

# SAERTEX-LINER<sup>®</sup> MULTI PROVEN THOUSANDS OF TIMES OVER

SAERTEX-LINER<sup>®</sup> MULTI is an efficient, cost-effective solution that offers industry leading performance. Two design options make this GFR pipe liner the timesaving, flexible and sustainable choice when it comes to the trenchless rehabilitation of municipal wastewater pipes and pressure lines:

- Type S+: strong mechanical properties for numerous applications
- Type S+ XR: suitable for pressure lines up to 478 psi

## OUR MOST VERSATILE LINER

#### INSTALLATION-FRIENDLY CONSTRUCTION

The construction of SAERTEX-LINER® MULTI allows higher pulling forces and prevents the liner from overstretching. Its reduced weight makes for easy handling, and the lower wall thicknesses shorten curing times. The "FastPlus" option saves even more installation time because the inner foil stays in place after curing.

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

SAERTEX-LINER INDUSTRY<sup>®</sup> 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.

#### TECHNICAL SERVICE LIFE OF 100 YEARS

The unique ECR fiberglass reinforcement that makes up our liner is based on multiaxial fabric technology that withstands high mechanical stresses and offers a minimum long-term retention of 76 % factor after 20,000 hours (acc. to DIN EN 761).

#### SAERTEX-LINER UPgreen: CO<sub>2</sub>-OPTIMIZED

The climate-friendly manufacturing process for our UP resin systems saves an average of 250,000 kg of  $\text{CO}_2$  per quarter. On request, we can provide you with a certificate showing the  $\text{CO}_2$  savings achieved by your projects.



#### Host pipe

UV light and protective outer foil

Resin encapsulating barrier

ECR fiberglass NCF, type S+ or S+ XR, UP resin-impregnated

Inner foil options – Standard, FastPlus or Pressure

## UV-CIPP FOR MUNICIPAL WASTEWATER PIPES

DRODUCT ADDUCATIC

Select your UV-CIPP product application.

Engineered to match profile, dimensions and application requirements.



Juter folis are
standard.
nner foil can be
selected based on
application.

See a virtual lining project!

PRODUCT APPLICATION	S.	SAERTEX-LINER® MULTI		
Utilization	Municipa	Municipal wastewater and stormwater		
Resin type		UP		
Temperature and chemical resistance		+		
Styrene-free		no		
DESIGN	ТҮР	TYPE S+ TYPI		
Host pipe profile	All profiles	Circular	Circular	
Application	Gravity	Pressure	Pressure	
Operating pressure [psi]		up to 14	up to 478	
Fully structural*	۲	۲	۲	
Diameter [inch]	8–64	10–48	10–48	
Structural wall thickness [mm]	3–15	4–12	4.3–12.3	
FOILS				
Outer foils:				
<ul> <li>Protective foil for ease of installation,</li> <li>UV light protection</li> </ul>	۲	۲	۲	
<ul> <li>Resin encapsulating barrier</li> </ul>	۲	۲	۲	
Inner foil with barrier function:				
– Standard	۲			
– FastPlus**	Optional			
– Pressure		۲	۲	

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 %

\* Design classification for pressure applications | Class IV AWWA M28 | \*\* FastPlus available for 8–60 inch diameter range and max wall thickness of 12 mm

### MULTIPLE SAVINGS

#### 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.

#### APPROVED BY INDEPENDENT BODIES

- DIBt-Approval: Z-42.3-350
- CSTB: DTA 17/16-311
- WRc: PT/458/0620
- Others on request