



NEW PRODUCT TD Handy-Scan

- ✓ Lightweight
- ✓ 64/32 Phased Array
- ✓ 8 Channels for Pulse/Echo or ToFD
- ✓ Encoder Input
- ✓ Removable, Rechargeable Battery
- ✓ 2 x USB ports
- ✓ Highly Portable
- ✓ Exceptional Performance
- ✓ Fast Inspection Speed
- ✓ Extensive Analysis Tools
- ✓ Easy to Use Menus
- ✓ Powerful Reporting Functions
- ✓ Removable Battery
- ✓ Ethernet

£19,999

Software Package Includes :

*Phased Array *Corrosion Mapping/PE *TD Super - View

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AGR TD's Applications Advisor Mark Nel recounts his time spent in Montana ,USA, working alongside our US Distributor Mechanical Integrity Inc

In early January before the snowfall, the melancholy khaki coloured plains surrounding Billings, Montana in the United States of America are swept by bitterly cold winds that dry the skin and make you long for the warmer days of summer or to be in more temperate climates. Surrounded on three sides by mountain ranges and split by the dark freezing waters of the Yellowstone River snaking from west to east, Custer Country as it is locally known, is transformed into an icy wonderland overnight when the snow storms finally arrive from north of the border

After this years heavy snow and exceptionally cold snap (-23°C) throughout the northern and mid-western regions, this idyllic scene was the backdrop for a busy month for our applications advisor, Mark Nel. Mark spent most of January at a local refinery with our North American associate and distributor, Houston based Mechanical Integrity Inc., observing and working on several automated and manual ultrasonic projects. The work was all in-service on live plant and ranged from automated high temperature corrosion mapping to ToFD on process piping to Phased Array on stainless steel header boxes at elevated temperature.



A TD Focus-Scan coupled to Mechanical Integrity's automated Twister Scanner with two conventional high temperature probes were employed to gather corrosion data from a 15m section of piping with a surface temperature of approximately 250°C. The technicians working at the hot surface needed to be extra vigilant of safety when handling the scanner and working with the hot recycled couplant. The Focus-Scan was configured to show the data from both probes as a C-scan with end views and colour slicing set to represent depth. The data was successfully collected and analysed in 4 days.



The ToFD survey of a piping system ranged from 6mm to 12mm wall thickness and was carried out using the miniature 8-channel TD Pocket-Scan instrument connected to a notebook computer. The data was collected using a MII* manual ToFD scanner and encoder.

* Mechanical Integrity Inc

AGR TD Newsletter



The stainless steel header box welds, operating at approximately 120°C were manually scanned in a raster pattern using our TD Focus-Scan in Phased Array mode configured for sectorial scanning with a 16 element probe. The purpose of the examination was to detect cracks and corrosion in the weld roots. This simple yet highly effective technique has been used to great effect in numerous examinations worldwide as the demand for quick defect detection & identification without the use of scanners has increased. Using this technique the diffracted crack tip signal is often clearly identifiable in the sector image.



All the work was completed in minimum time and disruption with the analysis and report being completed and delivered to the customers' satisfaction prior to vacating the site.

Once again The TD range of advanced ultrasonic equipment has proven effective and reliable in extreme conditions although we understand Mr Nel, originally a native of sunny South Africa is still suffering from thermal shock!

Tip of the month

When using the A-scan calibration window, to view a portion of the A-scan that is outside the viewable area: with the mouse cursor located in the window simply Left Click, hold and drag the A-scan across the window until the area of interest is visible
(Version 16.00 onward)



TD Phased Array Probes & Spares

Technology Design offers a range of probes and spares that are recommended for use with our products:

- *Phased Array Probes
- *Encoders
- *Phased Array Connector Adapter
- *Scanners
- *ToF Probes
- *Cables
- *Conventional Probes



Our probes and spares are manufactured by various specialists who are all well established and known for their high quality products. Contact us for further details at sales@technologydesign.com

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