Day 1: Commence 10:30. Exhibition will last until 18:00.

Buffet between 12:00 and 14:00

Additional buffet between 17:00 and 18:00

Seminar in Albyn Suite 10:00 till 16:30

Day 2: Exhibition 10:00 till 16:00

Buffet 12:00 till 14:00

Seminar in Albyn Suite 09:30 till 12:30
Technical Seminar Programme
Albyn Suite

Wednesday 26th November 2014

Welcome
Mr, Phil Kolbe, BINDT

Session 1
Chairman: Mr Archie Crawford
Bilfinger Ltd

10:00 to 10:45
Eddy Current Array Probes for Crack Detection and Sizing in Carbon Steel Welds
Angélique Raude, Team Manager, Eddyfi Europe

10:45 to 11:30
The importance of NDT Qualification for difficult material inspection
Colin Bird, NDT Development Manager, Doosan Babcock

11:30 to 12:15
Combination hardness testing method of dynamic Leeb & portable Rockwell to increase repeatability and to produce reliable measurements.
Alireza Akhlaghi, Product Manager Material Testing, Proceq SA

Lunch

Session 2
Chairman: Mr. Ray Wilson
Rigmar Training Ltd

13:15 to 14:00
Eddy Current Array Technologies for Detection of Circumferential Cracking in Heat Exchanger Tubes
Neil Harrap, NDT Market Manager, Ashtead Technology Ltd

14:00 to 14:45
Advanced Phased Array Probe Strategies for the Inspection of Austenitic and Dissimilar Metal Welds
Paul Chapman, Advanced NDT Product Specialist, Olympus Industrial

15:00 to 15:45
“Practical Application of Acoustic Emission”
Tim Bradshaw – General Manager, Mistras Group

15:45 to 16:30
Validation Processes to Establish Phased Array Techniques Using Established Recommended Practices
Gary Luckett, Advanced NDT Applications Engineer, Oceanscan Ltd

Thursday 27th November 2014

Welcome
Mr, Phil Kolbe, BINDT

Session 3
Chairman: Mr Cailean Forrester
Inspectahire Ltd

09:30 to 10:15
Oil & Gas Institute - Overview of Developments
Dr Gordon Dobie, and Calum Macleod, Strathclyde University

10:15 to 11:00
Advanced Thermal Imaging for Asset Integrity Applications
Mark Murray, Inspectahire Inst. Ltd

10:00 to 11:45
Industrial Coatings Inspection
Mike Norman, Field Sales Engineer, Elcometer Ltd

11:45 to 12:30
NDT Training and Certification in the Oil & Gas Industry – Developments
Bill Brown, Technical Manager, TRAC Oil & Gas Ltd
Eddy Current Array Probes for Crack Detection and Sizing in Carbon Steel Welds

Angélique Raude, CEng, MWeldI, MInstNDT. Team Manager, EDDYFI EUROPE, Application Specialist, Electromagnetic Technologies

The inspection of carbon steel welds for surface cracks remains a significant inspection challenge. Established methods such as penetrant testing (PT) and magnetic particle testing (MT) are effective but lack practicality. The conventional eddy current inspection technique (ECT) represents an opportunity for improvement, however using a single coil ECT pencil probe results in protracted inspection times and results are adversely affected by material properties and geometry.

Eddy current array (ECA) probes have always represented the ideal solution but, until now, have been limited to non-ferrous materials or detection only in ferrous materials. However, recent advances in ECA coil design and multiplexing patterns have contributed to the development of a new generation of ECA probes for carbon steel weld inspections. The main objective behind the development of these new ECA probes was to determine the optimal set of parameters for the probes to obtain a clear discrimination between the defects, lift-off and permeability changes while still being able to monitor and quantify each signal individually.

By multiplexing and leveraging advanced data processing capabilities, this ECA solution allows inspections to be carried out (a) quickly and (b) with accurate depth sizing of cracks and (c) without the need to remove protective coatings. This new approach offers additional benefits such as state-of-the-art imaging (e.g. 3D C-scan displays), improved surface coverage and ease of data archiving. Furthermore, the new sensor and technique developed allows inspections to be carried out under the mainstream ECT certification. This paper presents the most recent development for the inspection of carbon steel welds using eddy current array technology. Various aspects of the ECA technique are discussed and supported by inspection results obtained from welded carbon steel specimens.

The Importance of NDT Qualification for Difficult Material Inspection

Colin Bird, NDT Development Manager, Doosan Babcock

Difficult materials such as stainless steel and HDPE provide inspection challenges but qualification of inspection capability can be even more challenging. One of the challenges is the variation of the material properties with manufacturing process leading to changing defect detection characteristics, furthermore providing simulated defects with the correct properties must be addressed as a serious challenge. It is well known that changes in welding process affect defect detection by ultrasonic inspection in stainless steel components. Production of realistic defects in HDPE welds is equally challenging.

As an example whilst artificial defects, for example, spark eroded slots, are ideal for simulating planar defects or even certain types of crack using UT, they are not appropriate for qualification of methods required to detect stress corrosion cracking or closed cracks using radiography.

This presentation explains the importance of NDT qualification and provides case studies where qualification test pieces and the production of samples with realistic defects have been carefully designed with respect to the physical principles of the defect detection method.
Combination hardness testing method of dynamic Leeb & portable Rockwell to increase repeatability and to produce reliable measurements.

Alireza Akhlaghi, Product Manager Material Testing, Proceq SA

Successful quality control can be achieved in a timely manner when taking advantage of mobile testing solutions. Such drastic reduction of inspection time has a direct impact on costs by avoiding test samples dismantling, sectioning, prepping etc. Mobile methods such as Portable Rockwell and Leeb Rebound provide modern, quick and easy tools that can replace traditional instruments based on lab environments or using delicate experimental setups.

Regardless of many guidelines and procedure commonly available, hardness testing is not always as straightforward when dealing with non-ideal samples, due to lack of mass, thickness and other critical geometries. Although there is no mathematical relationship between different test methods it is a common practice to correlate them to one another. As an example the existing default hardness conversions in a Leeb device are based on specific sample geometries, but generally portable Rockwell instruments have almost no restriction in regard to thickness and mass. For samples that don’t meet the Leeb specification a simple custom correlation based on the Portable Rockwell measurements enables the user to apply a correction factor and create a new hardness conversion that satisfies the geometries on the non-ideal sample.

This presentation highlights an overview of combined portable hardness testing methods, namely Leeb Rebound, low-load portable Rockwell and Ultrasonic Contact Impedance (UCI). We will illustrate that accuracy and repeatability of the results can vary significantly between each method and based on that how combining these methods with each other allows the inspection to be carried out from based material to HAZ and the weld. We would also highlight some of the independent guidelines (ASME, Nordtest, DGZFP) and standards (ASTM, ISO, DIN) which provide useful references for quality inspectors in order to help select the most suitable test methods for each specific application.

Eddy Current Array Technologies for Detection of Circumferential Cracking in Heat Exchanger Tubes

Neil Harrap, NDT Market Manager, Ashtead Technology Ltd

Detecting circumferential cracks in heat exchanger tubes has always been a significant challenge, requiring precise setups, appropriate filtering, considerable experience and a fair bit of good luck.

Employing eddy current array (ECA) based probes offers an ideal solution but, until now, these probes have been almost exclusive to the Nuclear Power Generation market. However, recent advances in ECA coil design, multiplexing design and manufacturing technologies have contributed to the development of a new generation of combined ECT/ECA probes for non-ferrous heat exchanger tubes. These probes are known as the DefHi series probe.

This new approach to heat exchanger tube inspection offers additional benefits such as state-of-the-art imaging (e.g. 3D C-scan displays), improved surface coverage and ease of data archiving. Furthermore, because the DefHi probe retains conventional bobbin style coils as well as the eddy current array, inspections can be carried out under the existing ECT certification schemes. This paper presents a number of practical case studies where the use of eddy current arrays have been used to detect tube defects which have in the past been difficult if not impossible to detect using conventional inspection techniques.
Advanced Phased Array Probe Strategies for the Inspection of Austenitic and Dissimilar Metal Welds

Paul Chapman, Advanced NDT Product Specialist, Olympus Industrial

The OmniScan has established a track record for reliable and cost effective phased array inspections as an alternative to radiography for carbon steel piping and pressure vessel welds. That success is now driving the market for viable inspection solutions for austenitic welds such duplex, stainless steel 304\316\321, and inconel cladded dissimilar metal welds. Advanced probe strategies and more effective probe designs are pushing the limits of what service companies and manufacturers can qualify with regard to full volumetric weld inspection and in-service crack detection and sizing. This presentation will provide a general overview of probe technology used in austenitic weld inspection and how it is deployed in portable phased array systems.

Practical Application of Acoustic Emission

Tim Bradshaw – General Manager, Mistras Group

Mistras Group Ltd (formally Physical Acoustics) has been involved in the successful application of Acoustic Emission over the past 30 years. The company combines experienced AE staff, acquisition equipment development and manufacturing capability with site deployment services. These skill sets have allowed the successful application of Acoustic emission for the monitoring, inspection and assessment of many assets in a wide range of applications.

In this presentation the general concept of Acoustic Emission will be discussed including its strengths and limitations. A review of monitoring methodology including system design and hardware selection will be outlined and supported with real data. These case studies of successful AE applications within a number of industries will be discussed to demonstrate the benefits provided by the technique. These will include monitoring of pressure vessels, offshore structures, leak detection, power equipment and rotating elements.

Validation Processes to Establish Phased Array Techniques Using Established Recommended Practices

Gary Luckett, Advanced NDT Applications Engineer, Oceanscan Ltd

Phased Array has become an established technique in many sectors of industry and can cover a wide range of applications. There are European and International standards available to enable code compliant inspections and to assist with calibration, inspection and analysis.

What do you do if your application is not covered by available standards or by previous NDT inspections. The basis of this presentation is to give examples of applications that have had no previous NDT inspection and how using existing recommended practices enables accurate and successful inspections.

One of the applications covered, is the inspection of manufactured gears looking to isolate inclusions that can result in catastrophic failure of engines in large quay machinery.

Validation of the technique on artificial defects, Inspection of real defects and performing comparative destructive testing, setting up calibration blocks, competence training and examination of operators, MSA studies, blind trails of operators and implementation of quality control checks.

By following established inspection techniques it is possible to overcome challenges in applications in completely unrelated sectors that may have had no previous history of NDT.
Oil & Gas Institute - Overview of Developments  
Dr Gordon Dobie, and Calum Macleod, Strathclyde University

Strathclyde has provided the Oil & Gas Industry with considerable expert guidance on risk and reliability aspects related to our floating asset structures.

Research undertaken by Strathclyde provides The Power Generation Industry with valuable online condition monitoring tools and analysis techniques. These are used regularly for monitoring graphite core health, which supports the continued and extended operation of our fleet of nuclear power stations in the UK.

The Strathclyde team adds significant value to our research and technology development, working on compact power systems and associated controls for a variety of applications. Their protection solutions, power system models, microgrid/marine electrical laboratory and architecture appraisal tools are utilised across a number of UK and international R&T projects. Helping to mitigate the enormous business cost from corrosion and erosion.

Improved inspection and monitoring regimes have greatly improved asset integrity, yet corrosion remains a common cause of failure with an estimated annual cost of around £1 billion. Using advanced modelling techniques we are able to study multi-scale corrosion and its impact on material strength and develop corrosion mitigation approaches through the design and testing of novel surface coatings.

Internationally recognised in the area of tribocorrosion and the production and interpretation of combined erosion/corrosion maps, we model and test erosion in pumps, vessels and valves, and design improvements for enhanced performance.

We design and use advanced sensor technologies that can be used in cement, steel and other structures to monitor corrosion, cracking and stresses. The presentation will provide an overview on the new Oil & Gas Institute and some of the developments the research is being focussed on.

Advanced Thermal Imaging for Asset Integrity Applications.  
Mark Murray, Inspectahire Instruments Ltd

Petrochemical plants often handle invisible gaseous hydrocarbons. They may be toxic, or cause health issues, others are highly flammable, and most of them are dangerous for the environment. That is why leak detection is of vital importance.

Many forms of production gases are basically a highly flammable hydrocarbon. To increase the safety within the plant and reduce the environmental impact, Inspection engineers can use optical gas imaging camera as a gas leak detection tool to ensure that no gas leak escapes the attention of the process operators.

An optical gas imaging camera is a quick, non-contact measuring instrument that can visualize gas leaks in real time. Where many other measuring instruments only present the inspector with a number, optical gas imaging cameras present visual information, making the leak detection process more intuitive. Optical gas imaging cameras can also be used in hard-to-access locations, since they can detect small leaks from a distance.

Before the arrival of the optical gas imaging camera, industry used so-called ‘sniffers’, devices which measure the concentration of a certain gas in one single location and generate a concentration reading in parts per million (ppm).

The main advantage of the optical gas imaging camera is that it provides you with the possibility to detect gases visually. An optical gas imaging camera allows you to detect gas leakage anywhere within the field of view of the camera. This speeds up the inspections.
considerably.

Operating in the High Sensitivity Mode this camera is surprisingly sensitive, it can be used to detect even smaller gas leaks from about seventy meters. This enables the operator to perform these inspections from a safe distance.

All leaks to be repaired are reported to the maintenance crews. In this part of the process the use of optical gas imaging cameras also has an advantage over sniffers. With the optical gas imaging camera we can simply attach a video file to the work order and the maintenance crew will see for themselves where the leak is located.

Industrial Coating Inspection
*Mike Norman, Field Sales Engineer, Elcometer Ltd*

The presentation will be generic and discuss more the reasons for and the benefits gained from coatings inspections; methods and types of inspections carried out; how they can be measured; and how such measurement provided a cost effective solution for the Client in question; and how this can be utilised by the NDT Technician.

In effect this would be a CPD type approach to this seminar presentation.

NDT Training & Certification in the Oil & Gas Industry – Developments
*Bill Brown, Technical Manager, TRAC Oil & Gas Ltd*

When Inspection/NDT training is conducted under the current Certification Schemes it follows well defined National & International Standards. Does the current arrangements meet today’s needs? Do Industry sectors require specific training & certification e.g. Oil & Gas, Nuclear & Power Generation?

If the Certification Schemes address the fabrication of steel components and the training is geared at and relevant to this sector is that training and subsequent certification relevant and appropriate to In-Service conditions?

The Oil & Gas Industry in Aberdeen has created a Working Group to consider these issues and have been working for some two years now under the guidance of BINDT/PCN to develop and implement an In-Service Certification Scheme.

This presentation will report on the Working Group, the processes involved and an outline of the Scheme.
Ashtead Technology offer a comprehensive range of NDT and visual inspection equipment for rental; giving you access to the latest technology, application flexibility and removing large capital costs.

Our state-of-the-art equipment range for NDT instruments, scanners, probes and accessories are suitable for a number of NDT techniques including Eddy Current Testing, Ultrasonic Phased Array, Ultrasonic Flaw Detection, ToFD, Positive Material Identification (PMI) and Remote Visual Inspection.

We are able to supply equipment from our network of offices worldwide, including locations in the UK (Aberdeen & London), Houston and Singapore.

At Ashtead Technology we specialise in local service with global resources, so whatever your equipment requirements we are sure to have a solution. With over £60m of equipment in our rental pool (over 10,000 stock items), we offer:

- 24/7 availability
- Overnight delivery or even same day for local pick-up and drop-off.
- 24/7 Integrated Technical Services
- Up-front Engineering support
- Bespoke system design/support
- Multi-skilled offshore technicians

To find out more information about our NDT capabilities, please visit www.ashtead-technology.com/NDT or call 0845 270 2707 to speak to one of our Market Managers.
Carestream NDT

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http://www.carestream.com/nondestructivetesting.html

Carestream was founded in 2007 when Kodak’s Medical and NDT Group was purchased by the Onex Corporation of Canada in a $2.55bn deal, and formed a stand-alone company.

Based in Rochester, USA, and operating in 150 countries worldwide, Carestream is a totally independent company with over 7,000 employees and a turnover of $2.3bn.

Carestream manufactures the INDUSTREX range of radiographic films, chemicals and processors, as well as the acclaimed INDUSTREX HPX-1 computed radiography system.

The HPX-1, unlike other CR systems on the market is designed and built specifically for NDT. HPX-1 can handle rigid cassettes and bare plates without reconfiguration, and can also scan any size or shape of small plate. Image quality and ease of use are amongst the best available.

Carestream’s latest innovation is a software module that allows a Perkin-Elmer DR panel to be used with the same workstation as the HPX-1 CR system.

Whilst CR and DR are growing businesses, Carestream also remains fully committed to the traditional NDT film market.

Please take a look at our website for more information about Industrex films, processors and digital products - carestream.com/nondestructivetesting

Baugh & Weedon Ltd
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Baugh & Weedon is a leading UK manufacturer of MPI Benches, Penetrant Lines, Ultrasonic Thickness Gauges, MT / UT / ET Accessories and Eddy Current Sorting Bridges. Established in 1967, Baugh & Weedon has a long history of supplying the NDT industry with high quality products and services.

In Aberdeen Baugh & Weedon will be showcasing a mixture of own established equipment including the LumaCheck (hand-held UV and White Light Meter) and the Lumazon (UV and White Light hand-held lamp) as well as our new technology including the Audit 207 Ultrasonic Thickness Gauge and the TruFlux Tank Floor Scanner.

Alongside our own brand equipment we will be displaying the EMAT technology from Innerspec as well as the Gillardoni RDG 2000-2500(S) UT Flaw Detector which we proudly represent in the UK.

With a wealth of industry knowledge, Baugh & Weedon strive to be client focussed at all times, working with you to find the right solution for your NDT needs.

We look forward to welcoming you onto our stand.
Cygnus Instruments Ltd
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Email: sales@cygnus-instruments.com
Website: www.cygnus-instruments.com
Contact Person: Mark Harris (Sales Engineer)

A chance to take a look at our new and exciting range of ultrasonic thickness gauges.

Still designed to be rugged and easy to use, the new range of Cygnus ultrasonic thickness gauges incorporate a whole host of new features. Along with the well established through coatings multiple echo technique, Cygnus now offer the option of single-echo measurement using twin crystal probes. Other new features include: a colour display with A-Scan and B-Scan; a second end mounted display; Bluetooth for remote viewing; and data logging. The updated CygLink software is a Windows® based program offering logging and reporting in an intuitive and straight-forward layout.

Exclusive to Cygnus is MSI™ (Measurement Stability Indicator) which highlights when a measurement is stable.

Cygnus thickness gauges are designed for use in almost every industrial application. From offshore platform legs and anchor chain that can only be accessed using an ROV to towering bridges requiring rope access. From potentially explosive environments where only ATEX / CSA certified products can be used to performing diving inspections in blackwater requiring a large bright display.

Visit the Cygnus Instruments stand for a demonstration and to discuss the new applications these developments open up for Cygnus ultrasonic thickness gauges.

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Services and/or Products offered:

ETher NDE Ltd. Focuses purely on Eddy Current Flaw Detectors, Conductivity Meters, Probe Design and Manufacture, Accessories and Consultancy.

The Aberdeen show will give us the opportunity to bring the WeldCheck Eddy Current Flaw Detector to you with experts on hand to demonstrate the unit. The WeldCheck was launched in September 2013 and has been designed with Offshore, Rope Access and Oil and Gas applications in mind.

Fitted with industry standard 12-Way Lemo and Co-axial Lemo 00 connectors, the WeldCheck is able to use absolute, bridge and reflection probes without the need for adaptors. It has a fully daylight readable display, up to ten hour battery life and at just 1.2kg, it is simply “the right tool for the job”.

Complimenting our complete EC Flaw Detector range, we offer a full range of ECT probes including standard and special weld probes. Offering a rapid, cost effective alternative to weld inspection, the ETHER range of EC Weld Probes are all designed manufactured in the UK by expert technicians with a wealth of knowledge in probe design.

ETher NDE is also delighted to be able to demonstrate their EC Conductivity Meter, the SigmaCheck and will be on hand to discuss the Eti-200, the multi-frequency and multi-channel flaw detector which is ideal for your more advance application needs.
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Elcometer has been a world leader in the design, manufacture and supply of inspection equipment to the coatings industry for more than sixty years. Ever since the first Elcometer gauge was manufactured in 1947, the philosophy has been to provide ‘best in class’ design, quality and service at a competitive price. By concentrating on these core values, Elcometer has grown into a global network with representation in over 70 countries. With a range of products specifically developed to meet the needs of the industrial coatings inspection; concrete inspection; NDT instrumentation; and industrial metal detection industries; Elcometer is well positioned to provide solutions to inspection requirements – whatever and wherever they might be. A highly skilled production workforce builds and assembles the majority of Elcometer products in a purpose built UK manufacturing facility.

Constantly committed to innovation, Elcometer invests significantly in a dedicated Research and Development Team based at their head office in Manchester. Elcometer’s technical team rigorously test all products and design creative solutions to ensure that all products both meet expectations and “last the test of time. As an ISO 9001 registered company since May 1994, Elcometer not only prides itself in providing high quality products and services, but also understands the need for product certification and re-certification. The ability to demonstrate instrument, standard and test equipment compliance with BS, EN, ISO and NIST standards is essential. Elcometer offers certification using equipment certified by UKAS laboratories and NIST standards where applicable. Certificates of Conformance are automatically supplied with all shipments, free of charge, indicating that the instrument is working correctly and have been checked in accordance to Elcometer Procedures and verified as being compliant with the terms of our ISO 9001 registration.

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About Eddyfi
Headquartered in Québec City, Canada, Eddyfi is a dynamic company that penetrated the Non Destructive Testing (NDT) world in 2009 with offices in Lyon, France, and Houston, USA. Our company focuses on offering high-end eddy current and electromagnetic solutions for the inspection of critical components and assets. We offer complete supply chains: multi-technologies instrument, software as well as the array probes for both surface and tube assessments.

Eddyfi massively invests in R&D and new product development, to expand from its beachhead markets - surface inspection in the nuclear and power generation industries - to other markets such as oil & gas, heavy industries, and aerospace.

With over 100 professionals and some of the world’s most renowned ET experts in Canada, USA, Europe, and the Middle East, Eddyfi has the expertise, engineering, and manufacturing flexibility to supply fully integrated and dedicated solutions to its customers. Eddyfi has customers in more than 50 countries spread out over six continents.

If you would like more information about Eddyfi, please contact us at infoeurope@eddyfi.com
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Services and/or Products offered:

GE Inspection Technologies, and its industry-leading Agfa NDT, Hocking, Krautkramer, Seifert, Phoenix and Everest VIT products, aims to be a global leader in technology-driven inspection solutions that deliver productivity, quality and safety for its customers.

We'll be displaying a range of the newest products from our comprehensive range, including computed radiography (CRxVision), portable ultrasonics (USM Go+), eddy current (Mentor EM) and 3D phase measurement remote visual inspection (Mentor Visual iQ).

We'll also be working closely with our Channel Partner, Oceanscan Ltd to provide an unrivalled combination of technology and support.

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Products / Services Provided:

At this year’s exhibition we will be demonstrating our Viking Gamma Radiography projectors including the latest addition, the Viking CPR system. As with every Viking, with the CPR you have the ability to carry out either traditional projection radiography or Close Proximity Radiography with just the projector and the same source. The Viking CPR can be used with a Selenium 75 or Ytterbium 169 source and is ideally suited for wellheads, open shop radiography and any other application where a compact controlled area is required or where there is very little room for access for container.

Each projector in the Viking range is contains Tungsten as the radiation shielding material and does not use radioactive depleted uranium.

We supply radiographic sources and supply, service and repair gamma radiography equipment. In addition we supply, calibrate and repair radiation monitoring equipment; offer training and consultancy services and a bespoke design service. At the show we will also be demonstrating a range of Viking windouts, accessories and collimators and our electrical radiation warning equipment including the new compound safety system, battery powered Automated windout and GammaBeacon.
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Contact Person: Mathew Anderson

Services/Products Provided:

High Technology Sources Limited, known by most in the non destructive testing industry simply as HTSL, is a specialist distribution company set up by a highly experienced team that originated at AEA Technology.

HTSL’s team provides a dedicated, knowledgeable and highly flexible supply of NDT sources and equipment for a wide range applications, from formula one race car and aerospace engineering to the oil industry.

At this year’s show, the HTSL team will be demonstrating the 880 range of Gamma Radiography projectors including the Delta, Elite and Omega models together with the 959 and 989 Small Controlled area Radiography (SCAR) devices, plus the range of special clamps and fixtures, mainly for pipeline testing.

Also on the HTSL stand will be the Sentinel MultiVision HD, a new self-contained digital imaging system that is lightweight, portable and ideally suited to field based applications. New software, designed from the ground up ensures that MultiVision HD supports a wide variety of radiographic platforms, in a single, user friendly icon driven interface.

Based on the industry standard DICONDE format, high quality images can be captured, viewed and exported with ease.

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HSI-Lateral Wave Limited is a fully independent non-destructive testing organisation providing innovative advanced ultrasonic services such as phased array, Time of Flight Diffraction (TOFD) and corrosion mapping to the oil, gas, chemical, power generation, defence and pharmaceutical industries. HSI-Lateral Wave operate from modern office and workshop facilities at two locations in the UK, Ellesmere Port and Aberdeen, performs inspections on a worldwide basis. HSI also has group companies in the United States and Northern Ireland.

The full-time multi-disciplined professional workforce of HSI-Lateral Wave are trained and qualified to international standards in accordance with BS EN ISO 9712:2012. The culture of continuous training, including regular refresher training, ensures that every employee is capable of working to the highest standards with the latest technology in the most demanding of circumstances. All site service personnel hold UK & European offshore survival certificates and offshore medicals as well as Safety Passport Training and confined space training.

The company is certified to ISO 9001:2008 and accredited by the United Kingdom Accreditation Service (UKAS) in accordance with ISO 17020 as a Type A (3rd Party) Inspection Body.

Working for some of the most high profile companies in the world HSI-Lateral Wave is committed to providing cost effective inspection solutions that enable clients to manage the integrity of their plants and make informed decisions on the extension and safety of plant life.
Imaginos NDE

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Imaginos NDE has one main aim, to offer the non-destructive testing (NDT) industry advanced solutions for their application issues. Imaginos NDE looks to bring the most innovative, up-to-date NDT options to the market across a range of non destructive testing methods.

Imaginos NDE believe that the NDT industry should have access to a range of alternative systems, equipment and software that challenge the traditional non-destructive testing methods including Ultrasonic (UT) Phased Array NDT equipment, Ultrasonic (UT) Cleaning Systems, Computed Tomography (CT) 3D Imagining Software and non destructive testing (NDT) film scanners.

In Aberdeen, we will be show casing the PRAGMA PAUT 16/128 system, which offers the most up-to-date and innovative PAUT technology on the market.

We will also be showing the Imperium UT Camera, which offers a welcome addition to the Ultrasonic NDT remit. Met with interest since we have added it to our product portfolio, the Accoustocam i600 offers inspectors a new approach to their regular testing needs.

Finally we will be displaying our range of Eclipse Scientific products including the latest version of ESBeamTool (UT Software), ESBoltScanner, ESSPipeBeetle and the well received ESTempMaster which can inspect areas up to 350 degrees Celsius. All these Eclipse products are ideal for the offshore oil and gas market.

Inspectahire Inst. Co. Ltd

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Distributors for FLIR; CORDex, Sunaero,Labkotech, InterTest; LyYn;TST

Hire of inspection instruments and provision of inspection equipment and services

• Rigid Borescopes
• Flexible Fibrescopes
• Video Endoscopes – Olympus and Everest

Pole Mounted cameras, Pipe Inspection Cameras – push rod and tractor – Waterproof/Explosion Proof / Intrinsically Safe. ROV’s and AUV’s. Vessel and tank Cameras – Explosion proof. Underwater Cameras. Digital Stills and Video Cameras. NDE with – IRIS, Eddy Current, Silver wing UT Crawlers. Metrology Equipment such as Pi gauges, Verniers, External Micrometers, Bore & Depth Gauges, Pipe Ring Laser. NDE Equipment such as Metal Hardness tester, MPI kit, Covermeter, UT, PEC

We also undertake inspections with equipment such as IRIS, Thermographic Cameras, Systems for Caisson, Conductors, Process Vessels, Tanks, Pipelines, Caissons, Production tubulars inspection...

Technicians are highly trained and qualified across a range of disciplines.

Offices and Representation in
Australia, UAE, Qatar, Khazakstan, Malaysia
Oceanscan is a global leader in the sale, rental and servicing of conventional and advanced NDT Inspection equipment.

A trusted supplier for 25 years to the oil and gas, aerospace, defence, engineering and renewable energy markets, we can offer flexible rental solutions which reduce downtime, improve productivity, and take the risk out of your projects. Backed by a highly-experienced technical team who understand your business, we provide 24/7 support for the equipment we supply.

Oceanscan also offers its clients a unique site support service where one of our PCN certified technicians will support and assist your on-site needs.

We have a wide array of equipment available to hire including - Flaw Detectors, Phased Array Systems, CR Systems, Boroscopes, Laser Scanners, Tube Inspection, Thickness Gauges, Hardness Testing and MPI Units.

Our head office is based in Aberdeen and by working with our worldwide network of partners we can ensure you only receive exceptional service wherever you are.

Operating to a quality system to ISO 9001:2000 standard, Oceanscan has also accomplished our goal to become a UKAS accredited calibration house, the only one providing UT calibrations in Scotland. We are proud members of the British Institute of Non-Destructive Testing and Subsea UK.
Olympus Industrial
KeyMed House
Stock Road
Southend on Sea
Essex SS2 5QH

Contact Person: Rob Arnot - General Manager - UK Industrial Division

Services and/or Products offered:

Olympus is renowned as the World's leading manufacturer and supplier of non-destructive testing and remote visual inspection equipment for engineering and maintenance applications throughout the world. Olympus instruments are used in industrial and research applications ranging from aerospace, power generation, petrochemical, manufacturing, and automotive to consumer products. Olympus instruments contribute to the quality of products and add to the safety of infrastructure and facilities. For the industrial professional, Olympus provides an industry-leading portfolio of innovative test, measurement, and imaging instruments. Leading-edge testing technologies include ultrasound, phased array, eddy current, eddy current array, remote visual inspection, microscopy, X-ray fluorescence, and optical metrology.

Our products include ultrasonic flaw detectors and thickness gauges, videoscopes, borescopes, fiberscopes, microscopes, in-line and advanced non-destructive testing systems, XRF and XRD analysers, interferometers, and a large selection of industrial scanners, probes, software programs, and instrument accessories. We are committed to actively pursuing the development of new technologies, products, and services that offer the best solutions to customers' needs.

Visit our website at olympus-ims.com for our full product range, where you can now choose to purchase direct from our online store.

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Phoenix Inspection Systems are specialists in design and manufacture of ultrasonic non-destructive testing (NDT) equipment and solutions serving a wide range of industry sectors including nuclear and power generation, offshore oil, gas and petrochemical, aerospace and composites and rail.

Phoenix offer a dynamic range of standard NDT products, from manual and automated scanners, transducers and instrumentation to sophisticated nuclear inspection and turbine and generator systems.

Our products take into account the full range of ultrasonic NDT techniques, including phased array, corrosion mapping, pulse echo and TOFD, and are built to internationally recognised Quality Management Systems standard ISO 9001:2008. The Phoenix name is synonymous with custom-build solutions and we can design transducers and systems for the most challenging NDT inspections. If a standard product from our comprehensive range does not precisely fit your inspection needs, Phoenix has the expertise and capability to develop a customised solution to meet your specific requirements.

Established in 1983, Phoenix operates in countries worldwide through a network of agents and distributors.

Our products are used by some of the world's leading companies, to ensure safety standards and improve quality and efficiency, including: Airbus Operations Limited, BAE Systems, British Energy (EDF Energy), GE Energy, Alstom, TWI, Oceaneering International, SGS, Network Rail, Balfour Beatty Rail and Rolls Royce.
PMI Analytical
www.pmi-analytical.co.uk
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PMI Analytical were established in 2010 to promote and supply a range of Hand held XRF units and mobile OES systems manufactured by Bruker Elemental to the UK market. Servicing customers involved in many industrial and research applications ranging from Oil and Gas, Aerospace, Metal recycling and Geochemical industries. Beginning with the S1 Turbo SDD based unit back in 2010 and now the second generation expanded S1 Titan range.

PMI Analytical are in a position to provide a system which can be applied to most on-site testing requirements. Improved calibrations, innovative features like the Titan Detector Shield and IP54 approval, integrated camera and small spot options allows us to tailor a system to customer or application needs. Coupled with laboratory options for OES and Gas analysis from the Bruker portfolio PMI Analytical are a strong industrial partner for providing testing solutions for a wide range of applications and materials.

PMI Analytical can also supply laboratory systems from the Bruker range including OES and Diffusible hydrogen analysers when more in depth testing is required.

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Proceq is the leading Swiss manufacturer and inventor of the Equotip, the most renowned portable metal hardness tester of its kind. Proceq provides a complete range of portable non destructive testing instruments for metal, concrete and paper testing and has a certified service and calibration centre in Bedford and worldwide. The company’s strong research and development team continues to create products that set industries standards for portable hardness testing.

Hardness as a material property has long been used to determine consistency in the production of components, to test for conformity to specifications and more recently as a control of the service state of components in operation. Parts and components that are subjected to wear or heat can suffer a change in microstructure and mechanical properties over their service lifetime. This can result in failure and thus can be expensive and time consuming to repair. This can be prevented by a reliable inspection method. Traditional hardness test methods, such as Vickers, Brinell, or Rockwell, require the part to be brought to a bench-top instrument for testing. But some parts are simply too bulky or heavy to be carried to such a traditional hardness tester. This is where a portable hardness tester can come in very useful.

Portable methods such as the low-load Equostat 3 (Rockwell) and Equotip 3 (Leeb Rebound) provide quick and easy tools that can replace traditional methods based on lab environments or using delicate experimental setups.

The newest generation of Equotip 3 is unmatched in its implementation of the portable metal hardness testing concept and has therefore become established as a globally recognized measuring technique. The Equotip Piccolo 2 and Bambino 2 (pen type) are both suited for on site hardness checks where the indentation should be as small as possible. The Piccolo offers user defined metal hardness conversions and Piccolink software. Equostat 3 is ideal for the testing of light, thin-walled or tubular parts (<25mm) and rounds off Proceqs metal hardness testing portfolio.

Proceq will be delighted to demonstrate all of the instruments mentioned above during the event.
Feedback from our customers has revealed an increased focus on the training and certification of an additional sector in our industry specifically covering In-Service inspection, and with ongoing competency based training programmes.

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Established during August 2012, Rigmar Training Centre was founded to provide the North East of Scotland and Worldwide with a leading facility dedicated to non-destructive evaluation (NDE) and Industrial Rope Access Trade Association (IRATA) rope access training and Level 3 consultancy.

Today, Rigmar Training Centre is a leading training centre on providing training courses in non-destructive testing (NDT), NDE, IRATA and rope access for clients across 27 countries worldwide. Rigmar Training Centre employs experts in the field and currently holds over 60 years combined offshore and onshore experience, with approximately 20 years of experience on the training, examination and consultancy sectors, furthermore the company is fully accredited by the British Institute of Non-Destructive Testing (BINDT) as an ATO (Approved Training Organisation) and has been awarded both ISO 9001:2008 certification from the awarding body Det Norske Veritas (DNV) and IRATA approvals.

The success of Rigmar Training Centre has been meteoric, and we are very proud of the efforts made by all staff and their commitment to meet with compliance. With the support of our select accreditations we are in a fortunate position that we can deliver training for a wide range of courses at our East Tullos Training Centre or the convenience of having training delivered on site.

In addition to our work in the North East of Scotland, we are involved in projects internationally and have already visited several countries to support in the execution of training updates and nationalisation projects."
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Visit Sonatest to see and experience our new NDT inspection instruments ranging from the simple hand held thickness measurement gauges through to high-end portable advanced instruments; all ideal for challenging application environments.

Our products are designed to give the user a powerful tool that is easy to use and will withstand the harsh environments in which NDT is carried out.

Bring your inspection and application challenges along to the stand to discuss with our team.

Sonatest have a proven history in providing bespoke inspection solutions for the environment and the operators in the field. In line with Sonatest’s focus on achieving our goals of “Simplicity, Capability and Reliability”, both within our product development programs and customer relationships; Sonatest has a long history of product innovation and market firsts that continues today in the latest advanced NDT testing equipment such as the Prisma, VEO phased array flaw detector and WheelProbes and the recently released new range of conventional UT equipment.

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Contact Person: Steven Gordon, General Manager

Services and/or Products offered:
RSL NDT Limited is a distributor and stockist for all of the major manufacturers in the Non Destructive Testing Industry.

At our three locations throughout the UK (Aberdeen – Head Office, Hamilton – Kenged NDT, Sheffield – RSL Sheffield) we stock Equipment and Consumables for the main disciplines in NDT: Ultrasonics, Eddy Current, Magnetic Particle Testing, Dye Penetrant Testing, Radiography and Hardness Testing.

Our Labino and Spectroline Approved Service Centre offers a Repair and Calibration Service on most types of NDT Equipment and relevant accessories. Calibrations are done in accordance with the relevant British and International Standards.

All work is carried out in accordance with our BS EN ISO 9001:2008 accreditation
The UT Lite range is a multi-application portable UT system built around Silverwing’s UT400, and incorporating several scanning head / software solutions including:

- ToFD Lite: Manual ToFD system with A-Frame and H-Frame scanners.
- R-Scan Lite: Manual, dry-coupled B-Scan system
- Thetascan: Manual dry-coupled C-Scan system

The Pipescan range includes effective, easy to use MFL scanners for locating corrosion on exposed piping. Fast area coverage, minimum training requirements, and greatly improved POD compared to UT ‘gridding’ make the Pipescan a cost effective solution for pipeline corrosion surveys.

For more information please visit www.silverwingndt.com
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Contact Person(s): Bill Brown (Technical Manager),
Gordon Cook (Operations Director), Sam Peacock
(Business Development Coordinator)

Services and/or Products offered:
TRAC provides a comprehensive range of
inspection and non-destructive testing services
for materials and structures across all industry
sectors. TRAC is a BS EN ISO/IEC 17020:2004
accredited company.

We offer integrated packages to suit specific
requirements including full project management
and technical capability, conventional base
and site services, and a range of specialist and
advanced methods that utilise new and developing
technology including:

• Ultrasonic Inspection (UT)
• Magnetic Particle/ Dye Penetrant Inspection
  (MPI/DPI)
• Eddy Current Inspection (EC)
• Radiography (RAD)
• Controlled Area/ Digital Radiography
• Visual Inspection
• Coating Inspection
• Time of Flight Diffraction (TOFD)
• Corrosion Mapping
• Pulsed Eddy Current (PEC)
• Phased Array Ultrasonics
• Saturated Low Frequency Eddy Current
  (SLOFEC)
• Long Range Ultrasonics
• Wire Rope Inspection (LMA/LF)

In addition to our inspection capabilities TRAC are
also a leading provider of specialist rope access,
support and maintenance services.

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Services and/or Products offered:
Sonomatic is a worldwide organisation with
expertise in ultrasonic inspection design,
development and application dating back more
than 30 years.

Sonomatic are a leader in the development and
application of techniques such as TOFD (time of
flight diffraction), developing inspection methods
applied by in house field service engineers.

Integration of engineering and inspection services
for non-intrusive inspection (NII) benefits the
client through assessment of vessels for NII,
development and implementation of workscopes.
This removes the need for costly plant shut downs
to assess the internal condition.

Sonomatic is committed to providing cost-effective
inspections that enable clients to manage the
integrity of maturing assets.
TWI undertakes contract R&D in confidence for both industry and governments. It can offer individual experts or teams to help solve problems of all kinds related to materials joining. It will send its specialists anywhere in the world at short notice on troubleshooting missions.

Quality and reliability are of prime concern to industry. The recognised way of ensuring satisfactory performance is by working to relevant standards or specifications. TWI assists in the production of standards in the interest of its Member companies. It has representatives on more than 60 International, American and European committees and over 50 British Standard drafting groups. The field of activity covers welding engineering, welding equipment, structural integrity, corrosion, materials selection and joining of plastics.

Know-how within TWI covers materials properties and applications (ferrous and non-ferrous metals, polymers, ceramics, advanced composites, structural integrity, fracture, design and NDT), joining, fabricating and assembling technologies (welding and cutting processes, surface engineering, brazing, soldering, adhesive bonding, additive manufacture, electronic packaging), and manufacturing (project management, decision support, manufacturing systems, health and safety, quality assurance).

TWI operates a management system certificated by LRQA to BS EN ISO 9001:2008. It also has certificated management systems for health and safety (BS OHSAS 18001) and environment (BS EN ISO 14001).