

Laser Survey

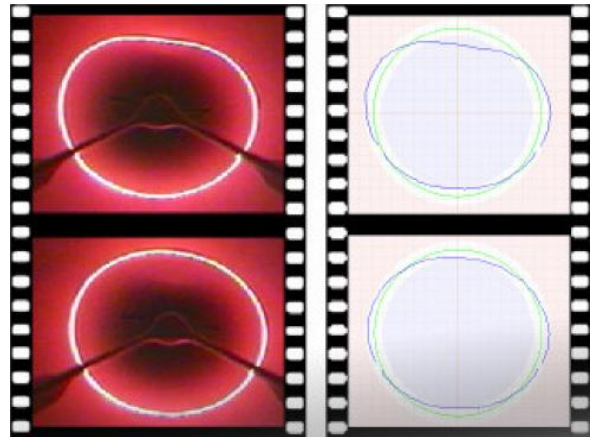
What is Laser Survey?

Laser survey is a necessary tool for determining the accurate profile of a pipe. A laser profiler is a slim probe that can be mounted on the front of a CCTV camera inspection unit.

How does it work?

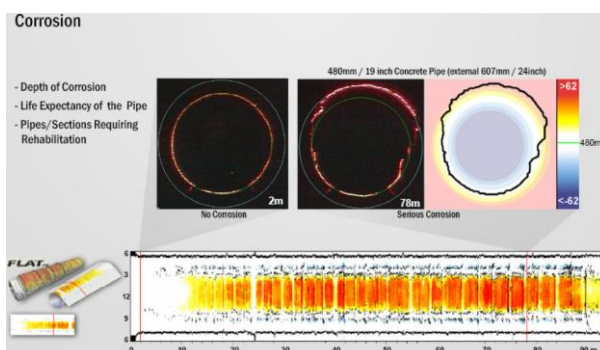
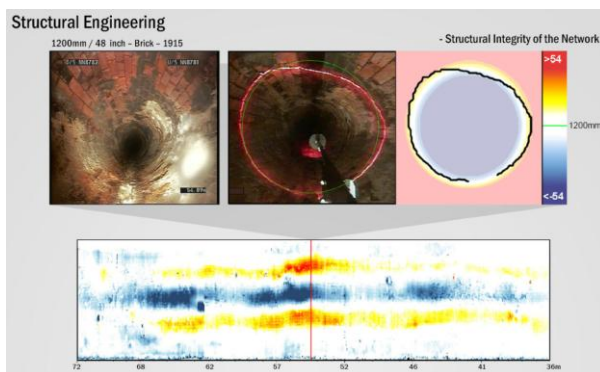
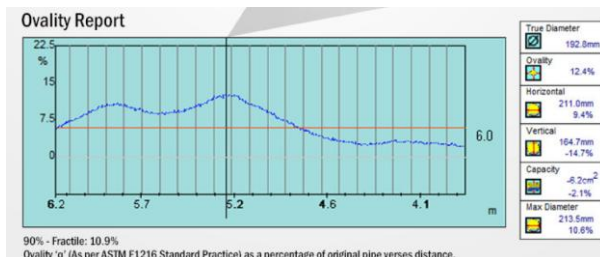
The laser projects a ring of light onto the interior of a pipe wall as the camera moves through the pipe. Smart Precision Vision software processes the information it receives from analysing the ring to build the pipe's profile.

Laser Survey provides users with the accurate pipe ovality, capacity, diameter, and alignment measurements.



Why Laser Survey?

While a television image helps to estimate the dimensions of a pipe, a laser profiler provides hard data and dead-accurate readings within a fraction of a percentage point. And while the position of a CCTV unit is estimated by the length of cable fed into the pipe, the laser profiler can determine its own location within inches.



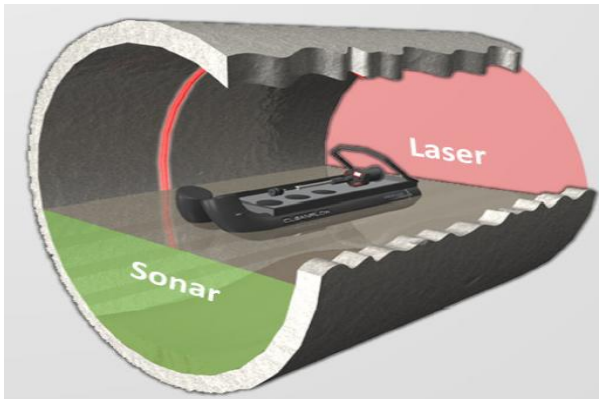
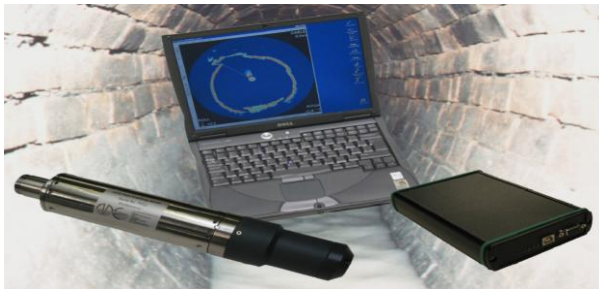
Laser Profiling Applications:

- Determination of the structural shape, cross sectional area
- Quantify holes, fractures, other defects and abnormalities
- Determination of erosion on pipe wall
- Estimation of debris quantity
- Calculation of pipe capacity before and/ or after cleaning
- Design information to improve selection of rehabilitation method
- Post rehabilitation verification of lining and subsequent capacity

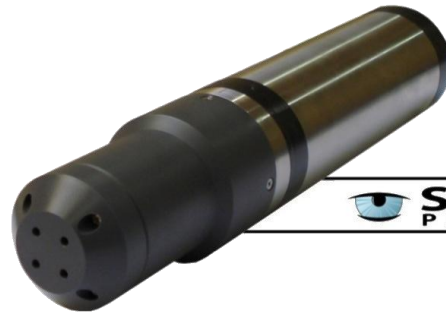
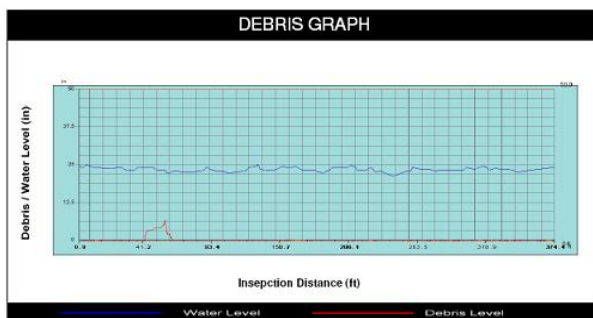
Sonar Survey

While CCTV is the standard acceptable method of visually inspecting pipelines above the waterline, it cannot provide visual information on internal pipe conditions below the water level.

A sonar inspection of a fully or partially charged line provides a two-dimensional profile of the interior pipe wall. Using the sonar software, a circle overlay is projected, sized, and moved anywhere within the image for checking erosion or remaining wall thickness. Accurate measurements can be made between any two points within the sonar image. Debris level, size of blockage, grease level, defects and other abnormalities can be quantified.



Sonar Water Level and Debris Report



SONAR PROFILER

Sonar Profiling Applications:

- Determine silt, grease levels and blockages
- Determine pipe defects (cracks, holes, and other abnormalities)
- Pre & Post inspection of rehabilitated or cleaned pipeline
- Determine corrosion and encrustation build-up
- Determine pipe deterioration



FLOAT CAM

In partially charged lines, the Sonar can be combined with our FLOAT CAM or LASER PROFILER to provide a simultaneous composite image of the pipe both above and below the waterline.

