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Wish you and your family
a very Happy Deepawali
and
a prosperous New Year!



In-Line Profile Measurement System



NDTS is pleased to announce its co-operation with M/s Starrett-Bytewise Measurement Systems, USA for non-contact in-line measurement solutions specialized for profile manufacturing industries. Starrett-Bytewise measurement products are utilized both on and off the production line and acquire profile geometry data in order to verify a product's size and shape.

Profile 360

Profile360 is an in-line, real-time measurement system for continuously monitoring key profile dimensions in complex shapes such as rubber, plastic, ceramic, and wood-plastic composite extrusions, roll-formed metal profiles, & profiled wire. Profile 360 employs CrossCheck laser line sensors manufactured by Bytewise to acquire thousands of data points around the profile and match them a CAD template where key measurement parameters such as width, thickness, radius, and angle are extracted. Measurement parameters are compared to allowable control limits and displayed on the operator's terminal with a green/yellow/red (pass/caution/fail) status indicator. Profile 360 runs at rates up



to 14 profiles per second. Profile 360 is available in sizes of 10mm, 25mm, 50mm, 75mm, 100mm, 150mm, all with circular field-of-view. Custom systems can be built up to 500mm.

Profile 360 for Pipe Industry

Profile 360 is an in-line, real-time measurement system for continuously monitoring OD, OOR, and circumference for round pipe & profiles. Profile360 can be installed in two locations, in-line before cutting, and in final inspection.

When installed in final inspection the system measures the OD, OOR, and circumference of the pipe ends and body

to assure compliance with API and other standards. This includes a pipe length measurement system that measures the pipe length, & also associates each measurement to its position along the length of the pipe.

When installed prior to cutting, the system measures OD, OOR, and circumference continuously. These measurements can be used to fine-tune the tooling during a set up change, and then alarm whenever the values approach the allowable limits so that an operator can intervene before a quality fault occurs.

Profile 360 is available in diameters up to 1600mm.



Sonatest's new flaw detector series offering choice, customisation & performance

Sonatest Ltd. announced the release of the latest range of the Sitiescan & Masterscan series of flaw detectors. Retaining the best features of the established series, the new range has evolved in response to the requirements of users and their applications, combining simplicity of use with improved capability and field proven reliability.

The new range comprises of just four models the Sitiescan 500S & D-50 offering entry level broadband UT performance & the Masterscan 700S & the D-70 providing the highest specification to the market including 8 filter settings from 100kHz to 22MHz, with 100-450V square wave transmitter and 20 metre range.

Sitiescan 500S and D-50: Sonatest Sitiescan Flaw Detectors have always meant highly reliable, technician focused flaw detection equipment and the new range continues this tradition. Individual models in the range now include the benchtop Sitiescan 500S & the portable Sitiescan D-50. Typical applications are weld inspection, corrosion testing, small castings/ forgings, lamination checking & general UT inspection.

Masterscan700S & D-70: The Masterscan name has always assured the technician of robust instrument construction combined with exceptional performance. High levels of near surface resolution, penetrating power (450V pulser - square & spike) and excellent signal to noise ratio are key functions in the Masterscan range. Typical applications are Weld Fabrication,

Corrosion Detection, Composite Inspection, Bond Testing, Forgings & Castings, Power Generation (including EMATS) and general UT inspection.

Features in Detail:

DAC functionality, available on all models, now enables up to 3 custom DAC curves on-screen, meeting all known worldwide standards. Adjustable DAC curves increase the available dynamic range and using the same reference indications DAC curves can now be converted to TCG & back again with ease. The unique Split DAC option gives up to 3 zones of additional gain to permit single-pass scanning of lossy materials & thicker sections.

Angle Measurement Mode is a new standard feature, which simplifies beam plotting. Using the built in peak detection mode the beam profile for any transducer can be confirmed in moments.

The introduction of a Corrosion Software option improves reliability over spot-thickness measurements and includes a B-Scan Display function, which shows a cross section of the material being tested, based on its wall thickness.

A-scan data can be stored with the thickness readings & transferred to a PC using the new data management software UT-lity Pro. UT-lityPro also provides the end user with the ability to create & manage inspection plans, location notes, historical data & other asset management information.

Software options across the range include TCG, DGS (AVG), AWS, API, Interface Trigger, Backwall Echo Attenuation, Split DAC, Corrosion Software and Dryscan modules.



Ectane2A - Proven Success; Made Better

Ectane has become the most popular multi-technology test instrument in the market with several hundred units in the field. It's time for the next generation - Ectane 2.

now 10 MHz, which offers more flexibility and better performance in a variety of tubing and surface applications.

Current Source for Saturation Probes— Available on the 41-pin connector, this built-in source can be programmed to control the current output that feeds into partial saturation ECT probes & magnetic bias ECT probes.

Motor Drive for RPC Probes-The Ectane 2 is capable of driving motorized rotating pan cake coil (RPC) probes, thanks to its powerful built-in motor drive. This is useful in applications where RPC probes are used to find longitudinal & circumferential cracks.

Built-in technological versatility

Non-destructive testing of tubing and surfaces relies on a number of techniques, which often depend on the application and the materials involved. Use the Ectane 2 built-in capabilities with almost any combination of the following testing technologies, according to your needs:

- Eddy current testing (ECT)
- Eddy current array (ECA)
- Remote-field testing (RFT)
- Near-field testing (NFT)
- Magnetic flux leakage (MFL)
- Internal rotating inspection system (IRIS) ultrasonic testing

Features

New CPU Board — The Ectane 2's new board has a faster CPU, which delivers more punch for ultrafast probe nulling and real-time processing. This greatly contributes to making quality inspections with the Ectane 2 easier than ever before with any technology combination, whether it is ECT, ECA, RFT, NFT, MFL, or IRIS.

Improved Maximum Frequency —The maximum ECT frequency is



Balteau NDT

NDTS is pleased to announce its co-operation with M/s. Balteau NDT S.A. for industrial X-Ray solutions. Balteau is the world first supplier of portable X-Ray generators. More than 14000 units are used worldwide.

With its range of high power or lightweight constant potential X-Ray generators, Balteau became a specialist in manual and automatic systems for radiography & radio-scopy (RTR). Many different industrial inspection systems have been installed & are now used in a variety of fields: automobile, aeronautic, casting work, cables, gas bottles & pipes manufacturing, shell dismantling...



A complete range of products fitting your specific requirements

- BALTOSPOT: Portable X-ray Generators & Generators for Crawlers
- BALTOGRAPH: Stationary & Mobile X-ray Generators with tubeheads
- BALTOOMATIC: Standard & Customized X-ray Systems
- BALTOSCOPE: Digital X-ray Solution
- ACCESSORIES for Balteau Products, Industrial Radiography and Safety

One Crawler Three possibilities : The F-200 - a top-class crawler

Specifically designed for CCTV vehicles, the crawler F-200 surprises with many features, which are not optional, but already integrated! Pan and tilt camera, locating transmitter, deviation measurement and single-wheel drive are only a few of the extras that the F-200 is standardly equipped with.

The crawler is supplied with various sets of wheels and wheel spacers & facilitates the inspection of pipe dimensions from DN200 to DN1000. A new Crawler from Kummert comes with following special features:

Continuously variable lift arm : The crawler camera of the F-200 requires no separate installation. It is permanently fixated to the



lift arm, which can be continuously adjusted in height. The arm lifts or lowers as soon as the pipe diameter is entered via the Software or the cable drum's operating panel, bringing the camera into centered position.

Automatic roll-over protection : In order to keep the crawler in the invert, an internal sensor measures the slope of the lateral axis. As soon as a deviation is detected, the crawler is automatically being steered back into the invert and, therefore, kept from rolling over.

Drive and control : The crawler F-200 stands out due to its rugged powertrain and simple control system. Four powerful EC motors drive each wheel individually. The speed settings can be adjusted to four different speed levels, and the built-in speed control keeps the desired speed with the push of two buttons.

High image quality : 16 high-power, equal-white LEDs flash continuously & offer sufficient illumination in any pipe. The progressive recordings are of sharp quality, thus allowing for a still image to be created from any video image.

Locating included : An integrated locating transmitter ensures that the crawler can be localized in the pipe at any time. The transmitter can be operated with a frequency of 512 Hz or 640 Hz. The selection is quickly made in the Studio software.

NDT Training Software – Simula

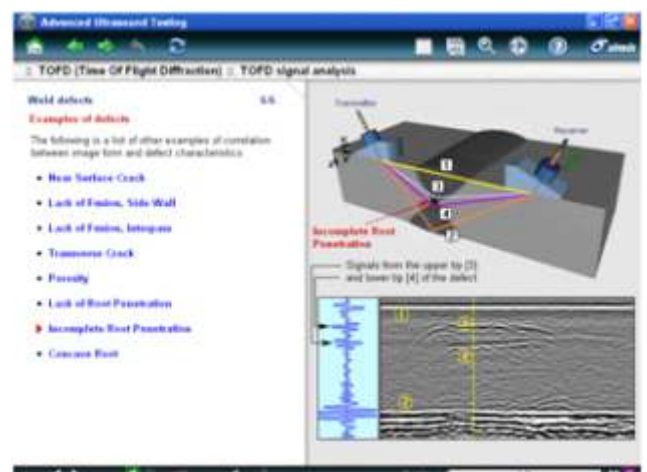
More and better training, information and circulation of knowledge are the needs of the new social, economic and productive standards of a company facing the challenges of the new millennium.

In multimedia training these needs find the best answer in terms of:

- Quantity of users,
- Standardization of the training message,
- Personalized learning
- Repetition of the training stages.

Presently the software is available in following streams:

- Ultrasonic Testing
- Radiography Testing
- Magnetic Particle Inspection
- Liquid Penetrate Testing
- Advanced Ultrasonic Testing: Phased Array & TOFD
- Corrosion Basic Principle



What's new in Inspection Services ?

NDT Level III Consulting Services

We provide you with our fullest support and necessary information to complete your assignment through our certified and well experienced Level III persons, within a specified time period.

- To help you in selecting the right nondestructive testing method/s and techniques suitable for the application
- Selection of suitable equipment for specific purpose.
- Preparation of NDT inspection procedures for various inspection methods, clients and jobs.
- Preparation of Test report formats and NDE technique sheets.
- Preparation of written practices as per ASNT recommended practice SNT-TC-1A / CP 189.
- Preparation of advanced NDT technique procedures for Immersion Ultrasonic testing, Phased Array Ultrasonic Testing, Time of Light Diffraction, Magnetic flux leakage.
- Validation of Procedures.
- Review of all inspection procedures.



TRAINING & CERTIFICATION

as per IS: 13805/SNT-TC-1A/BS-EN-ISO

Training Schedule — October - December 2014



| COURSE ID | COURSE | DATE | TOTAL HRS |
|-----------|--|-----------------|-----------|
| 14-01 | Familiarization - Phased Array & TOFD | 04 - 08 Nov | 40 |
| 14-02 | Phased Array Ultrasonic Testing (PAUT) Level II as per SNT-TC-1A | 10 - 22 Nov | 80 |
| 14-03 | Time of Flight Diffraction (TOFD) Level II as per SNT-TC-1A | 24 Nov - 02 Dec | 40 |
| 14-04 | Familiarization - Phased Array & TOFD | 08 - 12 Dec | 40 |
| 14-05 | Phased Array Ultrasonic Testing (PAUT) Level II as per SNT-TC-1A | 15 - 26 Dec | 80 |

Company News

- Organised a workshop in Chennai, Kalpakkam, Vadodara, Delhi & Mumbai on Surface Array & Tube Inspection using ECT/ RFT/ MFL/ IRIS/ ECA which included demonstration & technical presentation by Mr. Keith Sinclair from M/s. Eddyfi Inc., Canada, in the month of September 2014.
- Participated in Steel Mill Rolls 2014, held at Ranchi, Jharkand in the month of September 2014.

Upcoming Trade Shows

For this year NDTs India will participate / exhibit in following trade shows. For more information please feel free to contact us.

| Trade Shows | Location | Duration |
|-----------------------|-----------|----------------------|
| Tube India | Mumbai | October 28-30, 2014 |
| Indian Nuclear Energy | Mumbai | November 6-8, 2014 |
| ADIPEC | Abu Dhabi | November 10-13, 2014 |
| NDE 2014 | Pune | December 4-6, 2014 |
| India Composites Show | Mumbai | December 10-12, 2014 |



Skill up gradation

In July, August 2014, a team member Mr. Vasanthpraveen Kumar, had done his PCN Level 2 in Phased Array & Time of Flight Diffraction at Lavender International, United Kingdom.

