



Seven-axis ultrasonic immersion tank

Custom-made Metalscan tank with MultiX++ PAUT system

Immersion system designed for scanning complex-shaped components such as mooring chains, nozzles and composite panels using phased array ultrasonic techniques.

Features and benefits

- Full inspection of large components
- Geometry of components can be used to create scan plan
- Development of advanced phased array ultrasonic testing techniques and procedures for inspection of critical components
- Enables inspection of complex geometries for all industry sectors
- Advanced simulation and analysis software capable of processing large quantity of data
- Versatile system designed to be reconfigured for multiple applications

Some applications

- Development of phased array ultrasonic techniques for in-situ inspection of offshore mooring chains for deployment by robotic underwater systems
- Inspection of complex geometries for multiple sectors to reduce in-situ repair costs over product lifetimes
- Development of liner and weld overlay cladding techniques for subsea risers
- Overhead crane access enables batch inspection of high-value components, such as composite panels following curing
- Inspection of reactor and pressure vessel nozzles for nuclear power plants

Technical specification

- Three linear Cartesian axes
- Four rotary axes
- 1500kg weight capacity
- 5m x 4m tank area
- 1m x 1m x 1m working volume
- Tecnomat Gentry complex trajectory generation
- M2M MultiX++ 128-channel phased array instrument
- CEA LIST CIVA simulation, design and analysis software

