

Through the keyhole

Utility company National Grid has recently demonstrated new technology from its US gas operations that could revolutionise the way gas pipes are repaired by using a 'keyhole' technique to reduce the size of excavations in the carriageway.

National Grid is the first utility to trial both the vacuum and coring technology together in this country and has shipped two trucks across from the US with a team of mechanics to demonstrate and train UK staff in the techniques in an extensive two-month field trial.

The technology is already used by National Grid's US business and allows engineers to drill small holes and repair the underground pipes using long handled tools.

As well as reducing the time taken to repair gas pipes and the size of excavation in the roadways, the technique also allows the original road surface to be replaced immediately. Using less material brings environmental benefits and the whole task becomes less labour intensive for the engineers.

With the introduction of the Traffic Management Act, if adopted, this technology would be mutually beneficial with less disruption for the public and also more cost effective for UK utility companies.

Sharing best practice

National Grid's Director of Operations for UK Gas Distribution, Jon Butterworth said, 'We are always looking to share

The 10-tonne 'Coring Truck' which has the equipment attached to the back – this is one of National Grid's US fleet.



best practise across the Company and our US business has already adopted this technology. National Grid are continually looking at ways to improve and most importantly, reduce disruption for the public whilst we are undertaking essential works.'

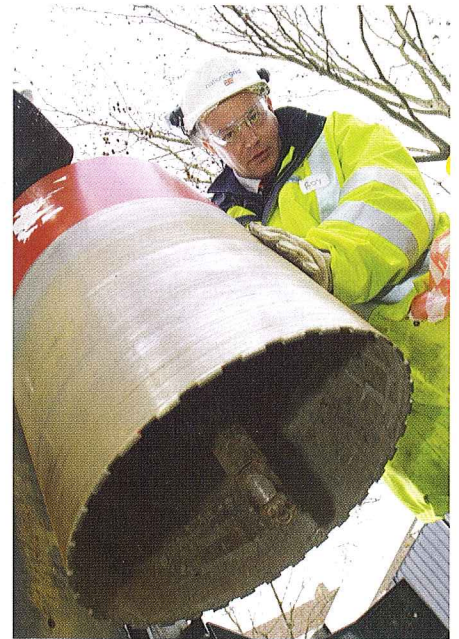
Operation Manager David Abrahams who has been organising the trial on behalf of the UK gas distribution business said: 'The coring drum can cut through any road surface, reinforced concrete, cobbles, even old tram tracks. It's very impressive to watch.'

'This trial has been a sharing of technology, with great potential environmental and health benefits, as well as big cost savings. The trucks would help us with our responsibilities under the Traffic Management Act by enabling us to considerably reduce the time taken to complete certain jobs.'

Major utility player

National Grid is one of the world's largest utilities owning and operating gas and electricity transmission and gas distribution networks in the UK and US and electricity distribution networks in the US. Other businesses operate in areas such as Metering, LNG Importation, Interconnectors and Property.

It owns and operates over 6,800km of high-pressure gas transmission pipeline across Great Britain. It also has 132,000km of gas distribution pipelines in the North West, Midlands, East Anglia and North London – owning more than half of Britain's gas transportation network, to deliver gas to around 11-million homes, offices and factories. **National Grid, Warwick Technology Park, Warwick CV34 6DA.**
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Coring equipment that drills the small diameter hole.



An engineer fixing a gas main using long-handled tools.