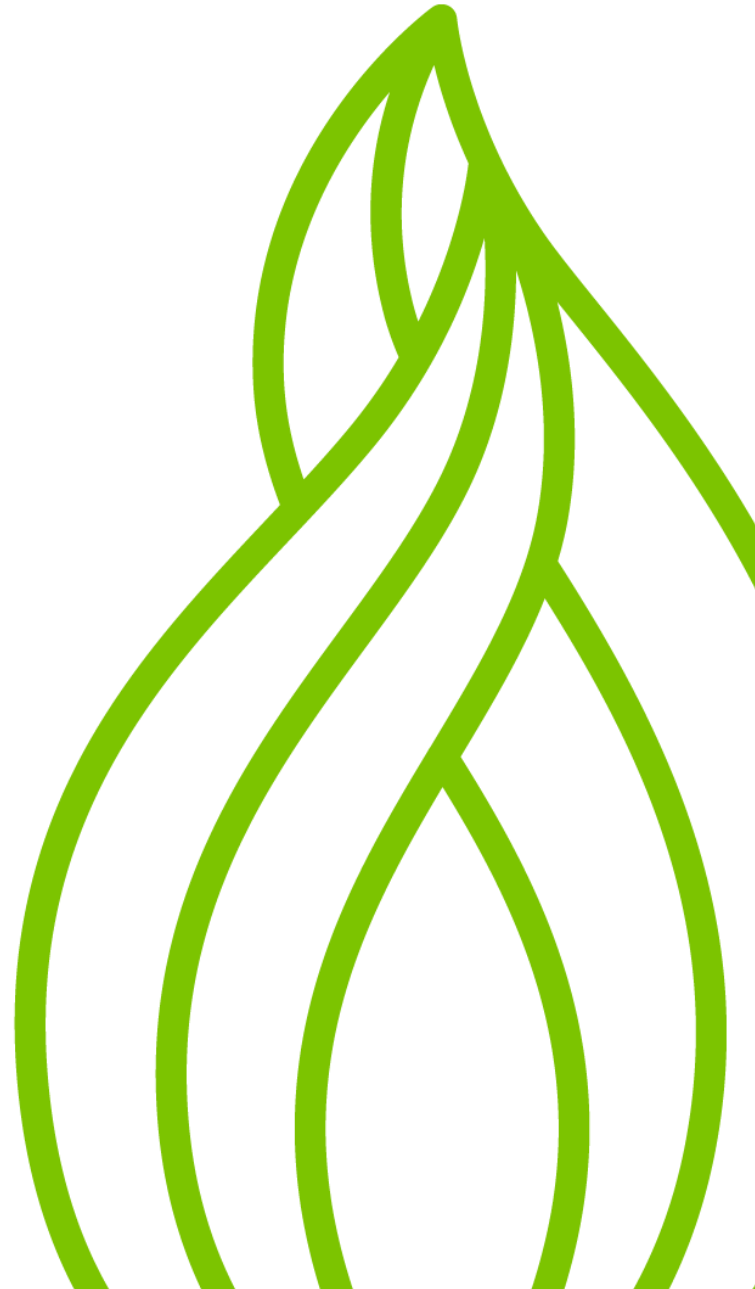




Hot Tap Buried Sample Probe

Value Tracking Case Study



Hot Tap Buried Sample Probe

Background

New gas analysers are being installed across the National Transmission System (NTS) to replace obsolete analysers and improve the accuracy of calorific value (CV) calculations. To meet the stringent gas sampling requirements of these gas analysers, new sampling handing probes are required. Three new probe designs and construction techniques were developed and field tested in order to create a holistic solution for probe/sample installations across the NTS.

What's new?

In the construction phase, the new sample probe designs reduce the amount of civil excavation work and construction materials required in comparison to conventional sample pit and platform construction methods.

Traditional sample probe solutions used at the 37 Calorific Value Sample Points across the NTS required employees to work at height and within confined spaces in sample pits requiring two man operation and trained teams.

The new set of sample probe solutions ensure the maintainable plant is at ground level providing improved access, reducing human factor risk.

The benefits

- Reduced design/appraisal costs due to standardisation of design
- Reduced project delivery time
- Quicker and easier Installation
- Reduced health & safety risks
- Improved working conditions

- Lower installation costs
- Reduced operational costs
- Minimal concrete requirement
- Reduced carbon footprint
- Application for gas distribution networks

Financial savings

The Hot Tap Buried Sample Probe delivers significant capital cost savings in comparison to traditional sample pit and platform construction methods.

Capital cost savings are achieved through a reduction in civils excavation work and sample pit/platform materials, as well as a shortening of the project delivery time with consequently lower project service costs.

National Gas Transmission (NGT) has recognised £1.3m through the installation of this equipment and avoided costs onsite. There is also forecast approx. £260k saving to be achieved by 2025 due to improved safer access for routine operations.

Implementation

The probe has been fully implemented across all NGT sites with savings recognised to date. Future savings to be highlighted from project outputs and further opportunities highlighted with subject matter experts.

