Kanadevia
Technology for people and planet

Playing an active role in maintenance and repair work for heat exchangers for chemical plants

Phased Array Ultrasonic Testing System for the Tube to Tubesheet Weld Joints of Heat Exchangers

- Up to a maximum of 600 welds can be tested per day (when using 3 units)
- Flaws and stress corrosion cracking will be detected
- Time for determination has been reduced substantially with AI-enhanced analysis software

Here's the Video

Features of the system

Using a phased array probe, ultrasonic waves are transmitted in the vertical and slant directions simultaneously, thereby demonstrating excellent flaw detection performance. The AI (Artificial Intelligence) that has learnt actual weld flaws with high precision, and the result of inspection will be reported on the next day at the earliest. Highly reliable results of determination will be provided by specifying optimum methods of inspection and determination criteria that fit the customer's needs.

Main functions and effects

Automatic flaw detection	AI-enhanced data analysis	Maintenance and repair cost reduction
		DOWN

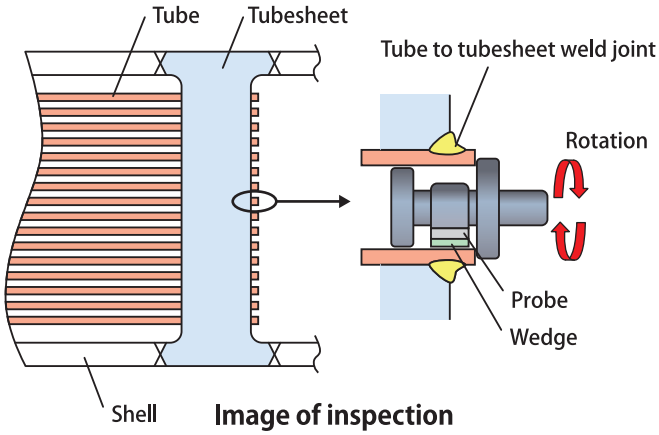
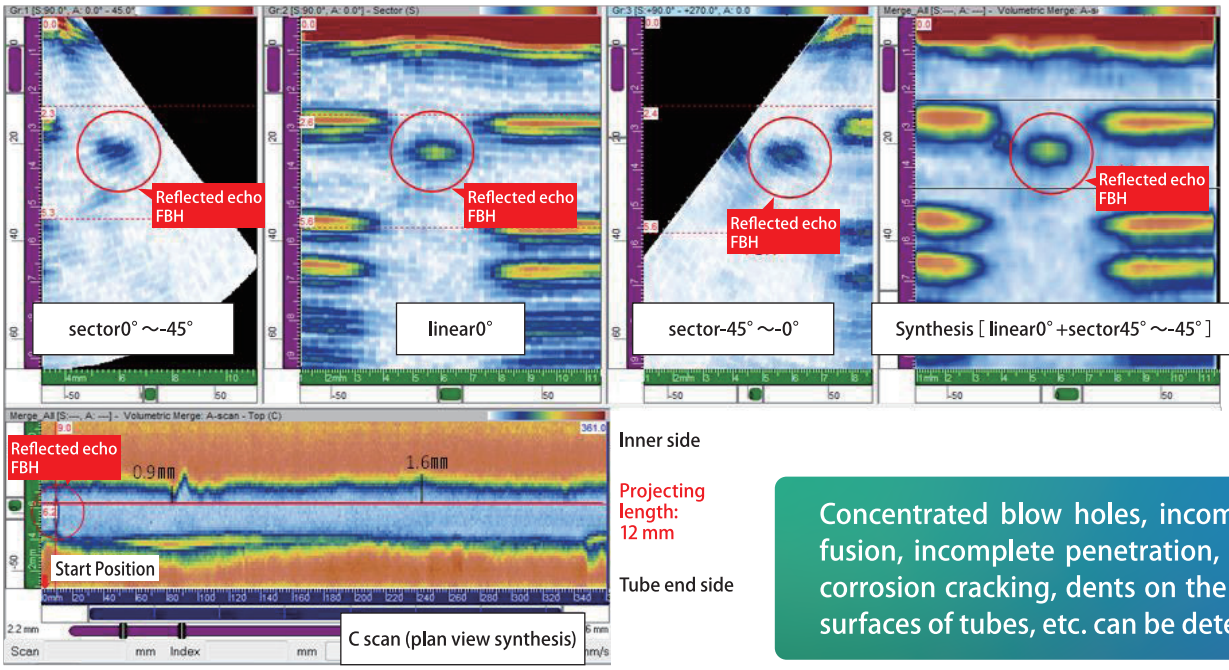


Image of inspection

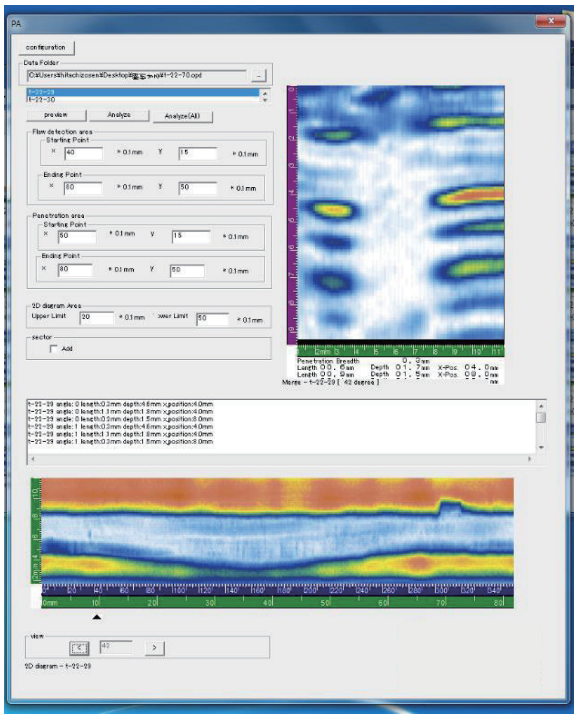
We can give you an estimate for demonstrating an inspection.
Contact us for details!

Result of detection of φ1.0 mm artificial flaws



Concentrated blow holes, incomplete fusion, incomplete penetration, stress corrosion cracking, dents on the inner surfaces of tubes, etc. can be detected!

Technology to analyze flaw detection data



- Features and effects of the analysis technology

- Automatic detection of flaws with AI-enhanced software
- Automatic creation of flaw maps
- Report of the result of flaw detection on the next day after inspection
- Reduction of up to a maximum of 99% in analysis time (as compared with conventional technologies)

- Examples of application of inspection systems

Inspection during manufacturing (available for inspection on a business trip)
Inspection for maintenance and repair during shutdown maintenance (SDM)
Inspection of areas that have been thinned or damaged by corrosion, etc.

Will help improve reliability and extend the useful life of the tube to tubesheet weld joints of heat exchangers!

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