

# Interflow<sup>®</sup>

## Mountain Highway AC Water Main Renewal



**\$XM**   
project value

**South East Water**   
customer

**VIC**   
Mount Dandenong

**2019**   
year completed

**1.4km**   
of pipeline

## Challenging the traditional scope of Titeflow application

# The project

**Working collaboratively, Interflow and South East Water challenged the status quo with the rehabilitation of a 1.4km, DN100 Asbestos Cement (AC) water main along the Mountain Highway in Victoria. Adapting Titeflow, our die-reduction tight fit liner, Interflow created a cost efficient, reliable solution that challenged the water industry's AC water main pipeline renewal methods.**

Through ongoing performance monitoring, South East Water identified underperforming water pipelines around The Basin area of Mount Dandenong that were no longer providing their customers with a reliable water supply. The DN100 AC water mains had been laid predominantly in the 1950s and '60s and were reaching the end of their service life.

The degradation of AC water pipes is a growing challenge for water authorities in Australia. Suitable relining solutions for water mains are hard to come by, and there is growing demand for alternatives to digging up and replacing ageing conduits. Like Interflow, South East Water is driven by finding innovative and sustainable solutions that provide service and cost benefits to their customers. Knowing that dig-and-relay is costly and risked a greater community and environmental impact, South East Water put out the call for innovative alternatives.

Designed for high pressure and large diameter water mains, Interflow's Titeflow technology was identified as a potential lining solution for the ageing water mains. The challenge for both teams was that Titeflow had never been used to line a pipe of this diameter in Australia. While the solution existed, the equipment needed to do the job did not.

Working together, Interflow and South East Water embarked on a program of research and development to engineer the lining installation solution. With the new technology in hand, Interflow lined 1.4km of AC water main, returning the assets to full service. The successful adaptation of the Titeflow solution is a game-changer in the renewal of small diameter AC water mains across the nation.







## The challenge

A significant challenge faced by the Australian Water Industry is the rapid degradation of ageing AC pipes. South East Water needed to renew 1.4km of deteriorating DN100 AC pipeline along sections of the Mountain Highway.

Lining solutions for water pipes of this dimension are difficult to find, with authorities typically opting for traditional lift-and-relay rehabilitation methods. Varied ground conditions – from rocky outcrops to dense vegetation – and heavy recreational traffic along the highway brought added complexity to any solution that relied on extensive excavation. Understanding the cost and potential impact of such options, South East Water needed an innovative alternate solution to the problem presented by their ageing waters pipes.

## The solution

Interflow's Titeflow technology, a die-reduction polyethylene compression tight-fit liner, had the physical attributes needed to reline this section of pipe while maintain optimum flow capacity. The catch; Titeflow had never before been used on such a small diameter pipe, and the technology to install it didn't yet exist in the Australian renewal market.

Taking a collaborative approach, Interflow and South East Water worked together to develop the technology to install the liner. Through detailed planning and plenty of trial and error, the two entities tackled each challenge as it arose until they reached a complete lining solution. By adapting the existing Titeflow technology, Interflow relined 1.4km of water main, securing life's essential for the Mount Dandenong community.

**Innovation lies at the heart of Interflow's vision of creating the future of water for its customers.**

**By balancing customer, community, environmental and traffic impacts, Interflow was able to provide South East Water with a long-term solution that will support the growing needs of local communities for another expected 100 years.**

**The project was delivered-on time and to budget with no variations. The innovative application of Titeflow saved South East Water over \$600k against a traditional lift and relay solution.**

**“ We took a customer-focused approach, challenging the status quo to deliver optimal project outcomes ”**



**Scott Jordan-Legg  
Business Development Manager**



# How we help

Our 4 Waters



**Water**



**Stormwater**



**Wastewater**



**Culverts**

**Interflow<sup>®</sup>**

Creating the Future of Water

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the services we provide

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