Inspectech® Ultrasonic test systems have been at work in tube mills around the globe for over 30 years. Ultrasonic testing of welded tube is a universally recognized method, offering equal sensitivity to both inside and outside defects regardless of material thickness. Codes of practice such as ISO, API and CSA all take ultrasonic testing of welds as an acceptable, or even mandatory, method.

Depending upon requirement, Inspectech can supply systems with 2, 4, 6 or more transducers to test various material thickness ranges and also to test HAZ (heat affected zones) and monitor material gauge.

- Robust mechanical construction.
- Advanced transducer technology.
- Multi-probe test heads are easy to set-up and calibrate.
- Discrete Array technology optional.
- Ideal for inspecting to API-5L, API-5CT and ISO standards.
- Complete Data Logging of all on-line Test Parameters - easily stored, retrieved, hard-copied or downloaded.
Over the years the welded tube industry has come to rely on InspecTech® ultrasonic testing systems to verify weld quality and integrity both on the tube mill and on the finishing floor.

With many years experience in NDT systems, InspecTech exercises continuous improvement policies, to supply the welded tube industry with systems of the highest reliability and sophistication, coupled with ease of understanding and operation.

For weld-line testing of carbon steel tubing 50mm (2.0”) diameter and up (and more recently down to much smaller diameters), the method of choice is ultrasonic testing. Ultrasonic testing is very sensitive to defects throughout the weld section and, at the same time, the test is relatively insensitive to process variations.

InspectTech® has developed and refined a probe system that utilizes immersion transducers in a special transducer holder. This system creates shear waves at the pipe wall interface.

With multi channel processing technology, InspecTech's multi-transducer probe assemblies are easy to set up and calibrate. They also exhibit a wide range of capabilities in terms of handling weld line shift and skew.

• InspecTech transducers have narrow beams along the weld line. (They respond well to short defects such as penetrators).
• InspecTech transducers have wide beams through the weld. (They hold sensitivity even if the weld line wanders).
• InspecTech transducers and wear shoes rarely need replacement. (The wear shoes last almost indefinitely).

Operational Features:
• Multi-channel systems, up to 64 channels.
• Fast, flexible TDG (Time Dependant Gain).
• Multiple alarm gates with dual thresholds.
• Rectified RF display with linear reject.
• Pulse Repetition Rate up to 20 kHz.
• Frequency range 0.5 to 30 Mhz.
• Up to 90 dB of gain adjustable in 1 dB steps.
• “Individual transducer” or “Through weld” coupling checks.
• Analog outputs.
• Audio & Visual Alarms, Defect marking.
• Time or distance based Strip Charts for all individual Channels.