

EMex 08

Exhibition of Experimental Mechanics



BRITISH SOCIETY FOR
STRAIN MEASUREMENT

10 September 2008

The BSSM's Exhibition of Experimental Mechanics (EMex) is the premier UK exhibition for manufacturers and suppliers of strain measurement and stress analysis equipment.

The 2008 exhibition will take place at the National Physical Laboratory (NPL), Teddington, west of London on Wednesday 10th September 2008, alongside the 6th BSSM International Conference on Advances in Experimental Mechanics 9-11 September 2008.

The 2008 conference continues the theme of recent advances in all aspects of Experimental Mechanics. Its aim is to bring together researchers in academia and industry to present novel work and to facilitate discussion and interchange of ideas

Exhibition opening times 10am to 4.30 pm. To visit the exhibition please register by contacting bianagale@bssm.org. Entry to EMex is inclusive of lunch and refreshments which will be served in the exhibition room and is free.



and the main London tourist attractions. It is easily reached by road, rail (from London Waterloo) and air (London Heathrow Airport). For more information visit www.npl.co.uk/location

Venue information NPL is the United Kingdom's national standards laboratory, an internationally respected, world-leading independent centre of excellence in research, development, and knowledge transfer in measurement and materials science.

For more than a century, NPL has developed and maintained some of the world's primary measurement standards - the heart of an infrastructure designed to ensure accuracy, consistency and innovation in physical measurement. The laboratory is located in Teddington, approximately 15 miles south west of central London, on the edge of Bushy Park and close to historic Hampton Court Palace, Kew Gardens

Emex 08 Exhibitors

Bose GmbH - ElectroForce Systems Group



Bose Corporation's ElectroForce™ Systems Group manufactures ElectroForce™ test instruments for materials research using proprietary linear motor technology such as characterization of plastics, rubber, biomaterials, stents, metals, composites and many types of viscoelastic engineered materials. These test instruments provide fatigue testing and characterization of a variety of specimens in tension, compression or bending. The instruments can be used in axial or even multi-axial configurations. For researchers involved in materials testing, Bose had introduced the ElectroForce 3450 test instrument for high-force dynamic mechanical analysis, which is well suited for the characterization of a variety of materials in a temperature controlled chamber.

Dantec Dynamics



Dantec Dynamics is a leading supplier of integrated optical measurement systems for fluid dynamics and solid mechanics applications.

We deliver state-of-the-art turn key systems to our customers worldwide supporting an ever widening range of applications with the latest techniques including Digital Image Correlation, Shearography and ESPI.

Displayed on the stand is our Q-400 system for the optical measurement of strain. This gives full field, 3D results and is a non-contact method. Applications include component testing, material testing, FEA validation and failure investigation.

Our Shearography systems for NDT applications offer the best available image quality combined with unrivalled measurement speed.

FLIR Systems



FLIR Systems is the leading supplier of research grade infrared cameras and systems for a wide range of thermal analysis and gas detection applications.

The recent acquisition of Cedip Infrared Systems has further expanded our portfolio to include the industry leading Titanium and Silver series of cameras.

FLIR's world-leading technology includes large format, high speed MWIR/LWIR cooled cameras, multi-spectral imaging systems, and specialised thermoelastic stress analysis and NDT systems. All systems are enhanced with sophisticated image processing software, and supported by excellent after-sales service and support.

GOM UK Ltd



GOM develops and distributes optical measuring systems with its main focus on applications such as 3D digitizing, 3D co-ordinates measurements, deformation measurement and quality control. GOM systems are used for product development and for quality assurance and material testing.

HBM UK Ltd



HBM, the global leader in test and measurement, will be displaying a number of its innovative products, offering unprecedented accuracy while being very easy to set-up and use.

These include HBM's universal amplifier, QuantumX, with its compact design that features eight connectors which independently recognize and support all current transducer technologies, reducing test setup configuration to a few minutes.

HBM will display its optical strain gages that ensure measurements are substantially easier and more convenient to complete accurately. Based on Fiber Bragg gratings these are particularly useful for measurements on fiber-reinforced plastics, in potentially explosive atmospheres and on high-current and high-voltage technology components.

HBM provides complete measuring solutions for a wide range of applications in any industrial applications and for any test measurement requirements.

Imetrum Ltd



IMETRUM is a high technology spin out from the University of Bristol that launched its first product to market in 2007. It was formed to exploit a new highly accurate technique for measuring 2D displacement & strain on materials, components & structures. The accuracy and ease of use of the IMETRUM non-contact video strain measurement system has created new standards for strain measurement in the aerospace, automotive, defence and construction industries

Instron



Instron is a leading provider of testing equipment for the material and structural testing markets. Providing single-source convenience, Instron's products are used to test the mechanical properties and performances of various materials, components and structures in a wide array of environments. Additionally, Instron offers a broad range of service capabilities, including assistance with laboratory management, calibration expertise and customer training.

LaVision UK Ltd



LaVisionUK Ltd supplies and supports Scientific imaging systems for the measurement of material properties in science labs within Universities, Government and Industrial research groups. Its wide range of systems include: StrainMaster 2D & 3D Digital Image Correlation systems

terms for full field deformation and Strain analysis, OCT for crack tracing & Point Tracker for high speed discrete mark tracking on deforming objects.

Limes GmbH



LIMESS develops, manufactures and distributes contactless systems for the 3D FULLFIELD MEASUREMENT of SHAPE, MOTION, DEFORMATION, STRAIN, VIBRATION and NDT. Applications are the measurement of material properties, component tests, material tests, structural tests, reverse engineering, non destructive testing and many more for research, product development, quality control and inspection. LIMESS systems are used in Aerospace, Automotive and in research centres and Universities and are partly based on digital image correlation. The systems cover static, periodic and highly dynamic applications with measurement field sizes ranging from less than 10mm² to more than 100m².

LIMESS develops also customer specific solutions of camera based measurement systems.

LMS



LMS is an engineering innovation partner for companies in the automotive, aerospace and other advanced manufacturing industries and helps organizations like yours to speed up the product design process and reduce development costs.

LMS offers a unique combination of 1D system simulation software, 3D virtual simulation software, mobile and lab testing systems, and engineering services in the areas of structural and modal analysis, motion, ride and handling, noise and vibration, acoustics and durability.

Mantracourt



Since 1974 Mantracourt has built a solid reputation for high performance, miniature electronics for use with a wide variety of measurement technologies.

Based in the South-West of England, Mantracourt has become firmly established as a global technology provider to several major OEM sensor manufacturers, and now has a product range of over 1000 designs, with measurement technologies including strain gauge, temperature, pressure, voltage, current, potentiometer, rate, flow, LVDT and displacement, in either analog, digital or combined form - wired, fieldbus and wireless.

nCode International Ltd



Photron (Europe) Ltd



Manufacturer of high speed digital video cameras

Si Plan Electronics Research Ltd



Stresstech Group



Stresstech Group serves metal industry with products and services for process control and quality inspection of camshafts, crankshafts, bearings, gears, valves, etc. We have applications for monitoring various manufacturing processes, such as grinding, super finishing, shot peening, heat treatment, case depth after case hardening, etc.

The solutions, instruments and measurement services are based on Barkhausen Noise (BN), X-ray Diffraction (XRD) and hole-drilling for studying residual stresses, retained austenite contents, grinding burns, heat treat defects, and hardness changes, welding stresses, etc.

Stresstech Groups main products cover the applications of automotive, machine and aerospace industries

Techni Measure



Techni Measure offers a wide range of sensors for measurement of strain, vibration, displacement, pressure, force, orientation and torque. Strain gauges and transducers from TML offer a vast range of gauges for most applications and with over 36 years of experience we would be pleased to offer our advice on any possible application. Vibration sensors include rugged industrial designs, through to miniature triaxial and shock sensors. Piezo-electric sensors for dynamic measurements or strain gauge based sensors for more general-purpose load or pressure monitoring are available. Various designs of displacement sensors, plus wireless and orientation systems are also available.

Vishay Measurements Group



For more than 40 years Vishay Measurements Group have been at the forefront of strain gauge technology, providing the highest quality strain gauges and associated accessories into every imaginable industry and application. Additionally, our unparalleled range of instrumentation includes our StrainSmart data systems, offering unrivalled ease of use and accuracy with innovative features to minimise the cost of ownership. Our full range of products is supported by our highly experienced engineers who provide on-site consultation free of charge, and our BSSM-qualified strain gauge installation service offers industry-leading quality at highly competitive prices for both one-off and high volume production applications.

VXI Technology Inc.



High density modular products for functional test and data acquisition

