

InsituMain® Pressure Pipe

1. General Data	
Diameter range	200mm to 1500mm
Wall thickness	6mm to 30mm
Carrier material	PET - Needle punch felt / PP coating & ECR glass layers
Suitable resins	Recommended specific flexible Polyester or vinylester styrene free (Insituform / MTC Technical support required)
Curing technologies	Hot water and steam - Note: steam cure only after consultation with Insituform's Technical Engineer.
Abrasion layer	PP-coating: Standard 450 - 550 g/m ² Optional 850 - 950 /m ²
Abrasion resistance	According to DIN EN 295-3
Working pressure rate	Up to a max. of 15 bar (depending on the diameter and site conditions)

2. Mechanical Performance	
Short time E modulus (DIN EN 1228)	2200 MPa
E-Modules long time	1100 MPa
Short time bending stress (DIN EN ISO 178)	30 MPa
Long time bending stress	15 MPa
Tensile strength	Depending on the type & amount of glass layers used (design specific)
Long term reduction factor	2.00
Pressure resistance vacuum	Up to -0,9 bar (depending on diameter)

3. Operating Conditions	
Chemical resistance	pH4 to pH10 (Depending on media temperature and kind of resin)
Max. media temperature	40°C
Old pipe condition	I, II or III (The necessary wall thickness is to define by the static calculation)
Displacements at joints	Yes
Bends	Yes, limited to long bends of up to 45 degrees
Diameter transitions	No
Wall thickness transition	Yes
Typical installation length	50m to 250m
Shape of the old pipe	Round
Material of the old pipe	No limitation

4. Transport and Stocking of Wet Liners <i>(varying according to the used resin)</i>	
Packing	Refrigerated cooling containers (Temperature controlled reefer unit)
Storage time / Pot-life	Max. 3 days storage after the completion of impregnation of a temperature of max. 5°C recorded at the centre of the liner stack.