractors and plant managers who select Sauereisen linings receive more than just a product. Our approach to coating and lining recommendations for corrosive environments centers on engineered solutions.

When a protective barrier is suitable, we typically offer several options. And the integrity of our recommendations is not compromised by limited technologies, systems or chemistries.

In more than 100 years of business, we've grown to serve many markets with diverse applications. Today our presence is global, through an international network of distributors and licensees.

As conditions dictate, Sauereisen coatings and linings may be complemented with refractories, brick/mortar systems, polymer concretes or substrate repair materials.

So, when corrosive environments adversely impact your business, do what many others have done. Call Sauereisen—the most credible name in chemical resistance.



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