PRESSURELINE

Date Revised: 04 / 2026
Product: Pressureline Hybrid XL
Document #: NFTDS_Pressureline_XL_2026-04

RECOMMENDED APPLICATIONS

Pressureline is designed for the rehabilitation of pressurised pipelines where maintaining operational capacity, pressure integrity, and long-term performance is critical. It is suited to assets where full replacement is impractical, high-risk, or disruptive.

- **Water Mains**
  Potable and non-potable water distribution pipelines, including trunk mains and reticulation networks.
- **Rising Mains**
  Sewage and wastewater rising mains subject to internal pressure, surge events, and cyclic loading.
- **Fire Mains**
  Dedicated fire service pipelines where pressure integrity and system reliability are critical.
- **Industrial Pipelines**
  Process water, cooling water, and low-to-moderate temperature industrial fluid pipelines (subject to chemical compatibility).
- **Marine and Coastal Pipelines**
  Pressurised pipelines operating in corrosive or saline environments where constant deterioration is a concern.

HOST PIPE MATERIALS

Pressureline can be applied to a wide range of existing pipe materials, including:

- Ductile iron
- Steel
- Asbestos cement
- PVC and UPVC
- HDPE
- GRP

APPROVALS, CERTIFICATIONS & SPECIFICATIONS

- AS/NZS 2566.1
- ASTM F1216
- ASTM F1743
- AS/NZS 4020, NSF61, SS375
  when used with potable resins

scan or click for more Information

TECHNICAL DATA SHEET
PRESSURELINE HYBRID XL LINER

Engineered to restore strength and reliability to deteriorating pressure assets, Pressureline creates a new, seamless structural pipe within the existing host without excavation or service interruption.

Developed and manufactured in Australasia, Pressureline combines advanced composite liners with potable-approved epoxy resin systems, delivering a watertight, corrosion-resistant barrier that withstands high internal pressures while maintaining flow performance.

TECHNICAL DATA TABLE

TYPICAL PROPERTIES	VALUE
Substrate	**Pressureline Hybrid XL** - Layered Polypropylene/ glass fibre composite, saturated & cured with Standard Part A & Blueline Normal Part B
Wall Thickness	7.5mm (+/- 0.5)
Diameter Range	DN100 +
E-Module Short Term **ISO 178 / ASTM D790**	7,500 MPa
Flexural Strength **ISO 178 / ASTM D790**	140 Mpa
Tensile Strength **ISO 527-4/5 / ASTM D3039**	100 Mpa
Pressure **Diameter dependant**	1200Kpa (long-term) 1800Kpa (short-term)
Max Service Temp	55°C with Standard Blueline
Min application temp	5°C
Chemical Resistance	Suitable for typical sanitary sewer flows (PH1 – PH12)
Hazen Williams Coefficient	140 (c)
Manning's Roughness Coefficient	0.010 - 0.012 (n)
Product Warranty	Up to 25 years **Subject to Terms & Conditions.**

nuflow

NUFLOW AUSTRALASIA PTY LTD
admin@nuflow.net | +61 7 55 97 1455
NUFLOW.NET

PRESSURELINE

TECHNICAL DATA SHEET
PRESSURELINE HYBRID XL LINER

Structural Performance

Pressureline liners are designed to restore and maintain the internal pressure capacity of deteriorated pipelines and can be installed as either continuous liners or localised structural patches, depending on the defect type and asset condition.

When installed, Pressureline forms a jointless, pressure-rated lining that is capable of resisting:

- Internal operating pressures
- Cyclic loading and pressure surges
- Localised stress concentrations caused by corrosion, wall loss, or joint failure

In patch applications, Pressureline provides targeted structural reinforcement at isolated defects while maintaining pressure integrity at the repair location. This allows critical defects to be addressed without the need to reline the full pipeline length.

Structural performance is governed by:

- Internal pressure requirements
- Host pipe condition and geometry
- Liner thickness and composite design
- Length of liner or patch
- Applicable design standards and safety factors

Design verification can be undertaken to confirm suitability for both full-length rehabilitation and sectional pressure repairs.

Hydraulic Performance

Pressureline provides a smooth, continuous internal surface that maintains or improves hydraulic performance in both full-length and patch installations.

Hydraulic benefits include:

- Reduced internal roughness compared to corroded or tuberculated pipes
- Elimination of leakage paths and internal discontinuities
- Minimal turbulence at repair interfaces due to smooth liner transitions
- Consistent flow characteristics across repaired sections

In patch applications, Pressureline restores hydraulic performance at the defect location without introducing significant head loss or flow restriction, making it suitable for strategic repairs in operational networks.

Durability and Service Life

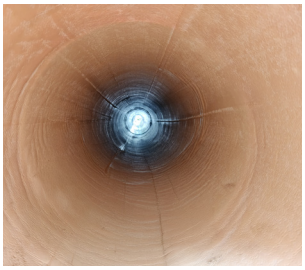
Pressureline is manufactured using corrosion-resistant composite materials designed for long-term service in pressurised environments, whether installed as a continuous liner or as a sectional repair.

Durability characteristics include:

- Resistance to internal corrosion and aggressive service conditions
- No reliance on mechanical joints within the liner or patch
- Protection of the host pipe from further internal degradation at repaired sections
- Stable mechanical properties over the intended design life

When correctly designed and installed, Pressureline provides a long-term rehabilitation solution, extending the service life of pressurised assets while reducing the likelihood of future leaks or failures at repaired locations.

BEFORE



AFTER

Installation Performance

Pressureline is installed using trenchless techniques and is well suited to both full-length relining and localised patch repairs, depending on project requirements.

Installation performance benefits include:

- Minimal excavation, typically limited to access pits, valves, or existing chambers
- Ability to complete targeted repairs without relining the entire pipeline
- Reduced construction timeframes compared to full replacement
- Lower disruption to traffic, structures, and surrounding infrastructure
- Reduced safety and environmental risks associated with excavation

Patch installations allow critical defects to be addressed quickly and efficiently, making Pressureline suitable for reactive repairs, condition-based maintenance programs, and staged rehabilitation strategies.