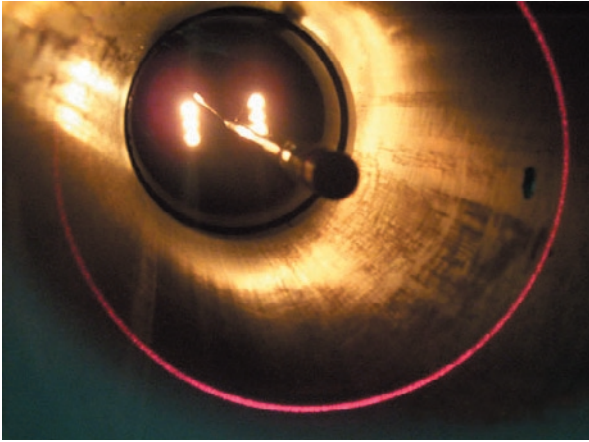


ClearLine Laser Profiler



FEATURES/BENEFITS

- Fast cross-sectional area calculations for determining flow reduction
- Deformation measured as an out-of-circle percentage
- Erosion loss of pipe wall can easily be ascertained
- Quantifies defects, holes or other abnormalities
- Simple and easy to use measuring software

If you are a municipality, consulting engineer or contractor the **ClearLine Profiler** is a necessary tool for the analysis of the true pipe condition prior to and after rehabilitation. When used as a video survey tool it can provide accuracy up to 1mm when measuring pipe size, deformation, erosion, encrustation, debris, grease, flows, lateral protrusion, surface damage and holes.

Our Precision Vision software uses the latest machine vision technology to automatically detect and report on many types of defects.

The ClearLine Profiler provides the user with the ability to accurately determine the amount of damage contained in a pipe asset. The laser profiler attachment shows the actual shape of the pipe while the software can predetermine the correct pipe shape and calculate the difference between the two.

The aim of projecting a bright line onto the internal pipe wall is to define a plane on the video image where measurements on the image can be translated into the real dimensions of objects observed through the camera.

Two fixed points with a known separation distance on the radial light plane are established with small marker pins that are illuminated by the laser light. These act as calibration points on the video image to identify the scale of the image where it is illuminated by the red laser light. The laser intensity is sufficient to make the generated red line on the pipe bright enough to see clearly on the video image.

Calibrating the video image allows measurement to be carried out after the video has been made and does not slow the rate at which the video can be recorded.

The ClearLine software measurement tools give the user the opportunity to accurately determine the amount of flow loss caused by a wide variety of pipe faults. Determining the necessity for pipe refurbishment is also achieved by analysing the data collected using the measuring tools. Obtaining the actual degradation of the pipe becomes a reality with the ClearLine Profiler and the Measurement Tools combined.