

Work with us

# ENDURATEC Case study

Incorporated in 2016, Enduratec was set up to bring an exciting new leak repair solution to the utility sector. Following a century without change, this micro-enterprise had the ambition to transform the way the gas industry repairs leaking pipes. Here, Bruce Hutt of Enduratec shares his experience with working with Wales & West Utilities (WWU).

WWU and Cadent backed Enduratec's DURASEAL innovation from the start. After SGN published its NIA-funded project (NIA\_SGN0030) that validated silicone self-amalgamating tape (SSAT) as an interim fix for metallic gas risers, DURASEAL developed this further, making the repair permanent and adding a sealing compound under the SSAT and a robust composite shell for protection.

We understood network operators want to keep customers connected, which is challenging since the first requirement is to make safe, potentially resulting in disconnection. Even small leaks create resource pressures, so we needed to create a quick, easy to apply and effective repair.

The WWU team quickly spotted DURASEAL's potential for use as a universal repair anywhere on the network.



**INTRODUCTION**  
Bruce visited our Treforest operational depot to demonstrate the solution live in January 2017

**TRIAL APPROVAL**  
We received further results from SGN's work, and information on Cadent's trial in July 2017 that gave us confidence to proceed to trial on the network

**TRIAL BEGINS**  
Operations were trained up, and approval granted to begin live field trials – beginning October 2017

**TRIAL COMPLETION**  
By January 2018, we had seen the benefits of DURASEAL and geared up for implementation

**APPROVAL**  
In May 2018, we had finalised the implementation plan with all areas of the business engaged, and set an implementation plan in motion

**IMPLEMENTATION**  
By July 2018, we had approved a business case to commission training for 500 engineers across our network, and by September 2018, this was complete



At the start, stakeholders from all areas of the business got the opportunity to experience DURASEAL first hand. We set up training rigs with live pressure leaks using compressed air at WWU's Treforest depot and, in autumn 2017, the first of many field trials began in Penarth, Cardiff.

Following a two-month assessment period, and with positive feedback on every application, we geared up for deployment. The launch involved representatives from each area of WWU to help remove any potential implementation barriers, while more than 500 engineers received DURASEAL training during summer 2018.

The journey to unlock potential involves a change in culture. First Call Operatives in the past couldn't repair these types of escapes, but WWU found a way to 'make safe' and 'repair' using DURASEAL.

Now, an NIA-funded project backed by WWU in collaboration with Cadent (NIA\_CAD0041) is under way. Developing DURASEAL for use on larger pipework, testing to the new LC1 standard and trialling on the networks, the project will prove its suitability for below ground and acceptance as a permanent repair.

WWU's open culture meant we could work with local teams, an invaluable source of experience, which has helped develop more potential applications and made the training programme effective.

The beauty of DURASEAL is that it can be used anywhere, as a permanent repair, above or below ground, on LP and MP, on metallic and PE pipelines. The full benefit of this 'quick-fix that lasts a lifetime' will be felt when the whole operations team is empowered to use DURASEAL anywhere.