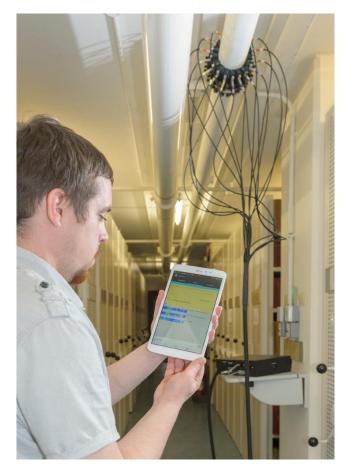


## Medium-range Ultrasonic Inspection for Detecting Corrosion in Fire Sprinkler Systems



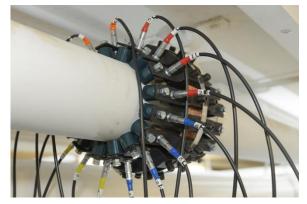
Android tablet controlled inspection

Fire sprinkler systems installed in domestic and industrial environments can be seriously undermined by corrosion.

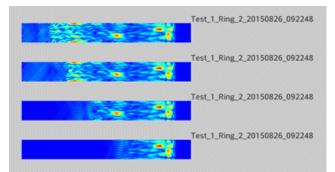
Conventional visual pipework inspection to check for such corrosion is extremely time consuming and often involves the removal of pipe sections for evaluation. Moreover, the pipes are often enclosed and difficult to access for close viewing.

The SprinkTest portable inspection system uses ultrasonic guided waves to inspect up to 6m of pipework from a single inspection location. It delivers substantial time and cost savings, and provides an effective means of inspecting hard to access pipes.

The SprinkTest system comprises an inspection collar (with up to 16 transducer modules), an ultrasonic pulser-receiver unit and an Android tablet installed with automatic defect detection software.



Adjustable transducer collar



Ultrasonic guided wave analysis

## The SprinkTest Consortium



The European Fire Sprinkler Network (EFSN), a not-for-profit organisation for the public good, is a coalition across the fire safety, political and other relevant communities which encourages the greater use of fire sprinklers to save lives and protect property and the environment. http://eurosprinkler.org

## The SprinkTest Consortium Enterprises







Founded in 1967, Baugh & Weedon Ltd (Hereford, UK) is one of the UKs leading NDE equipment developers and manufacturers. Uniquely, Baugh & Weedon are designing and manufacturing Systems and Instruments for Magnetic Particle (MPI), Liquid Penetrant (LPI), Ultrasonic (UT) and Eddy Current (ECT) Inspection. http://bw-nde.com

Founded in 1987 and located in Brussels, DVC provides a complete range of services (Electronic Manufacturing Services – EMS) and will accompany you through your project to produce the product that precisely fulfils your requirements. http://dvc-co.com

Tecnitest is a non-destructive testing engineering company developing and marketing the most efficient solutions to particular inspection needs, together with an outstanding technical service. http://www.tecnitest.com

WLB is a consulting and software development company, established to service the needs of clients who need complex analytical expertise and advanced software solutions. http://www.wlbltd.eu

## The SprinkTest Consortium Research Organisations







Innora SA is a privately owned profit R&D company which delivers high-added value advanced technology intellectual property (IP). Services include system design, complete integration and customisation, support, and collaboration project development. http://www.innora.gr

The Kaunas University of Technology (Lithuania) has been performing ultrasound research for more than 50 years. Ultrasound research activities were initiated by Professor Baršauskas in 1960 with the founding of the KTU Ultrasound Laboratory. KTU has strong links with industry and is involved in many projects concerned with the application of various ultrasonic techniques. http://ktu.edu/umi

TWI is a world leading research and technology organisation. Over 900 staff give impartial technical support in welding, joining, material science, structural integrity, NDT, surfacing and packaging. Services include generic research, confidential R&D, technical information, technology transfer, training and qualification. http://www.twi.co.uk

**Contact Details:** Martin Bourton, TWI Ltd Granta Park, Great Abington, Cambridge, UK CB21 6AL T: +44 1223 890000 E: martin.bourton@twi.co.uk

The research leading to these results has received funding from the European Union's Seventh Framework Programme managed by REA Research Executive Agency http://ec.europa.eii/research/rea ([FP7/2007-2013] [FP7/2007-2011]) under Grant Agreement No. 605050.

