



## Guided Wave Ultrasonics – Efficient inspection of long and hidden pipes

### Presentation

Wave Maker G3 uses low frequency ultrasonic waves which are transmitted along the pipes. The equipment is designed for rapid screening of long pipes, and to detect external and internal corrosion, but also peripheral cracks.

The equipment consists of three main components: the transducer ring, Wave Maker G3 instrument and the computer.

The transducer rings use mechanical or pneumatic pressure (depending on the ring) to dry couple the transducers to the pipe being inspected.

The transducer sends waves tens of meters along the pipe, when they pass an area with reduced wall thickness, they reflect back as an echo with a magnitude representing the decrease itself. Therefore, long pipes hard to access are easily inspected, such as buried pipes under roads, insulated pipes, pipes in concrete foundations, pipes at points of support.

### Advantages

- ▶ 100% of the pipe material is covered by the inspection
- ▶ Efficient and rapid method
- ▶ Possible to inspect buried or insulated pipes, pipes through concrete foundations, pipes at points of support, etc.
- ▶ The method detect wall thinning starting from in and the outside of the pipe
- ▶ The method can be applied during operation, even if the pipe media hold relatively high temperature
- ▶ No external power required
- ▶ High accuracy
- ▶ Sophisticated software for performance analysis and historical comparisons



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