SAERTEX-LINER® ENVIRONMENT

FOR STYRENE-FREE PIPE LINING

SAERTEX-LINER® ENVIRONMENT is the styrene-free option in our GRP pipe liner product range. With no styrene emissions, this liner is ideal for the trenchless rehabilitation of wastewater and stormwater pipes in high traffic public spaces and residential areas. It is available in two design options:

- Type S+: strong mechanical properties for numerous applications
- Type S+ XR: suitable for pressure lines up to 33 bar

HIGH PERFORMANCE

STYRENE-FREE = NO ODOR

SAERTEX-LINER® ENVIRONMENT is impregnated with styrene-free vinyl ester resin, making it ideal for UV-CIPP rehabilitation work performed in high-traffic areas and other public spaces.

A STYRENE-FREE GRP LINER WITH IMPRESSIVE MECHANICAL PROPERTIES

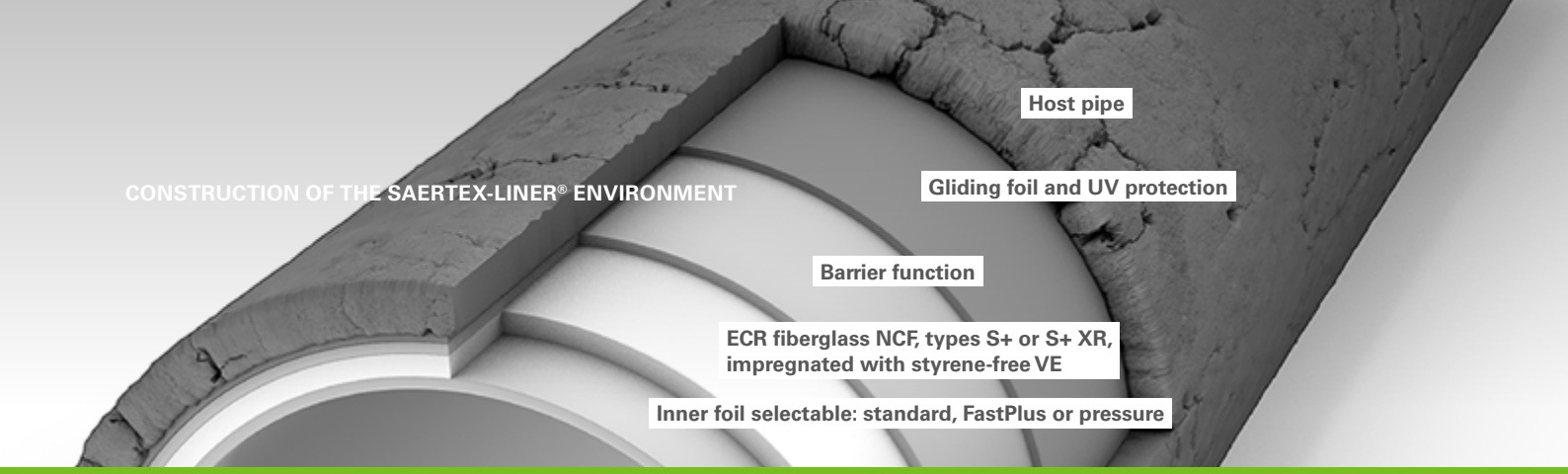
SAERTEX-LINER® ENVIRONMENT offers impressive mechanical properties that make it suitable for many applications, such as a long-term circumferential E modulus of 9,450 N/mm² and an excellent preliminary reduction factor of 1.37 after 2000 hours of testing.

DIBT APPROVED

SAERTEX-LINER® ENVIRONMENT is the first fiberglass-reinforced pipe liner impregnated with styrene-free VE resin on the market and approved by the German Institute for Building Technology (DiBT).

INSTALLATION-FRIENDLY CONSTRUCTION

The construction of SAERTEX-LINER® ENVIRONMENT allows higher pulling forces and prevents the liner from overstretching. Its low weight makes for easier handling, and the lower wall thicknesses shorten curing times. The “FastPlus” option saves even more installation time because the liner stays in place after curing.



FOR STYRENE-FREE GRP PIPE LINING

1 Select your UV-CIPP product application.

PRODUCT APPLICATION	SAERTEX-LINER® ENVIRONMENT
Utilization	Municipal wastewater and stormwater
Resin type	SFVE
Temperature and chemical resistance	+
Styrene-free	yes

2 Engineered to match profile, dimensions and application requirements.

DESIGN	TYPE S+		TYPE S+ XR
Host pipe profile	All types	Circular	Circular
Application	Gravity	Pressure	Pressure
Operating pressure [BAR]		up to 1	up to 33
Fully structural*	◉	◉	◉
Diameter [mm]	150–1500	250–1200	250–1200
Structural wall thickness [mm]	3–12	4–12	4.3–12.3
Max. length [m]	up to 350 [longer on request]		

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

FOILS			
Outer foils:			
– Integrated gliding foil for ease of installation, UV light protection	◉	◉	◉
– Resin encapsulating barrier	◉	◉	◉
Inner foil with barrier function:			
– Standard (temporary)	◉		
– FastPlus (semi-permanent)**	Optional		
– Pressure (permanent)		◉	◉

MECHANICAL CHARACTERISTICS***	TYPE S+	TYPE S+ XR
Short-term circumferential E modulus [N/mm²]	≥ 12,950	≥ 20,500
Long-term circumferential E modulus [N/mm²]	9,450	16,000
Short-term bending E modulus [N/mm²]	≥ 15,000	≥ 16,800
Short-term bending stress [N/mm²]	≥ 230	≥ 270
Long-term bending stress [N/mm²]	165	210
Reduction factor (acc. to DIN EN 761):	1.37	1.28

See a virtual lining project!

* Design classification for pressure applications | Class IV AWWA M28

** FastPlus available for DN 200 to DN 1500 mm diameter range and max wall thickness of 12 mm

*** Long-term characteristics: for Type S+ after 2,000 h testing; for Type S+ XR after 10,000 h testing

SAFETY TESTED

PROVEN RESULTS

SAERTEX-LINER® ENVIRONMENT type S+ still retained excellent mechanical characteristics after 2000 hours of testing, meeting the requirements of a wide range of typical rehabilitation projects (as of 4/2021). Contact us for the current status of the 10,000 hour test.

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 about 1 hour of installation time for every 100 meters of liner. FastPlus also makes it easier to introduce the UV source, even under difficult installation conditions.