RELINEEUROPE

AlphalinerPN6

Economic renovation of waste water pressurised pipes

ProductInformation

New:
Stands the pressure!

Waste water pressurised pipes

Almost all waste water disposal companies operate waste water pressurised pipes alongside free incline sewers. For the most part, these channels are renovated as a result of previous damages. The pressurised pipes are used to transport waste water from low to high points with the help of pressure. Alongside the pressure loads themselves, so-called pressure surges with peak pressures occur in accordance with operation. The mechanical abrasion in the channels is high. There are some 15,000 km of pressurised pipes in Germany alone.

AlphalinerPN6

The AlphalinerPN6 is a seamless GFK pipe liner with special technical properties designed for the renovation of waste water pressurised pipes and channels with a sealed construction. In order to accommodate the extreme loads, the AlphalinerPN6 is fitted with a special polyethylene interior coating. This coating is resistant to pressures of up to 6 bar, withstands pressure surges and the associated friction loads. The AlphalinerPN6 is statically self-supporting and designed as a stand-alone pipe liner. This enables even heavily damaged channels that no longer have sufficient static payload to be renovated. The curing is carried out on site using UV light.

:: Statically self-supporting stand-alone pipe liner
:: High level of resistance thanks to special inner coating
:: Low space requirement, short renovation preparation time, short periods of non-use or diversion on site
:: Very quick execution thanks to UV light curing
:: Minimum service life of 50 years

Total Quality Management System – TQM

The RELINEEUROPE Total Quality Management system, which is unique to the industry, guarantees end-to-end quality assurance from manufacture to installation on site. All relevant production data and material test results of site samples are recorded in a database specifically created for this purpose. The results are used for the continuous sustainable optimisation of liner production and installation on site.

AlphalinerPN6:
For the economic renovation of waste water pressurised pipes

:: Special polyethylene (PE) inner coatingng

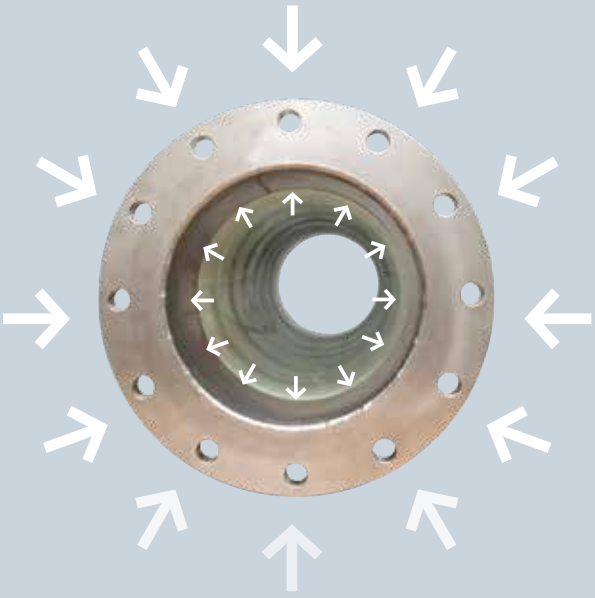
The AlphalinerPN6 is made up of a special PE inner coating which is combined with a pure resin layer and carrying laminate. In addition, the AlphalinerPN6 has a double wall – resin-rich outer layer. In this way, the Alphaliner is able to permanently withstand the enormous pressures of up to 6 bar. The PE inner coating is applied at the factory using a special procedure. The coating is extremely transparent thus enabling the curing to be carried out using UV light alone.

:: Friction resistance

The abrasion resistance of the AlphalinerPN6 has been tested in accordance with DIN EN 295-3 “Darmstadt tipping trough test” with subsequent testing of the high-pressure flushing resistance in accordance with DIN19523. The AlphalinerPN6 was tested in the Darmstadt tipping trough with 100,000 load changes. The average abrasion was 0.06 mm, thus barely measurable. In accordance with the standard specifications, the same material was also exposed to additional high-pressure rinsing at a load intensity of 450 Watt/mm². The material samples showed no subsequent optical changes, e.g. marks or damages. The AlphalinerPN6 meets all standard requirements.

:: Self-supporting stand-alone pipe liner

Due to its construction, the AlphalinerPN6 is a statically self-supporting pipe liner. This means that it is statically load-bearing and completely statically resilient even without the old pipe. The AlphalinerPN6 is a pressurised pipe liner in accordance with Class A of DIN EN ISO 11295.



Mechanical characteristic values	AlphalinerPN6
Young's modulus; short-term value; 5% quantile in accordance with DIN EN 1228	12752 N/mm²
Young's modulus; long-term value; 5% quantile in accordance with DIN EN 1228	9588 N/mm²
Young's modulus; short-term value; 5% quantile in accordance with DIN EN ISO 178	12300 N/mm²
Flexural strength; short-term value; 5% quantile in accordance with DIN EN ISO 178	210 N/mm²
Flexural strength, long-term value	157 N/mm²
Reduction factorA1 in accordance with DIN EN 761	1,31
Abrasion value in accordance with DIN EN 295-3	0.06 mm
Inner veil layer	0.5 mm
DWA-M 144-3 classification	20

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