



# Asset inspection and maintenance services



James Fisher Non Destructive Testing (JF NDT) site services division operates in many challenging markets, none more so than the highly regulated UK utility markets.

Patrick Boyle, Utility Business Manager for JF NDT, explains how his company are providing asset inspection and maintenance services to a variety of Water and Waste Water businesses. JF NDT are able to provide inspection techniques on a large variety of assets within the water and waste water market place. Our professional techniques are wide ranging from Ultra Sonics, to digital x-ray and in the majority of cases all works are carried out with no impact on the day to day operating process of the client, in turn leading to no customer issues. An example of this is the need to inspect waste or clean water holding tanks; many that have been in situ for years without an up to date inspection programme.

**The Challenge:** A UK water company approached JF NDT to provide a technique for inspecting Steel/Metal waste water holding tanks that have an external coating of thin fibre in many cases. With a large volume of these tanks situated across the company's network and with low confidence on record keeping and inspection processes, the risk to the business had been accessed as very high. Many sites were unmanned and failure of these types of assets would have a major impact on many levels. Eleven tanks were identified on one site and JF

NDT were provided with limited historical data.

**The Technique:** JF NDT are part of James Fisher and Sons and were able to set a challenge to our Research and Developments department to see if we could provide such a service.

After a period of time carrying out extensive desktop and live feasibility studies we developed an advanced ultra-sonic technique that would meet the challenges and objectives of the project. The equipment requires external contact only with the tanks and is versatile and light weight. All the sheet panels can be inspected alongside all the bolts and rivets that can sometimes be the weak spot of the vessels.

**The Results:** JF NDT were able to provide structural integrity of water and waste water tanks and identify corrosion, erosion, cracking, leakage and many other anomalies found on these assets. We are, where applicable, accredited to report on our finding to EEMUA 159 standards. The tanks were all inspected and a priority list was provided to the water company, listing tanks that needed immediate actions and remedial work or replacement, tanks that required future attention and tanks that need no urgent attention.

JF NDT clients include, DCWW, South West Water, Scottish Water, Thames Water and South East Water.

