

WAVEMAKER Rapid Pipe Screening System

Long range NDT pipe screening technique



Situations where the system is commonly used include:

- ⊕ Sleeved road crossings
- ⊕ Wall penetrations
- ⊕ Straight runs of pipe where 100% of the volume must be inspected
- ⊕ Inspecting under many types of supports
- ⊕ Elevated pipework
- ⊕ Inspecting for corrosion under insulation (with minimal insulation removal)
- ⊕ Cryogenic pipework
- ⊕ Sphere legs
- ⊕ Jetty lines

WAVEMAKER™ IS A PROVEN, STATE-OF-THE-ART PIPE SCREENING SYSTEM, WHICH IS USED TO RAPIDLY LOCATE INTERNAL AND EXTERNAL CORROSION AND OTHER DEFECTS.

The **WAVEMAKER™** pipe screening system allows long lengths of pipes in difficult to access areas to be quickly screened for corrosion or other defects.

Operating on pipes of 2 in or greater diameter, the **WAVEMAKER™** system employs lightweight transducer rings to send guided ultrasonic waves up to 50 m in each direction along the pipe.

Sophisticated software routines help categorise reflections from changes in the cross section of the pipe. **WAVEMAKER™** therefore gives 100% volumetric screening of up to 100 m of pipe from the transducer ring location.

The **WAVEMAKER™** system can use both torsional and longitudinal waves. This means that the inspection can be performed on both gas and liquid filled pipes without taking them out of service and with minimal surface preparation. New application areas are continually being developed.

1 A ring of transducers is placed around the pipe...

2 ...guided waves are sent in each direction...

3 ...reflections are analysed simultaneously for each of the two directions.

4 The unique **WAVEMAKER™** WavePro software generates a concise report indicating the general condition of the pipe and the positions of welds, defects and other features.

Applications



- | | |
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| 1 testing overhead line from ground level | 5 rapid screening of multiple lines |
| 2 testing for CUI | 6 16 in test – middle east |
| 3 WAVEMAKER™ can test from close to pipe features | 7 testing buried line |
| 4 testing road crossing | 8 WAVEMAKER™ uses robust transducers |
| | 9 in-plant operation |

Applus⁺ RTD
 NDT & Inspection

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