



# SAERTEX-LINER® INDUSTRY

## FOR CORROSIVE, HIGH-TEMP WASTEWATER



**SAERTEX-LINER® INDUSTRY** is a combination of vinyl ester (VE) and ECR fiberglass that has been engineered to withstand corrosive chemical environments and higher temperatures. Based on our proven S+ liner design, it is ideal for use in the trenchless rehabilitation of industrial wastewater pipes.

### FOR INDUSTRIAL APPLICATIONS

#### **RESISTANT TO HIGH TEMPS AND CORROSIVE CHEMICALS**

By combining the chemical and corrosion resistance of ECR fiberglass with the chemical resistance of vinyl ester (VE), SAERTEX-LINER® INDUSTRY is engineered to withstand the harsh effects of industrial wastewater. Since the liner's high-resistance properties are dependent on the temperature and concentration of the chemicals, our product engineers will consult with you to determine if it is suitable for your application.

#### **TECHNICAL SERVICE LIFE OF 100 YEARS**

Our unique ECR fiberglass reinforcement is based on multiaxial fabric technology that withstands high mechanical stresses. SAERTEX-LINER® INDUSTRY offers the same excellent reduction factor in the 20,000-hour test as our SAERTEX-LINER® MULTI, S+ product, which means a technical service life of 100 years.

#### **INSTALLATION-FRIENDLY AND TIME-SAVING**

Low wall thicknesses shorten curing times, and the reduced weight of the liner optimizes handling. The liner's construction allows higher pulling forces and prevents it from overstretching. The optional "FastPlus" inner foil remains in the liner after curing, saving time.

#### **UV LIGHT AND PROTECTIVE OUTER FOIL**

SAERTEX-LINER INDUSTRY® outer foil provides protection from UV light, installation damage, and site contaminates. The outer protective foil also doubles as a glide foil. Please review the instruction manual for details associated with this installation method.

Host pipe

UV light and protective outer foil

Resin encapsulating barrier

ECR fiberglass NCF, VE

Inner foil with styrene barrier – Standard or FastPlus

# UV-CIPP FOR INDUSTRIAL WASTEWATER PIPES

**1** Select your UV-CIPP product application.

| PRODUCT APPLICATION                 | SAERTEX-LINER® INDUSTRY         |
|-------------------------------------|---------------------------------|
| Utilization                         | Corrosive, high-temp wastewater |
| Resin type                          | VE                              |
| Temperature and chemical resistance | +++                             |
| Styrene-free                        | no                              |

**2** Engineered to match profile, dimensions and application requirements.

| DESIGN                         | TYPE S+      |
|--------------------------------|--------------|
| Host pipe profile              | All profiles |
| Application                    | Gravity      |
| Operating pressure [psi]       |              |
| Fully structural               | ●            |
| Diameter [inch]                | 8–40         |
| Structural wall thickness [mm] | 3–10         |

**3** Outer foils are standard. Inner foil can be selected based on application.

| FOILS   |          |
|---|----------|
| Outer foils:  |          |
| – Protective foil for ease of installation, UV light protection | ●        |
| – Resin encapsulating barrier                                   | ●        |
| Inner foil with barrier function:                               |          |
| – Standard  | ●        |
| – FastPlus  | Optional |

| MECHANICAL CHARACTERISTICS                 | TYPE S+ and TYPE S+ XR |
|--|------------------------|
| Short-term circumferential E modulus [psi] | ≥ 2,973,270            |
| Long-term circumferential E modulus [psi]  | 2,320,600              |
| Short-term bending E modulus [psi]         | ≥ 2,436,630            |
| Short-term bending stress [psi]            | ≥ 39,160               |
| Long-term bending stress [psi]             | 30,455                 |
| Reduction factor (acc. to DIN EN 761):     |                        |
| – 50 years [after 10,000 h]                | 78%                    |
| – 100 years [after 20,000 h]               | 76%                    |

\* FastPlus available for 8–60 inch diameter range max wall thickness 10 mm

See a virtual lining project!



## OPTIMIZED ALL-ROUND PERFORMANCE

### FASTPLUS INNER FOIL: A TIME-SAVING OPTION THAT PROVIDES EXTRA PROTECTION

This rugged inner foil remains inside the liner after curing and saves your team installation time.

FastPlus also makes it easier to introduce the UV source, even under difficult installation conditions.

### CHEMICAL RESISTANCE TESTS FOR YOUR SPECIFIC APPLICATION

Once you provide information on the type of chemicals, their concentration, and the maximum temperatures of the flow media, our liners are then specifically tested to ensure their suitability for your application. Our product specialists will be glad to advise you.