Complete
Instrumentation Solutions

Newsletter

Analyzing the properties of materials, components and system for discontinuities.

Non Destructive Material Testing

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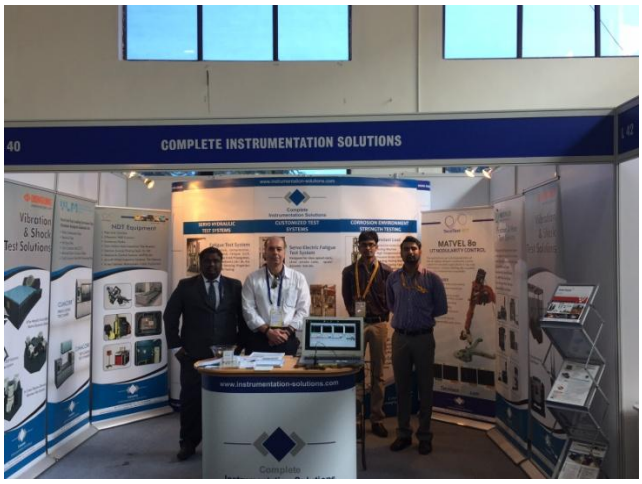
Events

HEMCE

10th International High Energy Materials Conference and Exhibits

We along with Suzhou Dongling Vibration Test Instrument Co. Ltd, China, participated in HEMCE - 2016 from 11th - 13th Feb 2016 on emerging trends in high energy materials primarily focused on performance enhancement. Recent developments in the field of HEM like thermally stable explosives, insensitive energetic materials and nano high energy materials were covered.

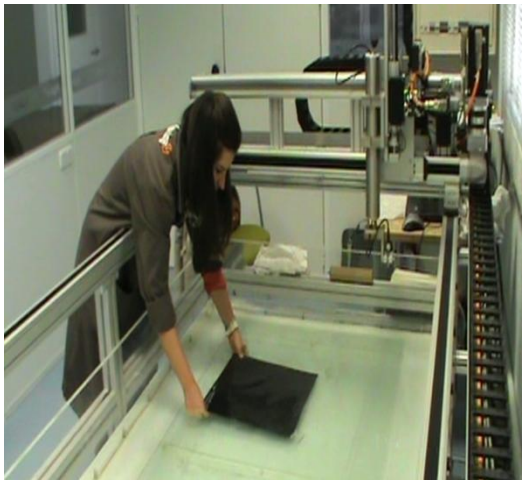
IFEX



12th International Exhibition on Foundry Technology, Equipment, Supplies and Services

We along with Tecnitest Ingenieros S.L, Spain and Suzhou Dongling Vibration Test Instrument Co. Ltd, China, participated in IFEX 2016 from 28th to 30th January 2016 held in Coimbatore. This is most important platform for the Foundry industry of the Indian sub-continent as a sourcing ground for all the foundry requirements. MatVel 8o-Nodularity Tester was displayed and demonstrated.

Non Destructive Material Testing



Immersion Tanks

The immersion tanks are built using a robust extruded aluminum frame with high movement precision and accuracy at all the available speeds. The basic mechanical concept for the tanks can be applied from lengths ranging from 1m to 15m and widths ranging from 0.3 to 3m. The systems have the capability to incorporate Linear Phased Array transducers along with Phased Array Ultrasonic equipment. These systems use PEAK NDT ultrasound equipment. Built on MicroPulse technology, the LT is a high performance ultrasonic system. The LT is implemented as a self contained unit designed to meet the requirement of IP67. This system comes with MS Windows based VisualScan, a complete dedicated software package, for ultrasonic inspection systems.

MatVel 8o- Nodularity Tester

The MatVel is an up to 8 channel state of the art digital ultrasonic nodularity control system for industrial application in the cast iron industry. It combines all the functionality of an outstanding flaw detector together with specific add-ons. The system can therefore meet the requirements for any set up, with live A-scan signal presentation and direct reading of acoustic velocity. The unit is main powered with proportional outputs and a velocity measurement mode function, allowing both on-screen display of the measured acoustic velocity value and an analogue or digital output. To optimize the performance of the MatVel a specific series of transducers have been developed.

Features

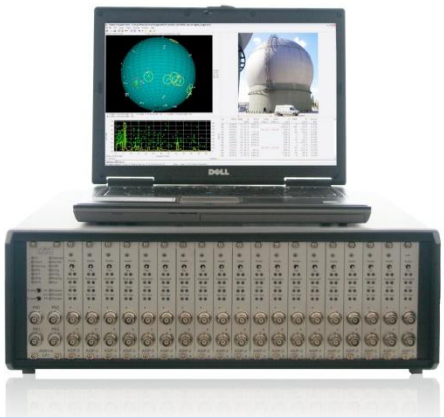
Matvel 8o Nodularity Tester

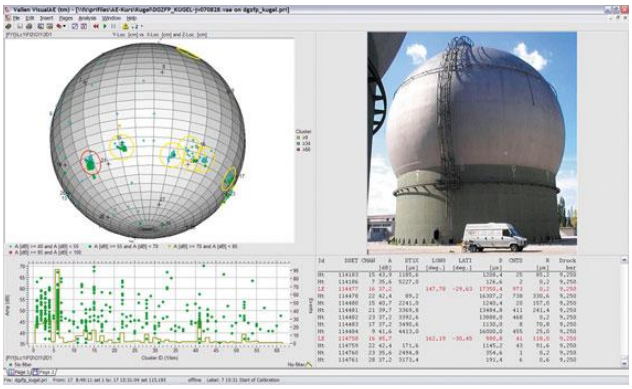
1. Full process automation and control.
2. Precise and consistent transducer placement.
3. Dry-coupled transducer avoids couplant/oil contamination of part.
4. Reduces cost by eliminating couplant and cleaning.
5. Direct read out of velocity.
6. User programmable alarm limits.

Immersion Tanks

1. High accuracy movement to +/- 0.01mm with a minimum index of 0.1mm.
2. From2 up to 8 motorized axis(standard), expandable.
3. Index adjystable from 0.1mm programmable speed to 500mm/s.
4. Control of movement made by commercial equipment to facilitate maintenance.
5. Software is user-friendly, fast programmable, create bitmap files and evaluate in real time.

Non Destructive Material Testing





Acoustic Emission (AE) Systems

Founded in 1980, German company Vallen Systeme GmbH (www.vallen.de) specializes in developing and manufacturing of instrumentation for AE Testing. Dedication to service, reliability, and performance has resulted in more than 500 satisfied customers worldwide. Their Acoustic Emission systems are proven in field service as well as laboratory research.

About Acoustic Emission

Technical systems, such as pressure vessels, piping systems and petrochemical reactors, are exposed to heavy stresses and require regular inspections. For those responsible for the safety of such structures AE testing can be of great value. AE testing detects beginning damage in stressed components, thus contributing to safe operation and avoiding costly downtimes. AE testing also offers large benefits for material, geological, medical and botanical research, detection and location of partial discharges in large transformers, leak and corrosion inspection of storage tanks, etc. It is also increasingly applied for tests and inspections in civil engineering (e.g. bridges) and in the automotive and aerospace industries.

Highly sensitive AE sensors detect stress waves on the surface of a test object. These waves originate from crack growth, for example, and propagate through the test object. The sensors' signals are analyzed, so that damage to the test object can be detected and located

Multi-Channel AE System AMSY-6

The Vallen AMSY-6 system covers the entire AE measurement chain. Using modular components, customized and expandable systems are configured, comprising sensors, preamplifiers, signal processors, system chassis, PC interface and software. Vallen offers all of this from a single source - products developed in Germany, a perfect match, in a very wide range of models and with extensive functionality.

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