

Quickly identify pipeline leaks and accurately assess life expectancy

Pipe Diagnostics Technologies

Quickly and accurately assess pipeline condition using SMART technology

Aquam Technologies world leading leak detection and pipeline condition assessment technologies can accurately predict life expectancy and precisely locate leaks and bursts. By capturing thousands of individual data-points, Aquam Technologies can provide highly detailed information that empowers you to make informed and defensible asset investment decisions.



With good quality data you can plan and prioritise works, optimising budgets, preventing future infrastructure failure and mitigating potential fines in the future.

Benefits of diagnostic services and technologies

- Quickly identifies pipe infrastructure at greatest risk of failure
- Empowers better targeting and prioritising of maintenance work
- Enables accurate calculation of life expectancy of pipelines
- Highlights problem areas effected by tuberculation
- Can be operated under live mains pressure reducing service issues
- Provides superior quality data over a longer range than laboratory testing
- Accurately identifies and locates leak infiltration
- Helps utilities mitigate potential fines of up to £500k
- Minimises excavation and streetworks disruption

Which pipelines can diagnostic equipment be used on?

- Live potable water mains
- Sewers and drains
- Firewater systems
- Greywater systems
- Heating, ventilation and air conditioning (HVAC) systems
- Industrial process systems
- Collection, holding and transfer (CHT) systems



A SELECTION OF OUR TECHNOLOGIES

INVESTIGATOR™

This unique inspection and leak detection system can access potable water pipelines of 50-300mm (2-12 inch) diameter, through live fire hydrants. It covers distances of up to 100m (300 feet) providing live-feed CCTV images, real-time hydrophone data and high-powered sonde information to pinpoint areas of interest.

Benefits

- Internal inspection without disruption
- GPS tracking and plotting of leaks and defects
- Operates in pressures of up to 16 bar (232psi)
- Pre and post rehabilitation assessment
- Used for valve assessment

AMPLUS™

This innovative crawler system inspects live potable water pipelines of over 200mm (8 inch) diameter and can cover a distance of up to 1,000m (3,300 feet). It provides live-feed CCTV and real-time hydrophone data for active leak detection and can be tracked above ground with high-powered sonde.

Benefits

- Precisely calculates wall thickness
- Accurately predicts life expectancy on assets
- Operates in pressures of up to 10bar (145psi)
- 1,000m CCTV inspection of pressurised pipes
- Long-distance leak detection in all materials



LDS1000™

This clever inspection system detects leaks in larger potable water pipes of over 300mm (12 inch) diameter and can cover distances of 1,000m. It can access pipes through a 50mm (2 inch) clear opening, sending back live-feed CCTV images, real-time hydrophone data and high-powered sonde information identifying areas of interest.

PIPESCAN+™

This unique system creates valuable data on the inline wall-thickness of potable water pipelines. It can access pipes through live fire hydrants and cover distances of up to 100m (330 feet). CCTV technology is combined with an ultrasonic transducer to accurately measure wall thickness and a high-powered sonde pinpoints failing sections.



BULLET™

This leak detection system is extremely small and requires only a 75mm (3 inch) access point to enter a pipeline. It uses CCTV to survey pipelines of over 100mm (4 inch) diameter and can be launched into pipelines using a 500m (1,500 feet) tether system or deployed in free-flowing mode, enabling long-distance leakage inspections.

Benefits

- GPS track and plotting of leaks and defects
- Operates under pressures of 16 bar (232psi)
- CCTV inspection of pipelines
- Enables long-distance line tracing
- Identifies illegal connections and services



Benefits

- Creates thousands of wall thickness measurements
- Corrosion can be accurately assessed
- Enables targeted rehabilitation assessment
- Digital couponing
- Precisely locates defects and restrictions

Benefits

- Enables very small pipes to be inspected
- Carries out long-distance leakage surveys
- Suitable for pressurised portable water pipe insertion
- Wastewater compatible
- Potable and cost-effective system



Our technologies in action

CASE STUDY

Pipe condition assessment on a 35-year-old pressurised firewater main

Aquam Technologies pipe diagnostics team carried out onsite leak detection, pipe wall thickness testing and pipe condition assessment on a 35-year-old pressurised firewater main at an international airport in SE Asia. Our Investigator technology was used for CCTV inspection to check for leaks, while PipeScan+ assessed the thickness of the pipe wall.

The client learned that the existing sections of the pipes were generally in good working condition and the remaining life-span of them was more than 26 years. Localised sediment build-up and corrosion was pinpointed and prioritised for cleaning, repair or replacement.



CASE STUDY

Inspection quickly reveals the cause of severe pressure drop

Aquam Technologies Investigator pipe inspection system was used to determine the cause of a severe drop in water pressure at a United Utilities water treatment works, the client feared it was being caused by a faulty valve. Access was gained through the filter inlet bell-mouth and involved negotiating numerous tight bends. The team were then able to inspect a number of sections of 400mm diameter pipe and associated butterfly values relating to three filter tanks, the whole operation was completed while the treatment process remained live, allowing the client to achieve 100% uptime. Aquam Technologies quickly identified the cause as tuberculation not valve failure.



Our technology enables your organisation to be more proactive with network maintenance, preventing expensive leaks and bursts. Our diagnostic technology is incredibly versatile and can be used on a wide range of pipe infrastructure.

AQUAM TECHNOLOGIES

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