

PRESSURIZED CIPP











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NuForce Pressurized CIPP structurally repairs pressure pipe systems with minimal disruption.

As pipes age and urban populations grow, quick and safe rehabilitation methods with only minimal impact on the environment and the existing infrastructure are needed. Pressure pipes failing from age, corrosion, breaks or from leaking or displaced joints can cause massive and costly disruption and property damage, as well as health and safety hazards.

NuFlow Technologies has partnered with Belgium-based NordiTube Technologies to bring their line of pressurized CIPP products to North America.

NordiTube Technologies, established in 1987, is a leading technology provider for trenchless pipe rehabilitation and has been producing CIPP liners for more than 30 years. The experts of NordiTube Technologies offer a wide range of innovative systems, materials, equipment, expertise and technical support to customers around the world.

ANSI/NSF 61 CERTIFIED

RECOMMENDED APPLICATIONS

- High pressure pipes such as water mains and sewer force mains
- Potable water pipes
- Hydronic heating & cooling
- Gas

BENEFITS:

- Preservation of surface and underground infrastructure
- Minimal traffic disruption
- Low noise and dust pollution for neighborhood residents
- Protection of the environment due to CO2 emission reduction
- Extremely short turnaround times
- High-cost efficiency
- Restoration of the functionality of a pipeline system for many decades to come



NORDIFLOW

Strong and independent pressure liner.

- Potable water
- Sewer pressure pipes
- Industrial pressure pipes

NORDIFLOW provides a system for trenchless rehabilitation of pressure pipes in one of two different material compositions that can be adapted depending on your requirements.

The liner is a special design of glass and felt layers. The coating – permanent internal membrane – is made of PE or PP.

The **NORDIFLOW** liner is considered a fully structural, independent CIPP system which can be designed to resist not only the internal pressure, but also external loads and vacuum pressure. This means the system is not dependent on the structural integrity of the existing pipe and is classified as "Class IV / Class A" according to ISO 11295.

NORDIFLOW can also be designed as a semi-structural liner that is classified as "Class III / Class B" according to ISO 11295.

BENEFITS AT A GLANCE

- Liner can be designed as Class IV / Class A full-structural or Class III / Class B semi-structural
- Long term operating pressure PFA up to 16 bar (depending on diameter)
- Short term operating pressure PMA up to 20 bar (depending on diameter)
- Individual lengths and bends are possible
- Approved for potable water





NORDIWALL HT

The resistant liner for high-temperature pipes.

NORDIWALL HT is an interactive liner system for semi-structural and nonstructural applications with classification C according to ISO 11295 (no pinholes covering under Class II / Class C).

NORDIWALL HT consists of a needle felt liner, having on one side a special coating of modified Polypropylene PP.

NORDIWALL HT allows industrial system operators to rehabilitate pipes exposed to high temperatures for the first time. NORDIWALL HT is resistant to temperatures exceeding 100°C/212°F. When used in combination with special resins, a heat resistance between 80°C/176°F to 140°C/284°F can be achieved due to its modified PP coating.

NORDIWALL HT is the economical choice for high-temperature pipe rehabilitation projects. After a successfully completed test phase, the excellent quality of this liner has been validated in a variety of industrial projects, particularly on offshore oil platforms.

Using a two-component epoxy resin system, the uncoated face of NORDIWALL HT is entirely bonded to the host pipe. The product ensures great bonding results within the given temperature range.

The installation method is an inversion with steam curing and requires a special heating curve to reach the needed glass transition temperature T_{G} .

BENEFITS AT A GLANCE

- Temperature resistance up to 140°C/284°F
- Excellent chemical resistance
- Good performance in bends
- Excellent adhesion behavior to resist pressure surge
- Felt liner coated with modified Polypropylene
- Class I / Class D: Corrosion protection



TUBETEX

Seamless textile pressure liner.

Drinking water Rising mains

• Gas

- Potable water
- Gas
- Industrial pressure
- Industry and oil
- pipes

TUBETEX has established itself as the cost-effective solution when reinstating the operational safety of pressure pipes with corrosion.

TUBETEX consists of a fabric made of polyesteryarn, having on one side a coating which becomes the new inner pipe surface. Using a special epoxy resin system TUBETEX is entirely bonded to the host pipe.

The **TUBETEX** system is an interactive system relining on the bonding with the host pipe and is classified at "Class II / Class C" according to ISO 11295.

Three decades of experience and many hundreds of kilometers of rehabilitated pipes underline the maturity of **TUBETEX**.

THE BENEFITS AT A GLANCE

- The liner is designed as Class C interactive system relying on bonding to exiting pipe
- Trenchless reopening of connecting laterals
- Long-term operation pressure PFA according to DVGW GW 327, W 330
 - up to 16 bar for waterup to 30 bar for gas
- Seamless fabric hose Individual lengths bends are possible
- Approved for potable water and gas

PRODUCTS OVERVIEW

	NORDIFLOW	TUBETEX	NORDIWALL HT
APPLICATION AREA	Pressure: Sewer, Water, Industry	Metallic Pressure Pipes: Water, Gas, Industry	Pressure & Gravity: High- Temperature Industry
PRESSURE RESISTANCE	PFA (Allowable Operating Pressure) up to 16 bar	PN (Nominal Pressure) according to DVGW 327: Water: 16 bar, Gas: 30 bar	Pressure forces relies on the existing pipe
CHARACTERISTIC BEHAVIOR IN CASE OF PRESSURE SURGE	Ductile behavior to resist pressure surge	Excellent adhesion behavior to resist pressure surge	Excellent adhesion behavior to resist pressure surge
PRODUCT DESIGN	Glass reinforced felt liner coated with PE or PP	Fabric liner coated with PE and TPU based materials	Felt liner coated with modified Polypropylen
COATING	PE or PP	PE, TPU or Hytrel™	FPP
CHEMICAL RESISTANCE	Good chemical resistance	Good chemical resistance	Excellent chemical resistance
DIAMETER	150-1400mm/6-55in	80-1200mm/3-47in	100-1200mm/4-47in
INSTALLATION LENGTHS	Up to 250m/820ft	Up to 300m/984ft	Up to 150m/492ft
ABILITY FOR BENDS	Bends are possible	Bends are possible	Good performance in bends
QUALITY & APPROVALS	Approved for potable water	Approved for potable water and gas	Can be tested according to special industrial requirements
RESIN	r.tec 582-25 OF	Adhesive Epoxy Resin r.tec MK III	r.tec 521-26
CLASSIFICATION ACCORDING TO ISO 11295	Class IV / Class A: Fully Structural Class III / Class B: Semi- Structural	Class II / Class C: Interactive	Class I / Class D: Corrosion protection
PRODUCT RANGE	NORDIFLOW W PE Pull In NORDIFLOW W PE Inversion NORDIFLOW W PP Pull In NORDIFLOW W PP Inversion	TUBETEX W PE TUBETEX W TPU TUBETEX G TPU TUBETEX G HYTREL	NORDIWALL HT

Approved systems in combination with resins from NordiTube available.



1-866-323-1246 nuflow.com