JW Fishers has developed a now patented PIC-1 Pipe Inspection Camera. This autonomous underwater camera (AUV) is capable of inspecting pipelines of almost any length. The original system completed many long video inspections, including a five-mile pipeline in Cleveland (OH, USA).

Completely self-contained and without umbilical cable, the system’s waterproof housing holds a high resolution digital video camera, a recorder, lighting, batteries and a computer system.

The PIC-1 uses the natural flow of water through the pipe to provide its propulsion, eliminating the need to shut down the flow. With a water flow rate of 2 feet per second, a 1-mile pipeline can be inspected in less than one hour. The streamlined design of the housing and a unique ballast system keep the AUV travelling down the centre-line of the pipe while the computer controls on/off times of the camera and lights.

The computer’s delayed start feature allows a pipe of almost any length to be videotaped by performing multiple trips. The system can traverse pipes with 90-degree turns, and up or down vertical shafts. As it travels through the pipe, perfectly aligned with the water flow, the PIC-1 videotapes a clear, well-illuminated picture of the pipe walls, ceiling or floor. The up, down, or straight-ahead viewing angle is operator-adjustable. The videotape can be viewed on any TV and still pictures may be produced on a PC for printing or e-mailing.

https://www.hydro-international.com/content/article/new-pipe-inspection-camera