



Horizontal Drillings

Pipe Bearings

Inner & Outer Coatings

# PSI Fibertec

**A high tech GRP material for extreme mechanical protection of the corrosion protection of pipelines**



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## Pipeline Accessories

# PSI Fibertec

## Product Datasheet



### General information

Fibertec is a resistant, glass fibre reinforced composite plastic. It offers the optimum mechanical protection for pipe coatings and is completely watertight. It adheres to almost any type of surface, such as metal, PE, PVC, PP, stoneware, GRP materials and concrete. In addition, it is highly resistant to chemicals.

A resistance table can be supplied on request. Fibertec is supplied in rolls (0.95 x 10 m, material thickness 1.8 to 2 mm), is exceptionally flexible to work with and can be adapted to substrates without any problems. It cures in sunlight or under a UV lamp. Once cured (curing time is 30 minutes to 8 hours in sunlight or 20 to 60

minutes under a UV lamp, depending on thickness), the surface can be machined and painted. It is suitable for a wide variety of applications, e.g. as a horizontal drilling kit, as protection for pipe coatings, at subsurface-to-surface joints, for lining manholes, etc. Conceived as an open system, it can also be installed retrospectively.



### Technical Data

Fibertec possesses outstanding resistance to chemicals. A resistance table can be supplied on request.

		Value	
Specific volume	kg/m <sup>3</sup>	1805	DIN 53479
Tensile force	N/mm <sup>2</sup>	55,7	DIN 53455
Elasticity under tension	N/mm <sup>2</sup>	13500	DIN 53457
Breaking elongation	%	1,1	DIN 53455
Bending strength	N/mm <sup>2</sup>	146	DIN 53452
Elasticity under bending	N/mm <sup>2</sup>	100000	DIN 53457
Resistance to compression	N/mm <sup>2</sup>	150	DIN 53454
Elasticity under compression	N/mm <sup>2</sup>	15600	DIN 53457
Impact resistance	kJ/m <sup>2</sup>	57,5	DIN 53453
Fibre content	weight%	20	DIN 53479
Volumetric contraction	%	0,15	DIN 53464
Vapour permeability	mg/100 hour	0,34	DIN 53495
Emission of styrene	PPM	<20	

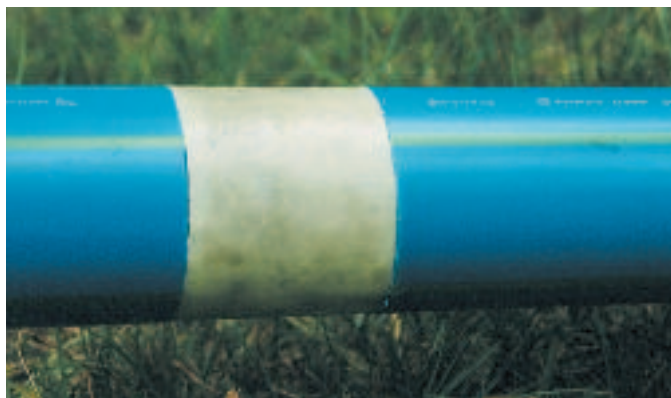
(The specified data may exhibit minor tolerances.)

**Other possible applications**

Fibertec is not only outstandingly suitable for protecting plastic coated pipes and plastic pipes against mechanical stress but can also be used for other applications, e.g. subsurface-to-surface joints, pipe clamp underlays, linings, etc. In short, wherever there is a need for high resistance to indentation and impacts, Fibertec offers the optimum protection.



**HDD-Coating**



**Two-layer PE pipe**



**Pipe clamp underlay**

**Ordering Service**

**Horizontal drilling kit with WLAS shrink sleeve/Fibertec**

Kit with 1 x shrink-type sleeve, 600 mm wide complying with EN1208/DIN30672-C/50  
 1 x Fibertec mat, 950 mm wide, including adhesive tape and disposable gloves.  
 DN ... (please specify)



**Concrete lining**

**PSI-Fibertec**

Description	Order-No.
Fibertec roll, (cut lengths can be supplied)	4-033- <b>23015</b>
Heavy duty UV lamp, 400 watts	4-033- <b>23012</b>
Disposable gloves, pair	4-033- <b>22950</b>
Transparent adhesive tape	4-033- <b>23011</b>

## Horizontal drilling kit WLAS shrink sleeve/Fibertec

The WLAS/Fibertec horizontal drilling kit with high tech Fibertec material was specially developed to provide the corrosion protection of horizontal drillings. It comes complete with highly peel and shear resistant hot melt adhesives and, with the additional security of the Fibertec mat, affords exceptional protection for the pipe wrapping during the boring process, irrespective of whether only the outer wrapping or entire pipelines are to be safely protected. The WLAS/Fibertec horizontal boring kit consists of a WLAS shrink-type sleeve of 600 mm in width and a precisely fitting Fibertec mat. The excess length of the mat of 600 mm brings the critical front part of the sleeve well ahead of the welded seam area. Installation is easy and can also be carried out retrospectively. The shrinksleeve is applied in the conventional manner but must be preheated to a temperature of approx. 90°C. The Fibertec mat is then placed centrally around the sleeve and carefully pressed down. Curing is carried out by sunlight or with a UV lamp.

**The combination of the WLAS corrosion protection system (approved in accordance with EN 12068/ DIN 30672 C/750 DVGW) and a GRP protective mat (Fibertec) ensures the maximum mechanical load resistant capacity for horizontal drilling operations.**

### Note:

The suitability of Fibertec must be tested by the user for the intended application and expected loading on his own responsibility. The applicable DVGW and other local regulations relating to the coating of pipes and outer wrapping systems used for trenchless pipelines must be followed.

## Using Fibertec

### For use exclusively in the open air

The length of the mat is calculated from the circumference of **the pipe + approx. 50 mm overlap. Uncoated and dry edges must be trimmed off before installation.** Roughen the sleeve and approx. 300 mm of the existing pipe-coating with emery cloth and dry the area to be glued. Pull off the coloured backing (pipe side) from the Fibertec mat. Pull off the upper transparent plastic sheet in the area of the overlap and place the mat centrally on the shrink-type sleeve.

Press down the mat with a roller.

Wind the transparent adhesive tape around the pipe (of whatever size) so as to achieve a flat joint between the existing coating and the Fibertec. For pipe sizes up to DN 400, wind the clear tape tautly over the whole surface, in order to ensure that it is pressed tightly on to the pipe. After curing, the transparent sheet can be completely removed.

**The maximum processing time is 5 minutes in bright sunlight or 15 minutes under an overcast sky.**

### Our tip:

Cure the side turned away from the sun with a UV lamp. If the sky is overcast, cure the entire Fibertec mat with the UV lamp in order to shorten the thermosetting time.

**Caution: Boring must not take place until the Fibertec mat is fully cured (min. Shore D 80°).**

