

# nuflow

SMART SOLUTIONS FOR RESIDENTIAL, BUSINESS AND COMMERCIAL PIPE REPAIRS.

NO EXCAVATION OR DESTRUCTION OF SURROUNDING AREAS REQUIRED

**NUFLOW.NET** 



# WHAT IS RELINING?

Relining uses advanced composite resin technology to restore and renew aged, broken, or corroded pipe systems to a 'better than new' condition without the need to excavate, remove or replace pipes.

For drainage repair solutions Nuflow® utilises a cured-in-place pipe (CIPP) restoration process. This is a relining system which repairs and rehabilitates pipes by creating a pipe within a pipe. The epoxy liner installed to the pipe's interior will seal and protect the system from further deterioration, dramatically extending its life.

Nuflow® also offers an epoxy relining product for repairs to high pressure and potable (drinking) water pipes that require structural strength. These products have all been designed by our in-house chemical scientists and engineers, and meet international standards – giving you peace of mind.

For pressurised pipe repairs that are not structural, Nuflow® offers an epoxy coating process. This is a non-invasive alternative to traditional pipe re-plumbing where the process completely coats the existing internal pipe system.

Nuflow® pipe relining is an economical and efficient alternative to traditional 're-plumbing or dig and replace' methods.

**CCTV FOOTAGE** 

# BEFORE BROKEN LEAKING PIPE AFTER FULLY RELINED INTERIOR OF PIPE

# WHAT ARE THE BENEFITS?

#### COST BENEFITS

Relining is a cost-effective method of pipe repair. Labour and equipment costs are reduced, and there are no outlays for things such as concrete cutting, destruction and reinstatement of walls or floors, re-paving, re-laying of concrete or repairs to landscapes or walls.

#### MINIMAL DISRUPTION

With no need to dig or excavate, there is virtually no disruption to lifestyle or function. Significant advanced planning ensures most jobs are completed within a day and there is little mess or environmental impact.

#### **SUPERIOR END-TO-END SOLUTION**

Our products are at the forefront of relining technology. From the first inspection to completion of the job, we provide structural repairs that resist future tree-root invasion or corrosion and increase the performance (ie. flow rate), strength and lifespan of your pipes.

## LIFETIME REPAIR

Depending on the specifications of the site, we offer warranties of up to 50 years, which means you will have peace of mind that no further breaks will occur in that section of pipe.

\*Up to 50-years warranty. Terms and Conditions apply. Visit nuflow.net/warranty for further information.

# RESIDENTIAL



NUFLOW® UTILISES THE LATEST TECHNOLOGIES TO INVESTIGATE, LOCATE AND SOLVE MOST PIPE PROBLEMS WITH MINIMAL DISRUPTION TO HOMES AND LIFESTYLE.

We have a team of professional accredited drain technicians, that will respect your property whilst onsite and provide quick, environmentally friendly repairs.

## **OUR RESIDENTIAL SERVICES**



#### **CCTV PIPE INSPECTIONS**

A CCTV pipe inspection is essential in assessing the extent and location of damaged pipes prior to carrying out pipe repairs. It is also ideal for:

- pre-purchase inspections
- pre-renovation pipe assessments
- preventative maintenance and repair investigations in aging properties.



#### PIPE CLEANING AND CLEARING

Nuflow® technicians are experts in blocked drain cleaning and clearing and have the right equipment to clear clogged pipes quickly and thoroughly.

We use a variety of methods including water jetting and specialised plumbing tools to ensure your pipe or drain is cleared and cleaned quickly and safely. Our cleaning and clearing equipment easily manage pipe blockages caused by:

- tree root
- faulty or damaged pipe work
- oils, fats and hair sediment deposits
- foreign objects.



#### PIPE RELINING

Nuflow® pipe relining systems are a highly effective method of repairing cracked, displaced, broken and corroded pipes. For pipes needing structural strength (i.e. beneath roads or driveways) a liner impregnated with the resins is pulled into place before being cured rock hard. With non-structural pipes (like water pipes in walls or ceilings) the resin is blown into the pipe to cure, forming a new pipe lining that will keep it operating successfully for years.



## **WHAT SETS US APART?**

Nuflow® offers versatile and effective relining solutions for commercial pipe systems. With our own manufacturing facilities in Australia, we support our clients from assessment of the problem right through to completion of the job.

- Nuflow® has the ability to manufacture liners of various composite constructions for a diverse range of applications.
- We customise epoxy resins to suit high-temperature, high-wear or acid based environments.
- Our cutting edge, in-house laboratory and testing equipment assists with new product development.
- With an in-house scientific team, including a fully qualified chemical and polymer engineer, we are continuously developing new products and techniques to ensure we provide industry-leading services.
- We have a network of highly skilled and fully trained installation partners, enabling us to deliver unrivalled service throughout Australasia.
- We offer warranties of up to 50 years\*, depending on the specifications of each job.

\*Up to 50-years warranty Terms and Conditions apply Visit nuflow net/warranty for further information

## **OUR COMMERCIAL SERVICES**

Nuflow® delivers a first-class service in maintaining and repairing pipe systems for all business, civil, commercial and property environments. Our efficient and affordable solutions, using highly advanced and reliable technologies, ensure drainage, trade waste, water and other specialty pipes continue to flow.

#### **WE PROVIDE:**



## **ASSET LIFE-CYCLE ASSESSMENTS**

We will conduct an audit on your pipe systems which includes CCTV footage, mapping, a full report and recommendations.



#### **PROACTIVE MAINTENANCE PROGRAMS**

Including annual, bi-annual or quarterly high-pressure cleaning of pipes and conducting any interim repair solutions.



#### **REACTIVE REPAIRS**

Qualified technicians and engineers on call 24/7 to ensure unanticipated issues are resolved quickly including CCTV inspection, clearing of blockages and relining where necessary.





**INTRODUCING NUFLOW'S** 

# REDLINE

Redline<sup>®</sup> is a **non-structural** internal reline coating for pressurised pipe systems which:

- prevents and eliminates leaks (including pin-hole and slab leaks), corrosion, mineral build up and issues with low water pressure
- protects you from lead and other contaminants leaching from pipes into drinking water
- tolerates and negotiates multiple 45 and 90-degree bends
- has an estimated epoxy resin life expectancy of 100 years
- is an environmentally friendly pipe relining solution requiring no excavation or destruction, causing minimal disruption to structures, or inconvenience to residents, workplace operations or clients
- · takes a fraction of the time of traditional pipe repair
- in most cases results in cost savings of between 25 and 80 percent.

## **COMMON APPLICATIONS**

Redline® is suitable for copper, metal, iron and steel pipes or conduit transporting:

- · hot and cold potable water (including mains water)
- grey water
- compressed air
- · HVAC and other chemicals
- · fire suppression materials

## TECHNICAL SPECIFICATIONS

- ISO9001:2015 Quality Assurance approved
- AS / NZ 4020:2005 and NSF 61 approved – safe for drinking water
- relines pipes with diameters from 12mm to 300mm
- withstands the psi rate of the host pipe
- BS6920-1:2014 approved as suitable for use in contact with water intended for human consumption
- Water Regulations Advisory Scheme Ltd (WRAS) – material approved





# BLUELINE

## Blueline<sup>®</sup> is a **structural** relining product suited to various applications and environments including:

- · high temperature and acid pipes
- drainage systems sewerage and storm water
- high-pressure networks
- structural pipes
- high wear and high impact piping systems
- trade waste
- marine pipes
- · oil and gas pipelines
- pool pipes

Blueline® is an environmentally friendly pipe relining solution. There is no excavation or destruction required therefore it causes minimal disturbance to the buildings, parking areas, staff operations, occupants or customers and clients.

Blueline® is also a structural repair for damaged pipes. It not only restores the pipe's previous level of strength, but in most instances improves it; which prevents joint weakening, tree root invasion and sub-soil water infiltration. It creates smooth transitions between pipes of varying diameters, pipes with multiple junctions and bends, horizontal or vertical pipes, and pipes with numerous branches, which improves water flow rates.

Blueline® allows installers to stop and start at any point within the pipe to give greater flexibility with sectional lining whilst increasing flow.

## TECHNICAL SPECIFICATIONS

- Watermark Technical Specification WMTS-518:2016 approved
- ISO9001:2015 Quality Assurance approved
- relines pipes with diameters from 40mm to 1500mm although we can custom make solutions for larger diameters
- can handle temperatures up to 140°C
- can handle many chemicals including caustic soda, sulphuric and nitric acids



\*Up to 50-years warranty. Terms and Conditions apply. Visit nuflow.net/warranty for further information.



# CREENLINE ®

Greenline® is a **structural** repair solution for mains and high-pressure potable water pipes. Like Blueline®, it:

- requires no digging or excavation to repair pipes (under or above ground)
- can repair any type of pipe with minimal disruption
- uses existing access points and minimal equipment to pull liners into place, leaving only a small environmental footprint and causing minimum disruption
- bonds to the host pipe and can start and stop anywhere within the damaged pipe
- is compatible with tapping bands (including Wang or similar), rubber ring push-in D1 tees and Gibault couplings of most types
- enables tees and house service connections to be re-installed from mains service lines
- enables connections to be made directly into the liner with or without a host pipe
- allows various saddles to be secured directly onto the liner to connect a ferrule cock
- has a higher crush and burst strength than AC and UPVC pipes.



Greenline® with saddle attached.



Connection can be made directly onto Greenline® structural liner.

## TECHNICAL SPECIFICATIONS

- ISO9001:2015 Quality Assurance approved
- AS / NZ 4020:2005, NSF 61 and SS 375 : 2001 approved – safe for drinking water
- Relines pipes with diameters from 40mm to 1000mm although we can custom make solutions for larger diameters.
- Withstands pressure of up to 1800kpa

## **INSTALLATION**

Greenline follows the CIPP structural relining process (see following page for details. This specific installation method enables a mechanical, watertight bond between the line and the host pipe. In certain environments, where an additional bond between the host pipe and liner is beneficial, a rubber safety ring acts as a secondary seal. This provides added security for leak prevention in case of ground movement or host pipe collapse.



Compatible with Gibault couplings and can be installed over tee connections and joints.



# STRUCTURAL RELINING SOLUTIONS

There are five basic stages in our 'cured-in-place pipe' (CIPP) structural relining process:

## **STAGE 1:**

A liner specifically designed to cater for the damaged area of pipe is impregnated with resin and a deflated bladder is placed inside.

## **STAGE 2:**

The liner is then inserted into the damaged pipe through existing access points using ropes.

## STAGE 3:

Once positioned, the bladder is inflated, pushing the liner against the host pipe and forming the shape of the new pipe.

## STAGE 4:

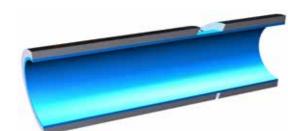
The resin cures; essentially forming a new, strong and permanent pipe or drain inside the old one.

## **STAGE 5:**

The bladder is removed; usually allowing for immediate use of the pipe.











# **EPOXY COATING PROCESS**

The process of relining pipes by coating them with a nonstructural liner such as Redline<sup>®</sup> is also a five-stage process, however those stages are slightly different.

## **STAGE 1:**

A pressure test and a flow test are performed to determine the flow rate and water pressure in the pipe. This also enables us to map out the plumbing system.

## **STAGE 2:**

The entire plumbing system is then drained and dried using dehumidified, compressed air, then a safe abrading agent is blown through the pipes to remove any debris or build up.

## **STAGE 3:**

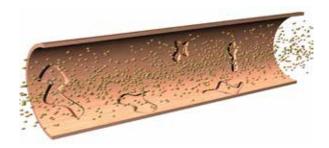
Optimal internal pipe surface temperature is created, and another air pressure leak test is done before conditioned air is used to evenly distribute the epoxy coating through the pipes.

## STAGE 4:

After the epoxy coating cures, new valves and hoses are installed to all fixtures.

## **STAGE 5:**

A final flow test is performed to confirm functionality.







## **TESTIMONIALS**



Very professional approach, obliging staff, work performed to satisfaction, great result, job areas cleaned when finished.

WOULD STRONGLY RECOMMEND TO ANY CLIENT 100%.

John Jefferson Palms

We couldn't of been happier with the job Nuflow did. We needed them in a bit of an emergency and they came out to the site straight away. Originally we thought their Greenline system was the one we needed, but they explained why Blueline would work better and we went with their advice. There were no problems whatsoever and I haven't needed to call them back, so I'd definitely use relining in a similar situation again. It all worked perfectly and we're leak-free which is fantastic.

Mark Shape Group





Having blocked pipes or closing down amenities obviously affects guests, so we needed things fixed quickly. We also needed to make sure the solution didn't create any negative impacts for our guests. Nuflow's reline job has proved itself over our peak period. So we're extremely happy.

Adam RACV Royal Pines Resort

## **NUFLOW'S FIVE PILLARS**

Nuflow Technologies has been leading the way in trenchless CIPP pipe relining in the southern hemisphere for nearly two decades, and apart from having successful and ongoing contracts with many of Australia's and New Zealand's largest council and water authorities, we stand behind a warranty model based on five guiding tenets.

## 1. OUR TEAM

We've got the leadership, the scientific and engineering expertise, the qualified installers, and the communication and education professionals to get the job done properly.

## 2. OUR PRODUCT

The products we deliver have been formulated using the highest quality raw materials, developed to exceed ASTM Standards, and independently re-tested to ensure they are the best on the market.

## 3. OUR BUSINESS MODEL

Nuflow is a fully integrated, end-to-end,
Australian-owned business – where the design,
testing, development, manufacture and installation
of products are a coordinated team effort between
our in-house scientific and production staff and
our fully trained and approved installation partners.
This means that in the unlikely event of an issue,
we are able to work together to find where the fault
has occurred and to provide solutions with minimal
disruption or inconvenience to the client.

These five pillars provide the foundation for not only Nuflow's warranty model, but for the business as a whole, and give us the confidence to back our products well into the future.

## 4. OUR EDUCATION AND TRAINING

With regular, ongoing training and workshops in the correct installation methods of products to our network of franchise partners, and a Masterclass education program for external industry professionals, we're making training and education a priority.

## **5. OUR CODE OF ETHICS**

We've developed a Code of Ethics that reflects the way we serve our clients and go about our business.

Our company Code of Ethics includes having passion for what we do, integrity in how we do it and excellence in what we achieve. It states our commitment to our clients and the communities we serve, our intention to comply with industry standards and our alignment with quality assurance, safety and environmental protection principles.

It's these ethics which guide our business decisions, and which form the fifth and final pillar of our warranty model.



# SERVICING CLIENTS THROUGHOUT AUSTRALASIA

YOUR LOCAL NUFLOW® SERVICE TECHNICIAN IS:

