

# CASE STUDY

## CLEANFLOW SYSTEMS PROFILER™ – PRECISION PIPELINE CLEARLINE MEASUREMENT TOOL

### Background

The ClearLine Profiler™ has been developed by CleanFlow Systems for the internal inspection of pipelines. The product comprises a 'SnapOn' laser head and ClearLine software. The laser head has been designed to attach to specific models of CCTV camera/tractor unit and project a ring of laser light on the internal pipe surface. The position and shape of the ring of laser light is subsequently recorded during the survey. After calibration and application of an image distortion correction, the Profiler software using 'Machine Vision' technology is used to analyse the recorded images and infer details of the pipe dimension. The pipe details can subsequently be viewed and interrogated with several automated reports and graphical tools.

### Scope of assessment

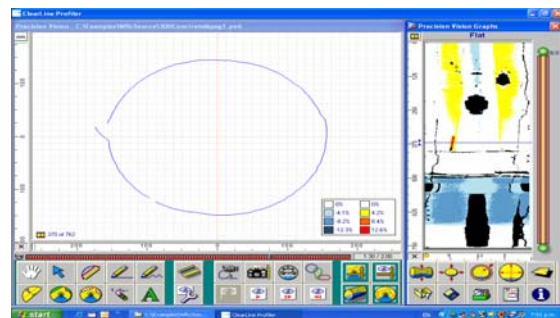
To assess the performance of the Profiler product in terms of the minimum requirements of the UK water industry and the specific claims of the manufacturer where these are exceeded.



SnapOn Profiler head for a Pearpoint 494 camera/tractor unit

### Programme

1. Audit of documentation to assess the manufacturer's Method Statements and Quality Systems;
2. Type testing to assess the performance of the product under controlled conditions in terms of accuracy, repeatability and automated reporting calculation methods;
3. Field Testing to assess the practicality of the product in field conditions and the manufacturer's Field/Operation manuals.



An Image from the ClearLine Profiler Software

### Results

The assessment procedure found that the ClearLine Profiler™ met and in most cases exceeded the requirements of Assessment Schedule PT/235/0904.

A WRc Approved certificate was awarded to CLEANFLOW SYSTEMS for the ClearLine Profiler™ in December 2004.

Details and Assessment Schedule PT/235/0904 can be viewed on [www.wrcplc.co.uk](http://www.wrcplc.co.uk)

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