We Understand Aerospace & Defence Industry Needs

The challenges facing manufacturers today seem insurmountable. Products have to be delivered faster, safer, be more reliable, sound better, be more comfortable. All this, while at the same time keeping costs down and complying with strict legislation.

Covering the whole measurement chain, our customers dedicate test and analysis solutions to your noise and vibration problems – improving quality and test efficiency, differentiating your products and helping you comply with the demands of legislation.

Developed with Customers in Mind

Customer feedback is all important to us – so by listening to, and working closely with our customers we develop with their needs paramount. Whatever the application, whatever the requirements, measurements of great precision and accuracy are paramount.

We have an extensive range of standard COTS (Commercial Off the Shelf) solutions. We can also supply turnkey solutions or the off-the-shelf range of transducers within force, vibration, pressure and sound. The technologies span piezoelectric, DeltaTron variable capacitance, piezoresistive and condenser principles. In addition to standard measurements, this enables Brüel & Kjaer to provide sensor instrumentation for practically any application including:

- Extreme high-shock applications
- Full scale fatigue testing
- Surface microphones for use on airplane surfaces during in-flight and wind-tunnel testing
- Charge accelerometers operating at temperatures exceeding 650°C
- Flight test accelerometers with TEDS for fast and easy identification
- Structural dynamics requiring miniature triaxial accelerometers with TEDS for size and ease of identification
- Flight test accelerometers with excellent low-temperature stability
- Change accelerometers operating at temperature exceeding 80°C
- Surface microphones for use on airplane-surfaces during in-flight and wind tunnel testing
- Accurate scale model testing up to 700kN and 100kN
- Full scale fatigue testing
- Ballistic high-shock applications

Noise and Vibration Solutions

Solutions

Aerospace & Defence

Service and Support

With our after-sales and support service, you are assured accurate results easily, efficiently, and confidently.

With Brüel & Kjaer you have one vendor for technical support for software, calibration and hardware maintenance.

A PULSE Software Maintenance and Support Agreement gives you access to software releases and technical support from a global network of specialists – you’re always up-to-date and never alone.

Calibration can be combined with a hardware maintenance agreement so the time your instrument is away for service is minimal.

With Brüel & Kjaer you can be confident that your noise and vibration test requirements change – you’re always up-to-date and never alone.

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Investing in Danish Innovation

Global Sales and Support
Brüel & Kjaer is a global leader. In fact, with more than 80 sales offices in 48 countries supported by a team of application specialists at our Headquarters in Denmark, we have the largest sales and support network in the world that is ensuring this globalization that allows us to think and act locally. With eight accredited calibration centers worldwide, and 500 employees working within local sales, service, and support, we provide you with immediate customer support no matter where you are.

The Industry's Most Comprehensive Product Range
From specialist transducers, multichannel data acquisition, and noise- and task-oriented application software to final documentation and reporting, we have all you need for your aerospace noise and vibration testing – and all from one supplier.

Acoustic Test Suite
Whether your interest is exterior or interior noise, our acoustic test suite provides data acquisition and evaluation solutions for controlling your noise problems – optimizing noise performance, improving sound quality and ensuring compliance with environmental legislation.

- Noise source mapping and location
- Wind tunnel and flight testing
- Engine and aircraft certification
- Acoustic material testing
- Cabin comfort and occupational health
- Ramp noise and taxi booms
- Underwater acoustics

Environmental Test Suite
Reproducing realistic environmental conditions in the laboratory is a must for qualifying the real-life integrity of structures to ensure durability. Whether it be billion dollar satellites, launchers, aircraft, instruments or structures, our comprehensive test suite can provide you with a wealth of environmental test solutions.

- Salts, sand, sun on randoms, random on random testing
- Classical shock
- Steady state spectrum
- Kurlation
- Acoustic fatigue
- Field data replication
- Wave recording

Structural Test Suite
Structural dynamics testing is essentially understanding and explaining the inherent dynamic properties of structures to ensure reliable and safe operation. Our structural test suite offers complete solutions for controlled excitation test, multi-life operational test and test/FEA integration – from the smallest components to the largest assembled structures.

- Operating deflection shape analysis
- Operational modal analysis
- Damage tolerance
- Normal mode testing
- Structural dynamics modifications
- Model correlation and updating

Rotating Test Suite
Vibration analysis of rotating machinery provides valuable information on engine health, reliability and performance. Ranging from RBI and production test cell applications to original maintenance schemes, our vibration measurement and analysis solutions can provide you with powerful real-time analysis tools.

- Vibration data analysis and diagnostics
- Vibration data acquisition and analysis in engine test cells
- Geared vibration monitoring and inspection
- Order analysis and fault tracking
- Balancing and trim balancing
- IMU transducers

Environmental Test Suite
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