

Brüel & Kjær UK **Monthly Newsletter**/March 2011

Welcome to the March issue of our monthly Newsletter, which provides a round up of the latest news, products and courses from Brüel & Kjær UK.

If you would like further information about any of the features in this newsletter, please contact ukinfo@bksv.com

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Environmental:

Powered by nature – Wind energy systems

Wind turbines are large, expensive investments that require rigorous monitoring at every stage, from design and development to manufacturing and operating.

The short time-to-market constrains the research and development process - and demands highly accurate, concise data gathering to ensure efficiency and longevity is built in.

Once operational, maximising efficiency requires minimising costly downtime and repair, troubleshooting rapidly and optimising energy output – whilst still maintaining good community relations.

Brüel & Kjær’s range of sound and vibration measurement solutions spans the complete measurement chain - from micro-transducers to powerful analysis software.

With an extended selection of vibration exciters, controllers and amplifiers, our equipment supports durability and fatigue testing on sub-components as well as large assembled units, to identify structural flaws.

Standards-based sound power measurement tools allow you to pinpoint noise sources and analyse them in detail, before representing the data in easily-understood acoustic maps.

Meanwhile long and short term monitoring solutions provide all of the tools you need to ensure compliance with local standards and regulations, keep local communities on side and prevent costly energy reductions.

Brüel & Kjær wind energy systems include:

Wind Farm Noise Monitoring

High noise levels can result in limitations on energy output, while overly-relaxed noise thresholds can cause conflicts with the local community.

Whatever your circumstances, gathering reliable operational data is key to optimising energy output while minimising complaints.

Read more about [Wind farm noise monitoring](#)



Wind Turbine Field Testing Tool

Noise plays an increasingly important role in wind energy, so understanding noise reduction is a critical factor during research, development and operation.

Accurate tools are necessary to locate and evaluate the noise from every aspect of turbine design - from blades to nacelle insulation.

Read more about [Wind Turbine Field Testing Tools](#)



For more information please contact: **+44 (0)1763 255 780** or email: ukinfo@bksv.com

Predictor-LimA Environmental Noise Calculation

Brüel & Kjær's **Predictor-LimA** is the market's most powerful and intuitive software suite for environmental noise calculation.

The Predictor-LimA Software Suite, Type 7810, is an efficient software package for environmental noise projects, which bundles the intuitive Predictor™ software and the powerful LimA™ software into one state-of-the-art package:

- ✓ New - All UK applicable calculation methods are available (depending on version purchased), including BS-5228:2009, CRN, CRTN, ISO-9613
- ✓ Basic version supports BS-5228:2009 and ISO-9613 only at the market's most affordable price
- ✓ Simple to operate even for infrequent users
- ✓ Intuitive and accurate modelling, also for complex situations
- ✓ Time-saving, integrated bookkeeping for model data and results
- ✓ Powerful result analysis and "what-if" scenarios
- ✓ Integration in environmental management, traffic management and Geographical Information Systems (GIS) as noise-calculation core
- ✓ Automated Reverse Engineering and Instant Noise Maps using measurements
- ✓ Automated workflows, including calculation, plots and more
- ✓ A wide range of calculation methods available in one suite



Cost-efficient - one license allows Predictor modelling on several linked PCs

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Industrial:

Subscription based noise management solutions for mine operators

Effective noise management is a necessity around mining sites.

The challenge for many mine operators is to grow operations whilst staying within acceptable noise limits - often defined as only 5 dB above background levels.

Public perception of exceeded noise levels can lead to complaints and constraints.

Gathering reliable and detailed data and sharing it with communities allows stakeholders' concerns to be addressed and can prevent problems for the operators.

Mine environment managers must adopt a range of measures to manage noise effectively, by reducing impact and managing both perceptions and expectations. To add to the challenge it must also be done cost-efficiently.

With a subscription to Noise Sentinel Mining, Brüel & Kjær provides noise monitoring equipment and operates it on your behalf, collecting the noise data you need to manage your business:

- ✓ Monitor noise levels continuously and demonstrate compliance with noise limits
- ✓ 24-hour-a-day recording
- ✓ Historical disturbances can be isolated and replayed to locate the source
- ✓ Manage noise in real-time and receive alerts so you can take action to reduce impact
- ✓ Interactive real-time noise display
- ✓ Immediate noise incident notification via automated e-mail, SMS or alarm
- ✓ Secure internet access - isolate, replay and analyse events from anywhere in the world
- ✓ Predict noise to feed your day-to-day operational decisions so you can get the most done within your noise limits
- ✓ Post relevant information relating to noise management – upcoming events, initiatives, reports, compliance history and enquiry procedures

Brüel & Kjær takes the responsibility for operation, calibration, support and equipment maintenance on your behalf, freeing you to focus on noise management and mitigation.

Learn more about subscription based noise management, by visiting the [Noise Sentinel product page](#)



Transducers & Conditioning:

Brüel & Kjær launches sound quality focused headphone amplifier

Sound quality testing using consumer panels is now a much quicker process with Brüel & Kjær's new Headphone Amplifier ZE-0769-004.



Subjective listening tests are vital for assessing a product's competitiveness and usually involves the evaluation of a product's sound quality by a group (or jury), representing the targeted customer group, who undertake a listening test.

Typically this is a lengthy and expensive procedure, requiring each jury member to test drive the prototype vehicle, in order to report back on the sound quality. This process has been speeded up by using a binaural head - such as a Head and Torso Simulator (HATS) - in the car to make a high quality recording of the sounds directly onto the hard disk of a computer.

The recording is then played back to all the panel members via headphones, at an off site venue.

Since the absolute level has a direct effect on juror preference, the headphone amplifier is designed to give the same level in all channels and has stepped gain control to be able to accurately return to a previous setting.



The amplifier produces an exact replica of the input signal and delivers the unfiltered (and possibly attenuated) signal to all outputs.

The amplifier supports listening panels for up to 12 people and is ideal for sound evaluation during the design phase, prototype evaluation or trouble-shooting of new vehicles.

For more information, please contact: **+44 (0)1763 255 780**
or email: ukinfo@bksv.com

Brüel & Kjær Service Centre:

Improved FAQ Section

Brüel & Kjær's improved website FAQ section now contains approximately 300 Frequently Asked Questions about a wide range of acoustic and noise related tools, including:

- ✓ Sound Level Meters
- ✓ Vibration Control Systems
- ✓ Environmental Noise and Vibration products

Visitors select the product area they are seeking information on and use drop down menus to produce search results (*below*):

Frequently Asked Questions

Frequently asked questions about sound level meters, including software, vibration control systems and environmental noise and vibration products.

To see which type numbers are covered by the FAQs, please refer to the type number drop-down list.

Please use the filters and/or free text search to create a list of questions and answers relevant to your problems.

Product area	<input type="checkbox"/> Calibrations	Type number	<input type="text" value="Any"/>
	<input type="checkbox"/> Telecom/ Audio systems	Problem Type	<input type="text" value="Any"/>
	<input type="checkbox"/> Transducers	Free text	<input type="text"/>
	<input type="checkbox"/> Urban NMT		
	<input type="checkbox"/> Urban Noise Prediction Software		
	<input type="checkbox"/> Sound Level Meters		
	<input type="checkbox"/> Sound Level Meter Software		
	<input type="checkbox"/> Vibration Control System		
	<input type="checkbox"/> Environmental Software		
	<input type="checkbox"/> Dosimeter		

SEARCH

For more information, please visit the Support section of our website:
[Brüel & Kjaer FAQ Section](#)

Training & Courses:

Bruel & Kjaer UK's Training Courses & Webinars 2011

Bruel & Kjaer UK's **2011 Training Course Calendar** is available to download via our website, please [Click Here](#)

Bruel & Kjaer UK Courses 2011:

PULSE User Training - 4th & 5th May
[Register Now](#)

Theory & Practice of Noise Measurement -
18th & 19th May
[Register Now](#)



Bruel & Kjaer UK FREE Interactive Training Sessions

Take advantage of free online training with Bruel and Kjaer UK's expert engineers by signing up for our one-hour web-based courses:

Building Acoustics - 31st March
[Register Here](#)

Basic 2250 Training - 12th May
[Register Now](#)

Advanced 2250 Training - 19th May
[Register Now](#)

MATRON-3 Training - 26th May
[Register Now](#)

Basic 2250 Training - 09th June
[Register Now](#)

Advanced 2250 Training - 16th June
[Register Now](#)

MATRON-3 Training – 23rd June
[Register Now](#)

Building Acoustics - 30th June
[Register Now](#)



Vibration Testing for Engineers and Technicians

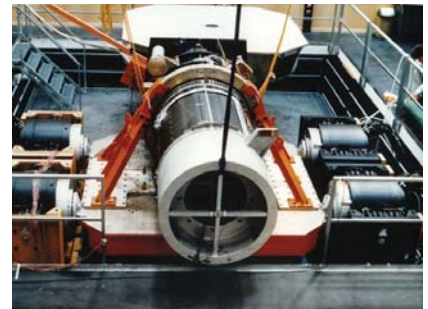
This two day course provides a practical introduction to the subject of vibration testing. Designed around the needs of engineers new to the subject of vibration testing and yet offering a useful refresher course for the more experienced user, this course explains how to interpret vibration test specifications and apply them to a vibration test system.

Subjects covered are sinusoidal vibration, random vibration, and shock/bump testing together with a background to the equipment required for each type of test, methods of control and simple fixturing.

The course emphasises the practical aspects of vibration testing - the realities, the problems encountered and the common mistakes which can be made.

The course removes the mystery and mystique of vibration testing and replaces it with facts and common sense.

10th & 11th May - [Register Now](#)



Vibration hands on practical course and test simulation

An optional 3rd day is available which covers the LDS Laser usb Controller for sine, random, shock and mixed mode testing and continues a more in depth hands on for the student. Tests will be run on an LDS V830 to provide each student with confidence for a realistic setup of an air cooled system.

Day 3 is 90% practical and puts into practice the lessons learnt on days 1 and 2, including all project parameters, error messages and control methods whilst observing resonance and Limit control on a test piece.

Bring along your specifications and requirements.

The 3rd day will be restricted to a maximum of 6 customers to allow all students some test time. (Only available at Royston UK company Headquarters)

12th May - [Register Now](#)

Bespoke Training

LDS also offers bespoke, onsite training courses for customers.

For further details on these specialised courses, please contact:
trevor.harrison@bksv.com

[See all Vibration Training dates here](#)

Global product & service information:

Accelerate your vibration testing

With manufacturers facing constant pressure to shorten product design cycles, accelerating traditional vibration test times is a critical consideration.

Fortunately, Brüel & Kjær and HBM-nCode offer products that significantly reduce vibration test times without exposing the vehicle or component to unrealistic vibration levels.

Traditional Gaussian random test signals can't accurately represent the 'peaky' vibration signals seen in the real-life use of many products. To address this, the LDS LASERUSB Vibration Controller from Brüel & Kjær offers non-Gaussian random vibration through its Kurtosis Control software.



The ability to tailor kurtosis ('peakedness') allows for accelerated fatigue testing that saves time, as testing with high kurtosis delivers more time at high acceleration levels. For a durability test lasting many hours, high-kurtosis testing delivers significantly more fatigue damage than a Gaussian random test.

So how do you accurately simulate the conditions that brought about your measured field data? That's where nCode GlyphWorks® software by HBM comes in, as the only commercial software that makes it possible to quantify the fatigue of vibration testing and subsequently create a representative PSD or swept-sine shaker vibration test.

nCode GlyphWorks enables the combination of multiple time or frequency domain data sets into representative test spectra that accelerate the test while matching the fatigue damage seen in the field data.

As HBM is a sister company to Brüel & Kjær under the Spectris umbrella, accelerated test spectra exported from nCode GlyphWorks are easily imported into Brüel & Kjær controllers to perform shaker table tests.

New Pulse Catalogue

Brüel & Kjær has updated its **PULSE data acquisition system** catalogue.

PULSE™ is Brüel & Kjær's noise and vibration analysis platform and builds on more than 60 years of measurement experience and innovation.

Read about the latest in its vast range of software applications and hardware configurations:

PULSE ANALYZERS & solutions



[Download PULSE Catalogue Vs 19](#)

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