

Wish you all season's greetings and thank you for your continued support. We look forward to serve you soon. In case of any suggestions please feel free to contact us.

1. Products & Technology

1.1 VEO+ Phased Array & TOFD Solution with Field Upgradable Capability

Sonatest is pleased to announce the release of their latest portable phased array & multi-scan instrument the VEO+.



Retaining the best features of the established VEO line, the new VEO+ is designed to meet the needs of today & tomorrow making the VEO+ a smart and future proof asset for your NDT business.

Key design elements considered in the development of the VEO+ are user and performance focused which include superior digital technology with a new 32:128PR board and four available PA configurations 16:64PR, 32:64PR, 16:128PR or 32:128PR, the ability to upgrade in the field makes the VEO+ user experience a winning one. Finally, the VEO+ is a portability champion with batteries giving a minimum of 6.6 hours autonomy and more with its fantastic hot swappable concept for continuous use.

1.2 SonaCam Ultrasonic Camera for NDT Inspection of CFRP

SonaCam is a mobile and ergonomic ultrasound camera system designed for NDT inspection of CFRP (Carbon Fiber Reinforced Plastics) creating high-resolution 2D & 3D images of suspected damage areas.



SonaCam connects to a standard Windows PC or Tablet through the USB port, & makes the system very portable & flexible. The SonaCam software creates A, B & C-Scan images of very high quality supporting amplitude & time-of-flight modes.

By adjusting pulse & gate settings, color thresholds & other camera settings, material defects are easily identified. An effective manual switching mode is added to ease large-area inspections. Camera settings are easily stored/retrieved for quick camera configuration.

1.3 Multigauge 5750 Datalogger Through Paint Thickness Gauge

The Multigauge 5750 is a simple, robust ultrasonic thickness gauge designed specifically for ship and small craft surveyors, but can also be used in applications where different measurement modes are required. The user has a choice of Multiple Echo, Echo to Echo or Single Echo to cover all requirements. The gauge can be used for metal, GRP or plastic measurement and it automatically switches modes and settings depending on the type of probe fitted.



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1.4 SAW Bug Motorized single axis weld scanner

SAW Bug is a single axis motorized scanner which is suitable for circumferential scanning of pipes & vessels of 3" OD up to flat & can carry a variety of probe configurations. The standard SAW Bug holds four transducers: typically two phased array and two TOFD probes but can accommodate up to six probes. It is compatible with industry standard instrumentation.



With a four-wheel drive system, the magnetic buggy has excellent grip & drive power and delivers constant speed whether ascending or descending the inspection surface. The single axis motor is controlled via a simple remote handset offering forward & reverse drive options and variable speed control for the non-steerable magnetic wheels. The motor power unit includes an emergency stop for safety.

1.5 NozzleScan Manual Scanning Solution for Nozzle Inspection

NozzleScan is a versatile manual scanning solution developed by Phoenix ISL, for the inspection of nozzle welds in both set-through and set-on configurations. Available for two-axis and three-axis instruments adaptable to cover a wide range of 90 degree nozzle sizes, from 3" upwards, on ferritic & austenitic materials.



NozzleScan features an overhead gimbaled probe holder which allows the operator to hold the transducer conventionally for a more tactile inspection. Probe skew orientation is changeable (a critical requirement for inspecting many nozzles) and can be free-running or accurately adjustable, with the additional option of being encoded as a third axis, if required.

Attaching NozzleScan to the branch pipe can be achieved with either magnetic wheels for a wide range of ferritic pipe sizes, or with fixed size clamping rings for supreme accuracy on any material.

1.6 Aerocheck+ Dual Frequency Eddy Current Flaw Detector



AeroCheck+ has same features as the AeroCheck, including Rotary Capabilities as standard, but in addition offers Dual Frequency with Auto-mix & Conductivity Measurement as well as an outstanding Frequency Range from 20Hz to 20MHz.

The AeroCheck+ can be used with all reflection, bridge & absolute probes from all manufacturers and uses industry standard 12-Way Lemo and Co-axial Lemo 00 connectors, reducing the need to use adapter.

Advantages:

- Dual frequency
- Rotary drive capabilities as standard
- Industry standard probe connectors
- Large crisp daylight display with user friendly interface
- Upto 10 hours battery life with a pencil probe & 7 hours with rotary drive

1.7 Ceram 35P Panoramic Portable X-Ray Machine

The Ceram Series is a reference in the X-Ray industry for reliability, high performances and robustness. The Ceram 35P is the panoramic brand new portable generators designed by Balteau NDT and is offering no less than 300kV, 5mA & 100% duty cycle for an incredible image contrast even at full power.

This unit will surely become a reference on the market as it can be classified as a high power portable unit and can be operated with their classic F2000 control unit but also with the well-known Hand-X Wireless Remote Control.



1.8 XLD160 Constant Potential Portable X-ray Machine

The XLD160 is a 160kV constant potential generator, direct evolution of our well known CLD160. It has been specially designed and optimized for real time applications and offers an extremely high dose stability to produce quality images comparable to conventional X-ray films.

Lightweight and highly flexible, that makes it the ideal selection for all castings and medium walled steels. Equipped with the RC8 control unit, the XLD160 will be very easy to use and adjustments will only be a matter of a button to push.

1.9 VUMAN RA-Y Available with Measurement Function now



The work horse of Videoscope industry now has the measurement feature. Measurement feature measures path (distance between two points) & circles (radius, diameter, circumference and circular area), save inspection images with measurement information and manages our measurement data.

1.10 Equotip 550 All-in-one Portable Hardness Tester

The industry leader Equotip is now available in three methods i.e. Leeb, Rockwell & UCI.

The Leeb hardness principle is based on the dynamic (rebound) method and is best suited for on-site testing of heavy, large or already installed parts.

The Portable Rockwell test principle follows the traditional Rockwell static test method which is particularly suited for scratch-sensitive, polished or thin parts as well as for profiles and pipes.

UCI (Ultrasonic contact impedance) is suited for objects with any shape and heat-treated surfaces (weld inspection; heat affected zones).



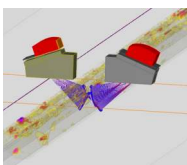
The new generation Equotip Touchscreen interface is specifically designed to provide an exceptional user experience. The enhanced software provides interactive wizards, automatic verification processes, personalization options and custom report functions.

1.11 Simulation Software CIVA Education, UT Analysis & 2016



CIVA Education, a simplified version of the reference NDT simulation software CIVA, is the ultimate tool to help you teach the physics behind NDT to students & trainees efficiently & at a low cost. The simple, realistic & interactive interface of CIVA education makes it easy to highlight the main phenomena & understand typical NDT results in a visual & comprehensive environment. It provides a lot of images & analysis curves, assisting the understanding of results more efficiently than comparing single signals together. With quick computations, users can easily try various inspection configurations, understand the importance & influence of the main input parameters (component geometry & dimensions, material properties, type & settings for probes/sources, defects location and dimensions, etc.).

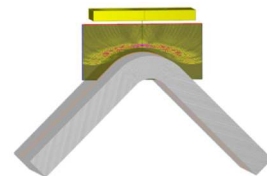
CIVA UT Analysis module main objectives are to display acquisition DATA in an easy & understandable way, to extract advanced information in an efficient way, to put this data into a dynamic report & to avoid repeatable & time consuming manipulations.



Data is displayed as classical UT data (A-Scan, echodynamic curves) or more advanced images (B-Scan, C-Scan, S-Scan, E-Scan, etc.). Images in the specimen frame can also be displayed (front, top, side sections or full views) and the data can be exported in the 3D view with the specimen as 2D images or directly as 3D with the one-click 3D view. Note that images can be built from amplitude, depth or time of flight.



CIVA can simulate the most common inspection methods used in the industry. Modeling complex welds (made of Austenitic steel for example) is now more precise through the use of a continuously variable model which allows you to take into account not only the acoustic properties of the material, but also the orientation of the dendrites in the weld bead in a continuous way.



A composite option combining different features specific to composite structures is now included in CIVA. It lets the user easily define bended composites, stiffeners and stacks of composite plies. New phenomena & types of defects such as structural noise, epoxy layers between fiber layers & ply waviness can now be taken into account with the emergence of an add-on model based on a coupling of semi-analytical calculations & 2D finite differences methods developed by Airbus Group Innovations. This module also provides the visualization of beam/defect interaction snapshots within the composite structure.

For phased array probes, the SAUL (Surface Adaptive Ultrasounds) algorithm, which enables an iterative adaptation of an incident wave at the surface of a complex geometry part, is now available in CIVA UT. The ray tracing has been greatly optimized to visualize the zone coverage for the whole scan plan, the divergence of the field and also the angles of the different skips.

1.12 Nuclear Solutions by INETEC

Our Partners M/s.INETEC's name is synonymous with technological & service excellence in nuclear industry. They have gained international acclaim for developing technologies for nuclear power plant examination & repair, inspection & repair services, as well as various engineering studies that they conduct as their regular scope of activities. In doing so, they are active in permanent programs of research, development, design, construction & fabrication of equipment, tools, plugs & probes, including software & instruments for non-destructive examination. They offer a range of products & services meeting the highest standards such as ISO 9001, ISO 14001, OHSAS 18001, & ISO/IEC 17025 etc.



2. Inspection Services

2.1 F-200 Remote Visual Inspection using Robotic Crawler

Our Inspection team uses F-200 Crawler from Kummert, Germany for pipe inspection ranging from 8" to 48". 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 studio software or the cable drum's operating panel, bringing the camera into centered position.

16 high-power, equal-white LEDs flash continuously and 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.

An integrated locating transmitter ensures that the crawler can be localized in the pipe at any time. The Kevlar reinforced cable is 320 m long and ensures a high tensile strength.



2.2 Medium Range UT (MRUT) Quick Inspection of Pipes/Tubulars & Under-Support

For tube & tank corrosion detection, Our Inspection team uses MRUT system from Innerspec Technologies, USA, which makes use of medium-range guided waves with a typical inspection range between 0.1m (4") & 3m (105") to detect corrosion, cracks & discontinuities on tubes, gas lines, oil pipelines & storage tanks.



The use of Electro Magnetic Acoustic Transducers (EMAT) technology in the system helps our team to perform fast scanning on exposed tubes & tanks as well as inspections of inaccessible areas from a fixed position. With the use of higher frequencies & a shorter range, this technique detects isolated pitting & wall loss with up to 10 times better resolution than Long Range UT systems with minimal dead zone.



3. Training & Certification

3.1 We are happy to share that now we will be providing conventional trainings also & below is the list of training courses & schedule.

3.2 Our training & certification team successfully conducted PAUT & TOFD Level II training in Egypt. Kindly contact our training & certification team for customized corporate training programs



COURSE ID	COURSE	DATE	DURATION
16-02-01	Visual Testing	4th July – 7th July	24 Hrs
16-02-02	Penetrant Testing	8th July – 12th July	16 Hrs
16-02-03	Magnetic Particle Testing	13th July – 18th July	24 Hrs
16-02-04	Eddy Current Testing	19th July – 2nd Aug.	80 Hrs
16-02-05	Radiography Testing Film Interpretation	3rd Aug. – 10th Aug.	40 Hrs
16-02-06	Ultrasonic Testing	11th Aug. – 26th Aug.	80 Hrs
16-02-07	Phased Array Ultrasonic Testing (PAUT)	29th Aug. – 14th Sept.	80 Hrs
16-02-08	Time of Flight Diffraction (TOFD)	15th Sept. – 22nd Sept.	40 Hrs
16-03-01	Visual Testing	3rd Oct. – 6th Oct.	24 Hrs
16-03-02	Penetrant Testing	7th Oct. – 12th Oct.	16 Hrs
16-03-03	Magnetic Particle Testing	13th Oct. – 18th Oct.	24 Hrs
16-03-04	Eddy Current Testing	19th Oct. – 4th Nov.	80 Hrs
16-03-05	Radiography Testing Film Interpretation	7th Nov. – 14th Nov.	40 Hrs
16-03-06	Ultrasonic Testing	15th Nov. – 29th Nov.	80 Hrs
16-03-07	Phased Array Ultrasonic Testing (PAUT)	30th Nov. – 14th Dec.	80 Hrs
16-03-08	Time of Flight Diffraction (TOFD)	15th Dec. – 22nd Dec.	40 Hrs

4. Company News

As you are aware that we have been building quality products from some time now. In order to expand that portfolio we have floated a new company called as M/s. Arora Technologies (P) Limited (ATPL).

Keeping the vision of 'Make in India', ATPL will focus on manufacturing of:

- Ultrasonic Testing (UT) Accessories
- Radiography Testing (RT) Accessories
- Magnetic Particle Testing (MPT) Products & Accessories
- Liquid Penetrant Testing (LPT) Chemical & Accessories
- Flaw Kits
- System Integration

Please feel free to contact ATPL at info@arorandt.com or www.arorandt.com



5. Upcoming Events

Events	Location	Duration	Booth No
Kuwait NDT Conference & Exhibition	Kuwait	26th to 28th September	TBD
Tube India International	Mumbai	5th to 7th October	123
India Nuclear Energy	Mumbai	20th to 21st October	G26
8th International Symposium on NDT in Aerospace	Bangalore	3rd to 5th November	TBD
Non Destructive Evaluation (NDE) 2016	Trivandrum	15th to 17th December	2 & 3