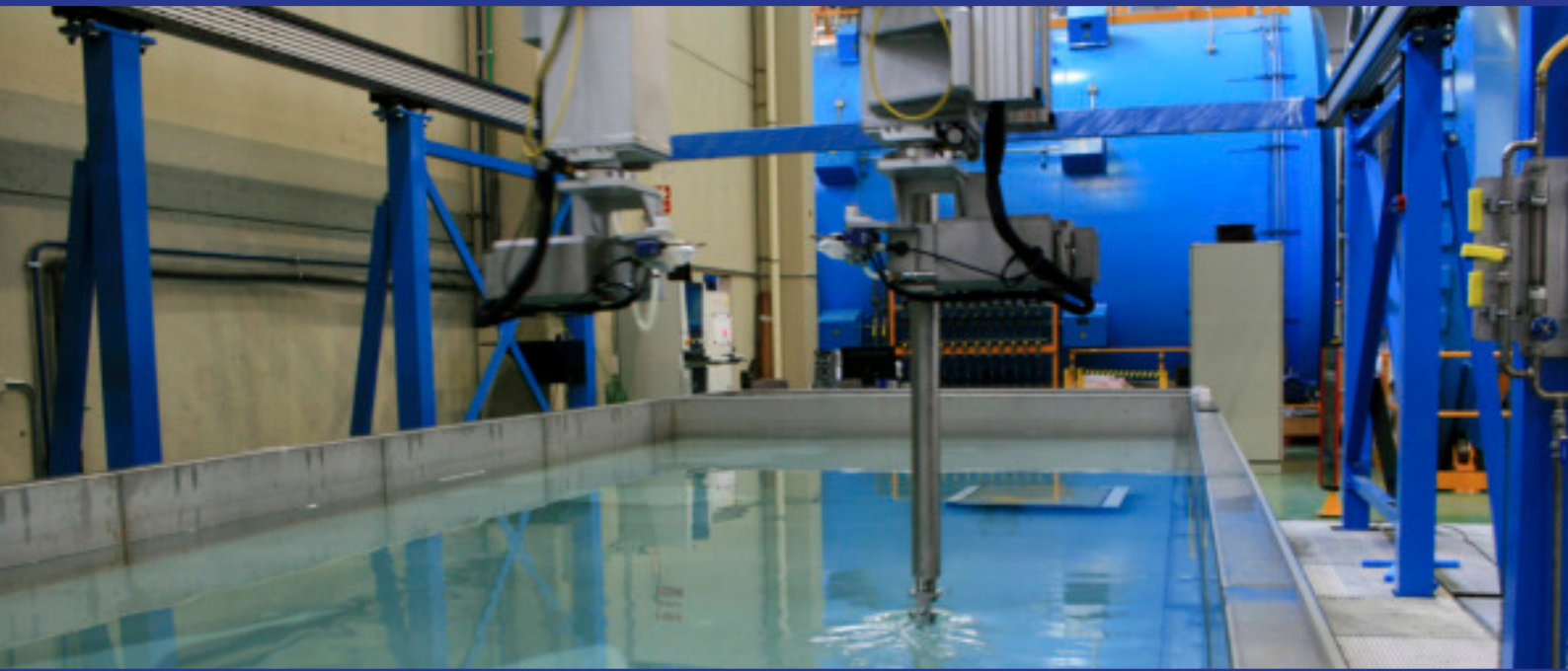


IMMERSION TANKS

UT IMMERSION FLAW DETECTION



INTRODUCTION

The advantage of the ultrasonic testing systems Tecnitest NDT offers is the flexibility and individual nature of bespoke design, providing customers with an exact match for their requirements and creating a tailor made automated solution to inspection needs.

Some of the users of manual methods of ultrasonic testing may find they are less reliable than automatic inspection. With manual inspections; records are not automatically generated and stored, affecting quality control, and high operator skill levels are required with continuous monitoring that can lead to mistakes in the inspection.

Tecnitest systems have the capability to incorporate; Through-Transmission Squirter Systems, Linear Phased Array Transducers with the associated Phased Array Equipment and Contour Following systems. Furthermore we are able incorporate Air Scan Through-Transmission systems.

INDUSTRY LEADERS

The immersion tanks are built using a robust extruded aluminium frame with high movement precision and accuracy at all the available speeds.

The UT inspection can be pulse echo, through transmission or double through transmission

The basic mechanical concept for the tanks can be applied from lengths ranging from 1m to 15m and widths ranging from 0.3m to 3m. There is also the potential for easy upgrading at any time.

The standard system has three motor controlled linear axis, X,Y and Z, however other manual or motor controlled, angular or external axis can be installed.

The overall design of the immersion tanks guarantees compliance with applicable EU standards and gives the best system performance whilst avoiding induced electrical noise.

Furthermore, designs to specific customer requirements can be incorporated.

BOARD TECHNOLOGY

The systems that we manufacture are generally the same design, but each customer has their own specific needs. As such we try to accommodate our customers and therefore, we incorporate the best ultrasonic equipment to suit the customers' needs. Doing this we ensure that the customer receives the latest technology available.

Sonatest DFDs can also be used with this equipment. The customer may also specify a DFD or indeed any Phased Array Equipment that he wishes to use providing that there are digital outputs to enable us to generate a 'C' scan and the relevant data to be able to produce 'A' and 'B' scans.

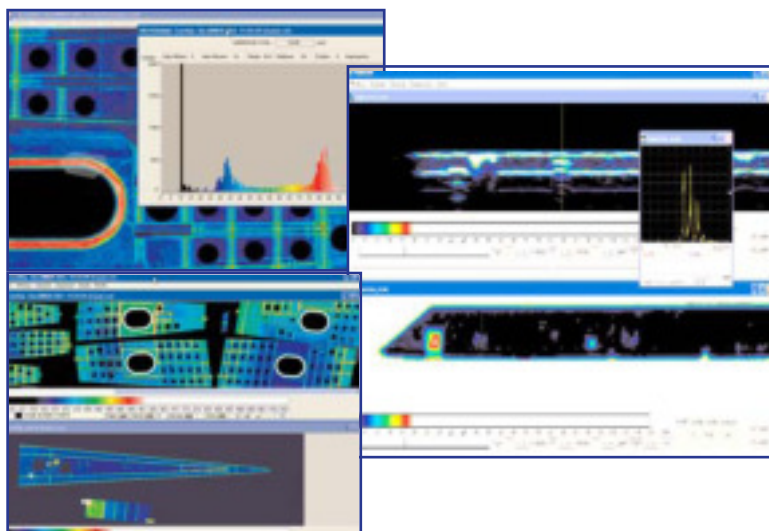
'VISUALSCAN' SOFTWARE

'Visualscan' from Tecnitest is a complete, dedicated software package from MS Windows for ultrasonic inspection systems.

The software comprises of user-friendly interface modules for motion programming and control, data acquisition in all operation modes, signal presentation in single or multiple window frames and evaluation.

SYSTEM ELECTRONICS

The system's electronics include a 19" stand rack or desktop box including a PC, a high-



speed A/D conversion card and a motor driver board for up to 4,6 or 8 axis. The system also includes, as standard, integrated emergency stops along with other system safety elements.

DATA RECORDING & ANALYSIS

A, B and C-scan presentations are available with data recording and reporting functions. A complete set of evaluation tools are included: zoom, histogram; area measurements etc. Systems performance is optimised, in terms of resolution and scanning speed, due to the customised data acquisition algorithms.

SPECIFICATION

MECHANICS

- From 2 up to 8 motorized axis (standard), expandable.
- Axis with traction through pinion, rack or belt.
- High accuracy movement to $\pm 0.01\text{mm}$ with a minimum index of 0.1mm .
- Optional tools for inspections.

ELECTRONICS

- Control of movement made by commercial equipment to facilitate maintenance.
- Index adjustable from 0.1mm (depending on model) Programmable speed to 500 mm / s .
- Possibility of inspection in various planes.

SOFTWARE

- Software of system based on Windows.
- Software up-datable by via Internet.
- Friendly interface easy to use.
- Fast programmability for self-learning.
- A-SCAN in real time on screen.
- Programmable Speed and Index
- Creation of bitmap files.
- Complete file of inspection data.
- Sending of results through Internet.
- Evaluation in real time by local network.

For full Specification and details please visit www.tecnitestNDT.com