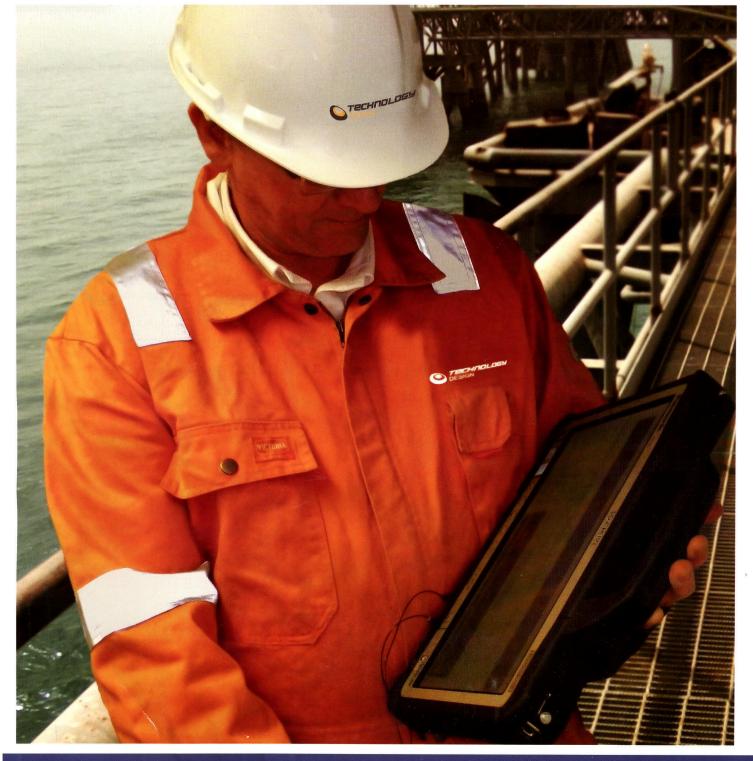
Volume 55 Number 8 ПИ 1-67 Non-Destructive Testing and Condition Monitoring August 2013

















Published by: The British Institute of Non-Destructive Testing Newton Building, St George's Avenue Northampton NN2 6JB UK Tel: +44 (0)1604 89 3811; Fax: +44 (0)1604 89 3861: E-mail: info@bindt.org; Website: www.bindt.org

Volume 55	· Niumbar O
volume 5:	

August 2013

Comment, by Professor L Gelman......410

NEWSDESK: Acoustic emission technology prevents hundreds of hours of downtime for century-old flour specialist; The hidden world of ultrasound;

COVER



Wall thickness gauging may seem mundane but is undeniably an essential task in the condition monitoring regime of industrial installations. Measuring a set of discreet points regularly has inherent shortcomings: limited coverage and positional inaccuracy.

This month's front cover depicts a technician using the TD-CM IV® to collect point wall thickness data assessed from a wider area than the traditional gauge point. The CM IV was born from the desire of several oil majors to improve the effectiveness of inspection data without resorting to corrosion mapping and simultaneously streamline workflow cycles seamlessly, with minimal human intervention.

Historic thickness data, location details, isometric drawings and sometimes 3D simulations are pre-loaded onto the CM IV from the plant's ERM database. Thickness data is collected using a standard ultrasonic probe scanned over a distance. The system automatically registers the thinnest point of many thickness readings along the scan line and appends it to the existing data. When all gauge areas are recorded, the data is re-synchronised with the database. The CM IV addresses the end-user brief and additionally provides multifunctional capability if further advanced ultrasonic investigation is required.

> **Technology Design Ltd** www.technologydesign.com

SPECIAL FEATURE: CONDITION MONITORING

Gear tooth crack detection using dynamic response analysis, Experimental investigation on the fault diagnosis of permanent magnet DC electromotors, Novel decision-making technique for damage diagnosis, Identification of wind turbine natural frequencies using narrow-band decomposition methods, by O Cardona-Morales, E F Sierra-Alonso and G Castellanos-Domínguez433 Diagnosis of bearings by novel non-linear non-stationary higher order spectra, by L Gelman, B Murray, T H Patel and A Thomson438 Using artificial neural networks and strain gauges for the determination of static loads on a thin square fully-constrained composite marine panel subjected to a large central displacement, by MR Ramazani, S Noroozi, P Sewell, R Khandan and B Cripps.......442

REGULAR FEATURES

International Diary	449
NDT Info	453
Product Showcase	461
Associate Members/Index to Advertisers	

Федеральное государственное бюджетное учреждение науки Центральная научная библиотека Уральского отделения Российской академии наук (ЦНБ УрО РАН)

409