



**SUMOLINE<sup>®</sup>**

# **MANHOLE REHABILITATION: A SOLUTION THAT LASTS**

**NO EXCAVATION, NO DEMOLITION, NO FUSS**

**NUFLOW.NET**

**nuflow<sup>®</sup>**  
WE FIX PIPES

# FIX IT FOR GOOD

Put an end to groundwater infiltration from damaged and degraded manholes.

Manhole deterioration can cause significant ongoing problems, putting strain on the sewer system and costing you more and more in maintenance over time.

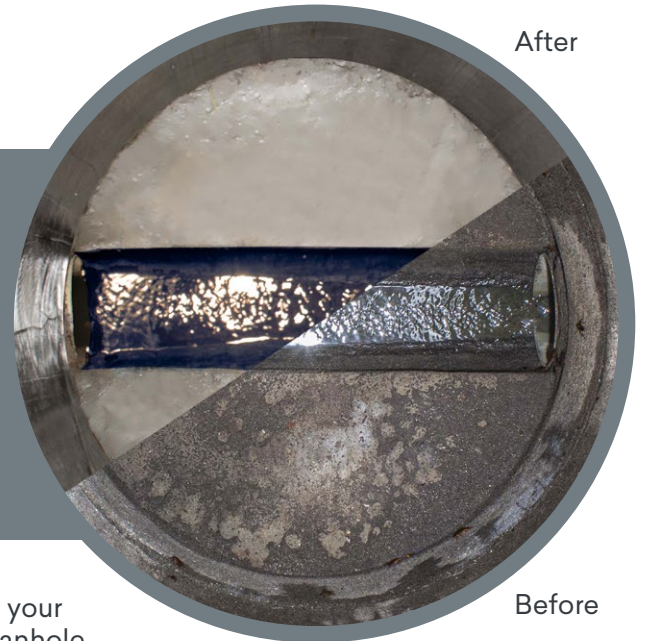
Nuflow's manhole rehabilitation system not only repairs cracks and seals against water infiltration, but also creates an ongoing resistance to H<sub>2</sub>S and microbial-induced corrosion (MIC).

## CONSTANTLY REPAIRING MANHOLES WITH COSTLY TEMPORARY SOLUTIONS?

Unlike commonly used spray coating methods that repair manholes cosmetically and break down over time, Nuflow's system is a long lasting, structurally sound solution.

By proactively managing aging manholes, you can ensure your infrastructure remains functional and efficient. Signs of manhole degradation:

- Cracking
- Brittle walls
- Water ingress



## WHAT SETS US APART?



The Nuflow manhole rehabilitation system has minimal environmental impact—great for manholes located in residential backyards, roadways and amenity blocks.



With no excavation or demolition, you'll not only save in labour and equipment costs, but operational disruptions will also be minimal compared to the traditional 'dig and replace' approach.



Nuflow is an Australian-owned business, with Australian manufacturing facilities and products.

# HOW DOES IT WORK?

Our process for manhole rehabilitation:

- 1. CLEAN AND REMOVE LADDER RUNG**
- 2. SEAL WATER INFILTRATION**
- 3. REPAIR ANY MAJOR BREAKS OR CRACKS**
- 4. INSTALL SUMOLINE MANHOLE LINER**
- 5. REINSTATE ANY PIPE CONNECTIONS**
- 6. CLEAN AND REPAIR BENCHING AND CHANNELS**

We use a combination of products and methods to rehabilitate a manhole.

## AQUA SEAL

Aqua seal solution stops water ingress into a manhole. The product is injected into the cracks of the manhole structure and foams up, plugging and sealing to prevent water infiltration.

## SUMOLINE MANHOLE LINER

Sumoline Manhole is our structural and load bearing epoxy liner. Layers of advanced composites and epoxy resins are used to create a long-lasting, fully structural and incredibly robust product. With our Sumoline Manhole Liner, the infrastructure will often be stronger than it was originally.

## CROC MATE BENCHING BUDDY

This self-leveling epoxy repair mortar provides a protective waterproof layer, shielding concrete from harmful gases and bacteria. Benching Buddy works to actively prevent concrete cancer and similar degradation for long-term peace of mind.

## CROC MATE SMOOTH COAT

This product is used to repair the open channel in manholes, where sewerage and water flows through. Smooth Coat cures to a hard, glossy surface that optimises flow rate and prevents substances from catching and causing blockages.

## CROC MATE SMOOTH TROWEL

This product is a structural, trowel-able epoxy mortar, designed to repair concrete surfaces. Smooth Trowel is formulated to resist harmful chemicals, providing long term protection and preventing further corrosion. The structural repair coating maintains high pH levels to protect against harmful gases that cause concrete cancer and corrosion.

# SPECS & STANDARDS

The below table provides an example with achieved mechanical properties of a standard Sumoline Manhole repair. Actual results may vary depending on design and project specifications, such as repairs to Manhole under road and parking applications.

	<b>METHOD</b>	<b>NOMINAL VALUE</b>
Viscosity Part A / Part B / mixed viscosity (cps at 25°C)	ASTM D2393	11000 / 600 / 2500
Tensile strength Sumoline Manhole Liner (MPa)	ISO 527-1	55
Flexural strength Sumoline Manhole Liner (MPa)	ISO 178	100
Flexural modulus Sumoline Manhole Liner (MPa)	ISO 178	4100
Permanent / Dead Loads – light to medium vehicle traffic areas (kPa)	AS1170.1	13-31
Maximum service temperature (°C)		55
Minimum application temperature (°C)		0
Maximum application temperature (°C)		45
Design Life (years)		100

**IT'S FIXED WHEN  
IT'S NUFLOW.**

**SOLUTIONS@NUFLOW.NET  
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