

# Resiline 320

The easy fix for ageing pipes

Bring new life to old drinking water pipes, affordably and sustainably. Increase flow, improve water quality, protect pipe integrity - and restore service in as little as one day.

As New Zealand's authorised Resiline 320 Pipe Renewal Liner applicator, Citycare Water can deliver a time and cost-saving way to rehabilitate and extend the life of ageing potable water pipes with the latest in sprayed-in-place pipeline (SIPP) lining technology.

The Resiline 320 cleaning and lining process is specifically designed to rehabilitate existing potable water mains, restoring pipes to near original condition, increasing the structural integrity with only a minimal reduction in pipe diameter.

- Extends pipeline life by 50 years.
- Protects pipes from further degradation
  preventing corrosion and tuberculation.
- Improves water quality.
- Repairs certain cracks and pinholes and provides semi-structural enhancement.
- Restores and maintains flow by resisting build-up.
- Safe, reliable, carbon-considered pipeline maintenance tool.
- Low-impact application minimises disruptions to communities.
- High productivity up to 600m per week.
- Same day return to service.
- AS/NZS 4020:2018 Approved.
- NSF61 and BS6920 UK potable water approved.

### Resiline 320 Pipe Rehabilitation



Eliminates up to 90% of the excavation, fill and repaying associated with full pipe replacement.



Reduces carbon footprint by up to 75% compared to typical replacement pipe.



Repairs cracks and pinholes, provides structural enhancement, restores and maintains flow.



# Resiline 320

Certified: The 100% solids polyurea formulation is AS/NZS 4020:2018 Approved, BPA free, NDMA free and contains no VOCs.

Strong: Enhanced build capability with film thicknesses of 1mm to 3mm, applied in a single pass. Linings up to a maximum of 9mm may be applied in multiple passes of approximately equal thickness, with each pass not exceeding 3mm.

Flexible: Third generation Resiline 320 Liner can be applied on ductile iron, cast iron, steel, asbestos cement and PVC pipes ranging in diameter from 100mm to 600mm.

Fast: The unique polyurea formulation sets in 2 minutes and reaches full cure in 60 minutes, allowing for same day return to service.

**Efficient**: The liner is installed via a trenchless, spin-cast process that can eliminate up to 90% of the excavation, fill and repaving associated with open cut replacement, reducing overall costs and construction time.

#### **Material features:**

- Based on next generation aliphatic polyisocyanate technology.
- Novel Filler system to avoid water absorption during service.
- · High wet creep rupture strength ensuring long term pressure containment capability.
- · Long term wet flexural strength to avoid collapse under vacuum or external pressure.
- 3mm lining can cover holes up to 6mm in diameter.
- · 3mm of lining can span gaps in the host pipeline up to 5mm.



#### **Material benefits:**

- Tensile Strength 48MPa 37% higher than previously recorded comparable products.
- Burst Pressure Burst testing proven. 3mm thick liner = burst pressure of 17.6 Bar 176m head (255psi).
- Flexural Strength 70MPa 32% higher than previously recorded comparable products.

### **Application advantages:**

- · Minimises disruption to customers.
- Minimal excavations required, reducing time, dust, noise, and visual amenity environmental disruptions.
- Scope 3 CO2 reduction of 75%, with no fabrication of new pipe or delivery to site and heavy construction.
- High weekly productivity 600m per week. Return to service times from 6 hours to 1 hour.

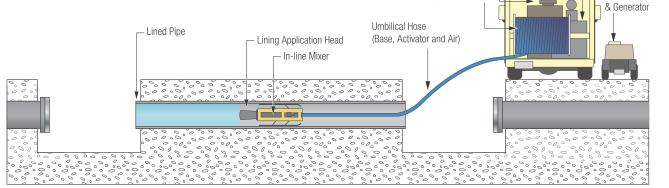
Transfer Pumps

· Excellent QA/QC with digitally monitored parameters.

Hose Metering Pump

Hose Drum/Winch

## Resiline application process:









Reservoirs

Air Compressor