

# NDTS NEWS LETTER

Second quarter was a bit hectic for NDTs as most of the time was invested in working for upcoming technologies and solutions.

Effective immediately, NDTs has also started providing inspection services and currently we are providing inspection services in [remote visual inspection i.e. RVI](#). For more information, please feel free to contact us.

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## Solutions for Ultrasonic Testing (UT)

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### Corrosion thickness gauge at GREAT PRICE!!

The Nova TG110-DL defines the standard for performance and value in Ultrasonic Thickness Gages. It would be difficult, if not impossible to find a gage offering the long list of STANDARD features the TG110-DL does at a very attractive pricing.

The TG110-DL offers fully adjustable velocity for perfect calibration. Other features include single and dual point calibration capability, High & Low Alarms, High Speed Scan mode and an included time encoded 'B' Scan.



The TG110-DL is housed in a custom, all aluminum enclosure with gasketed ends. The case is designed for maximum comfort while offering the user maximum grip along the sides and back surfaces.

The display is a full 128 X 64 pixels (1.96" X 1.25") and incorporates simple language text for all menus. Along with the 1/2" high primary numeric readout area an analog style "Scan" bar is located at the bottom of the screen and represents a visual indication of the current thickness. This is particularly useful while in the high speed scan mode. The eye can perceive these linear movements much easier than rolling digits making general thickness trend information easier to interpret.

Additionally, a graphic display permits logged data to be displayed in a grid fashion, much like a spreadsheet. The user can review the log by scrolling through the rows and columns much like a spreadsheet. Any value above or below a preset value will cause that cell to flash in the spread sheet view. **Through paint capability is available as an option.**

For more information on TG110-DL, Kindly write to us.

### Ultrasonic thickness gauges with A-Scan

The All New Nova A-Trace Series of Thickness Gauges define a new standard for performance, features and portability in Handheld Ultrasonic Thickness Gauges. This ALL NEW Nova Series offers Pulse Rep Rates up to 300Hz, With Display Updates of 30Hz, fast enough for all but the most demanding applications. With the introduction of three NEW, Industry Leading Features including **SplitView**, **SplitScan** and **AutoTrack** the New Nova Series possibly presents the best features for price in High Performance Thickness Gauges today. The high speed, fully sunlight readable, backlit display offers Quarter VGA resolution. User interface is via simple plain text menus located at the bottom of the display. Large numeric display zone offers full 7/16" high characters representing Thickness.



#### TG200: General Purpose Dual Element Gauge

- ☞ Calibratable from 0.508 to 500mm, Through Paint Capable, Encoded B-Scan Option Available, Scrolling B-Scan Standard, Data logging of more than 100,000 points with more than 1,500 waveforms, B-Scan or combination.

#### TG200-EZ: Ultra Sample A-Trace Gauge

- ☞ Patented Nova Probe Auto set feature sets all operational parameters, Just Zero & Go, User can set range, velocity and gate threshold, Scrolling B-Scan Standard, Data logging of more than 100,000 points with more than 1,500 waveforms, B-Scan or combination

#### TG300: Precision Single Element, Contact or Delay Line/Bubbler

- ☞ Range 0.508 to 500mm, Gating from IP-1st, 1st-2nd, 2nd-3rd, IP Blocking Gate, IF Blocking Gate & Echo Blocking Gates (T1 & T2). Scrolling B-Scan with Encoded B-Scan Optional, Scrolling B-Scan Standard, Data logging of more than 100,000 points with more than 1,500 waveforms, B-Scan or combination.

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**TG400:** All of the features of the TG200 & TG300 are combined in a single gage.

For more information on A-Scan thickness gauges, kindly write to us.

## A Series of Precision thickness gauges

The Nova 900 Series precision ultrasonic thickness gauges are available in 3 portable models and 2 Bench top models. These ruggedized, highly stable models have been carefully designed to offer a choice of features to best suit the application level, gauging environment and use preference.



All five models provide the identical base gauging performance, with variations in options and the supporting features. The 910 is a basic gage emphasizing operational simplicity for the more straightforward, less demanding applications.

The Nova 950 offer a wide variety of supporting features including 50,000 point Data Logger, User setup parameters can be modified and stored, High/Low alarms, Industry First Scan Bar, Scrolling 'B' Scan and more.

For more information on 900 series, kindly write to us.

## The all new NovaScope 5000

For gauging on particularly sharp contours or in very small spots, effective results can be obtained using a bubbler and immersion transducer with a sharp-focused ultrasonic beam. The product can be presented in a continuous manner (e.g. a web); discrete lengths (e.g. pipe); or as rapidly indexed small parts (e.g., bottles and forgings).

Various Digital and analog outputs of thickness data and alarms are available on the side panel to interface with the controllers, loggers or computers. Such system setups permit automatic thickness monitoring and, in certain situations, process feedback control.



## Other Features Include:

- ☞ 0.0025mm digital resolution; as low as (0.127 mm) thickness resolution.
- ☞ Compatible with contact, delay line or immersion transducers.
- ☞ Dual-trace display; A-Trace and gates.
- ☞ Displays English or Metric units.
- ☞ Velocity display (quartz-stabilized, digital).
- ☞ Full RF or rectified RF display.
- ☞ Selectable multiple echo interval.
- ☞ Receiver attenuation control plus manual gain and automatic gain control (AGC).
- ☞ TAC (Thickness Amplitude Compensation), for noise suppression.
- ☞ Outputs: Alarms, Analog Thickness, Digital
- ☞ High Speed Binary, Serial RS-232C, IP Sync.
- ☞ Input: External Sync.

For more information on Novascope 5000, kindly write to us.

## The All New, High Performance, Avenger EZ Flaw Detector with productivity features

**SplitView:** SplitView is Dual Time base feature allowing the user to view the full range of the area under inspection in one window while at the same time presenting the user with a resizable second window. The second window has a separately adjustable, Range and Delay. The second window can be fixed at a specific place in time or set to automatically track (AutoTrack) an echo over a predefined level. Split View can be turned off to use the entire screen for a single large waveform display.



**SplitScan:** SplitScan is an operating mode allowing the user to view the active waveform while performing a Real Time B-Scan, whether timed or encoded. The feature gives the user positive feedback and identification of indications such as corrosion and pitting in real time.

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**AutoTrack:** AutoTrack is a feature where the second window has a separately adjustable, Range and Delay. The second window can be fixed a specific place in time relative to the main upper window or set to Automatically Track (AutoTrack) an echo over a predefined level. While in AutoTrack, the echo being tracked will display in the center of the lower window regardless of the actual place it is in time. This feature allows the user to easily view where on the echo waveform the gate is monitoring in a zoomed fashion.

## Other Features Include:

- ☛ Thickness & Amplitude Gating
- ☛ EASY Grip Aluminum Sealed Case
- ☛ 7"H X 3.25"W X 1.4"D
- ☛ Encoded & Scrolling AmpScan & B-Scan
- ☛ Embedded Probe Library
- ☛ 2 MByte Data Logger
- ☛ Scrollable "Spread Sheet" View
- ☛ High Speed Scan Mode
- ☛ Single Point Calibration, 2 Point Calibration
- ☛ 300Hz Rep Rate!!
- ☛ High Speed LCD Display
- ☛ Only 3 'AA' Batteries
- ☛ RS-232 I/O
- ☛ Optional USB
- ☛ English / Metric
- ☛ Backlight

For more information on Avenger EZ, kindly write to us.

## CRT Based, Ultrasonic Flaw Detector

Developed specifically to meet CURRENT customer requirements and requests for a High Speed, CRT based unit. Why CRT? CRTs are naturally easier on the eye and present the user with a virtually infinite resolution display as compared to digital displays, allowing easier perception of indications along the baseline.

In a world gone totally digital, the NDTs-90 provides the best compromise between the digital and analog world by offering a graphic user interface where controls are represented by images of associated controls. Simply touch the control and use the available knob or graphic Scroll Bar for faster operation.



For more information on NDTs-90, kindly write to us.

## Portable Corrosion Mapping System - PortaScan Series 3

PortaScan Series 3 is the affordable solution for ultrasonic detection and monitoring of corrosion in pressure vessels, pipelines, cranes, bridges, storage tanks, railroad tank cars, ship hulls/decking, tube trailers, aging aircraft, composites, rocket motor cases, torpedo housings, rolls, plates, slabs, billets, bars, and much more.



PortaScan Series 3 offers a complete choice of optional automated or manual scanners and various attachments (including suction cups, magnetic wheels and feet, adjustable pivot legs and cantilever extender arms) to allow you to customize your system for almost any requirement. Motorized x-y Mini Scanners are available for flat or moderately curved surfaces and motorized Pipe Scanners to test pipe from 4" (101mm) O.D. or greater.

## Other Features Include:

- ☛ Truly Portable & Easy to Use
- ☛ High Resolution Imaging of Ultrasonic Thickness/Amplitude Data
- ☛ Scan Flat, Curved and Moderately Irregular Material
- ☛ Detect Pitting, Corrosion, Laminations, Cracks
- ☛ Thru Paint and Coating Measurement Capability

For more information on PortaScan Series 3, kindly write to us.

## Portable AIRBORNE Ultrasonic Flaw Detector Curlin-Air

Curlin-Air is a new and radically different type of portable ultrasonic flaw detector that features a unique (and much needed) combination of performance capabilities. Its remarkable penetrating power provides the opportunity to readily inspect an increasing variety of extremely attenuative materials that are generally considered "uninspectable" with conventional ultrasonic flaw detectors.

To top off matters, Curlin-Air performs inspection with an airborne ultrasonic beam – which eliminates the need for material contact or liquid couplants

This outstanding capability greatly facilitates material scanning and overall practicality. It also makes Curlin-Air an alternative choice for

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certain applications where conventional flaw detectors are used. Plus, it extends the applicability of Curlin-Air to various liquid-intolerant and contact-intolerant materials.



## Other Features Include:

- ☛ Nondestructively Inspect Material Integrity with an Airborne Ultrasonic Beam
- ☛ No liquid couplant needed (just air!)
- ☛ No surface contact needed
- ☛ Remarkable penetrating power
- ☛ Applicable to numerous materials throughout industry
- ☛ Portable for production line or field use
- ☛ Simple to operate
- ☛ Helps assure product quality and safety
- ☛ Cost effective

For more information on Curlin-Air, Kindly write to us.

## NDE Educational Kits and Flawed Specimen Sets

NDTS is pleased to announce its co-operation with M/s. **Sonasppection, UK** for its complete line of NDE Educational Kits and Flawed Specimen Sets.

Sonasppection is the longest established manufacturer of flawed specimens starting in 1980, and is the pioneer on many well recognized 'industry standard' flaw manufacture and implanting techniques. Sonasppection's flaw manufacturing procedures have, without doubt, been proven as the 'industry standard' for consistently able to meet the most exacting tolerances.

**NDE Educational Kits:** Introduction to flaws - A set of miniature welds, macro sections and photo-radiographs to demonstrate the principles of flaw detection, flaw interpretation and basic sizing.



**Flawed Specimen Sets:** Introduction to basic flaw evaluation - A set of small welds with simple weld geometry's to demonstrate basic flaw detection, sizing and interpretation.



**Standard Flawed Specimens:** Advanced flaw evaluation - Realistic size welds in most common geometry's available either individually or in sets for advanced training/practice and qualification.



**Custom Specimens:** Full size mock-ups / component simulations containing accurately located and sized flaws, simple or complex weld geometry's, exotic materials.

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**Custom Calibration Blocks:** Sonaspection also offer following reflector types: EDM, Slots, Notches, Side Drilled Holes and Flat Bottom Holes.



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## Solutions in Remote Visual Inspection (RVI)

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NDTS is pleased to announce its co-operation with **M/s. IT Concepts, USA** for its complete line of Remote Visual Inspection (RVI) equipments and solutions.

### Z Series Videoscopes



A Z Series Videoscope System consists of a Videoscope and a VISIE Pro Video Imaging Hub. The VISIE Pro Video Imaging Hub is a field portable unit that combines light source, image control and

management functions. The remote images produced by a Z Series Videoscope are clearly displayed on a state-of-the-art LCD monitor.

Digital video and audio data can be recorded without messy cables or advanced computer knowledge. The onboard removable digital storage media or the USB outlet can be used to transfer data to a personal computer.

#### Other Features Include:

- ☛ **It's Portable:** The VISIE Pro Video Imaging Hub weighs just 2.2 kg and can be powered by an AC power supply or a handy battery pack.
- ☛ **It's Practical:** A single cord connects Z Series Videoscopes with the VISIE Pro Video Imaging Hub. The Videoscopes are interchangeable; any Z Series Videoscope can be used with the VISIE Pro Video Imaging Hub.
- ☛ **It's Robust:** The Z Series Videoscope hand piece chassis is made of metal and insertion tubes are sheathed with hard wearing tungsten braid.
- ☛ **It's Advanced and Easy-to-Use:** The latest in CCD (Charge-coupled device) solid-state camera and Metal-Halide lamp technology provide bright high resolution images on an integrated large LCD (Liquid-crystal display) monitor. A Compact Flash digital image storage card and a USB port make image and audio recording, saving and transfer simple.

### Standard Industrial Fiberscopes

IT Concepts offers extensive selection of Fiberscopes from 2.4mm to 8mm in diameter in various lengths with 2 or 4 way articulations. IT Concepts also offer accessories and peripheral equipment for use with industrial Fiberscopes/Borescopes.



For more information on Z Series Videoscopes, Fiberscopes etc. Kindly write to us.

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## Solutions in Magnetic Particle Inspection (MPI)

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NDTS is pleased to announce its co-operation with **M/s. Parker Research Corporation, USA** for its complete line of Magnetic Particle Inspection equipments and solutions.

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## Hand Yokes

A wide range of Hand Yokes in AC/DC, only AC or only DC, underwater is available and selected depending upon application.



## Portable Magnetic Inspection Unit

The portable magnetic inspection unit provides high output AC or HWDC fields for magnetic particle inspection. Field selection is determined by using the appropriate field cable connector. Current output is infinitely variable from zero to maximum by use of the current control located on the front panel, and is indicated by the panel meter. Actual current output is determined by cable size and length. AC magnetic fields offer the best sensitivity for detection of surface defect indications. The AC field is also beneficial for demagnetizing after inspection. Half-Wave DC magnetic fields provide for the detection of certain subsurface defect indications. DC fields penetrate a cross section of the test area rather than just the surface. Optional magnetizing cables can be equipped with prods for circular magnetization. The cables can be wrapped around parts to form a coil for longitudinal magnetization. Demagnetization is accomplished in a similar manner.



Low cost, folding hand truck for transporting the portable magnetic inspection units around the inspection area. Hang the cables on the convenient peg, store inspection media in the lower tray and you're off to the next job. The folding legs can be retracted for storage or used as a hand truck for rough terrain.

## Accessories for Magnetic Particle Inspection

- ☛ Test Bars
- ☛ Magnetic powder pick-Up stick
- ☛ Portable Magnetizing Units
- ☛ Permanent Magnets
- ☛ Gauss Meter
- ☛ UV Lamps & Intensity Meter
- ☛ Magnetic powder blower
- ☛ Magnetic Powder



For more information on Magnetic Particle Inspection equipments and solutions. Kindly write to us.

## Upcoming Events: NDE - 2006

**NDE 2006** is an annual National seminar organized by the Indian Society for Non Destructive Testing (ISNT). This year's annual National seminar i.e. NDE 2006 is being organized at Hyderabad.

The Seminar is also supported by an Industrial exhibition, which renders a good opportunity for NDT professionals to interact with each other, their counterparts, and host of vendors and suppliers in this field. For more information on NDE 2006 you may visit NDE 2006 website at <http://www.nde2006.com>

**Date:** December 7 to 9, 2006 **Venue:** Hitex Exhibition Center, Hyderabad

## Company News

NDTS participated in ECNDT (European Conference on NDT) 2006 as a visitor.

NDTS will also be participating in NDE 2006 and will be displaying a gamut of NDT Equipments & Solutions. Looking forward to see you at NDE 2006

For suggestions, please write to us:

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