GUIDED WAVE INSPECTION - LONG RANGE ULTRASONIC TESTING

THE OBJECTIVE
Are you sure about the condition of your piping? What about the buried sections or the insulated parts? It is not easy to assess their condition in an effective way. The piping may be located many meters above the ground where they cross roadways or other pipe racks and what do you know after some local spot measurements? As process piping is a vital element of your facilities good understanding of their reliability is preventing unexpected shutdowns or delays during maintenance periods.

THE SOLUTION
Guided Wave technology, also known as Long Range Ultrasonic Testing, is a relatively new inspection technology with very big advantages above any other spot measurement. The Guided Wave technology screens 100% of the volume of the piping inspected for metal loss features such as corrosion and erosion. The piping can be in operation, insulated and even be buried Guided Wave technology will supply more data than we ever had to found decisions on further inspection and even replacement.

METAL LOSS DETECTION IN PIPELINE AND PROCESS PIPING
The Guided Wave technology uses a low frequency guided ultrasound waves traveling along the pipe, providing 100% coverage of the pipe length. In normal application, tens of meters of piping may be inspected from a single location. Effected areas are precisely located in terms of distance from the transducer ring and highlighted for further local examination by visual or other conventional NDT methods. This non-destructive screening technique can be used without extensive scaffolding and minimizes the requirement of removing insulation along the piping.

WHY SGS?
SGS Industrial Services has the knowledge, expertise and experience to perform conventional and advanced NDT inspections around the world using a unique international network. Our service offer varies from Guided Wave and the conventional NDT techniques to Risk Based Inspection, Time of Flight Diffraction, Corroscan, Positive Material Identification, Magnetic Flux Leakage, ACFM, Leak Testing, Thermography, Electromagnetic Testing, RFEC, IRIS, Digital Radiography, Radiation detection RVI and Endoscopy inspections.

OUR SERVICES FOR GUIDED WAVE TECHNOLOGY
Guided Wave tools are available in fixed ring and modular ring format. The fixed ring designs are suitable for pipe diameters up to 8-inches. For larger diameters, a modular ring up to 42-inches has been adopted. With Guided Wave you lift your inspection plan to a much more effective level then ever before. Guided Wave technology has the following fields of application:
• Diameters 2” to 42”
• Temperatures from -40°C to 120°C
• Road crossings and buried pipelines
• Testing of elevated or complex piping from convenient locations
• Detection of corrosion/erosion under insulation

• Offshore process piping/riser inspection
• Refinery piping
• Chemical plant
• Power generation plant
We are pleased to inform you anywhere around the world about how SGS can help you in improving the reliability of your processes and assets.

NDT TRAINING
SGS established an NDT Training and Examination Center in Shanghai China, with a particular focus on the extensive training syllabus for most of the standard NDT methods.

CONTACT
SGS Australia Pty. Ltd.
10 Reid Road, Perth International Airport
WA 6105 Newburn Australia
T: +61 (08) 9373 3500
F: +61 (08) 9373 3556
E: au.sgs@sgs.com
W: www.au.sgs.com

WHEN YOU NEED TO BE SURE