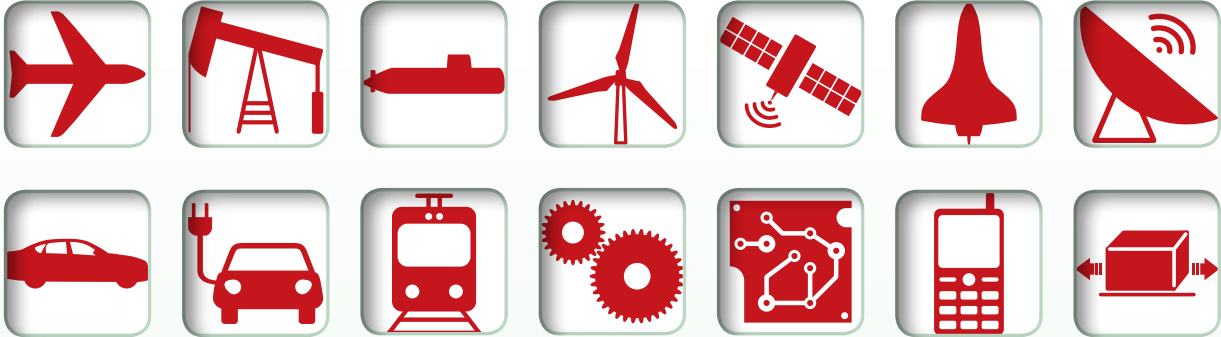


V9x – Unmatched performance

When completing your vibration test on time is priority one



Endurance and durability are a must when tougher standards and tighter deadlines require testing to be more aggressive and robust.

The high-specification, enhanced performance V9x shaker is the solution for you.



from Brüel & Kjær

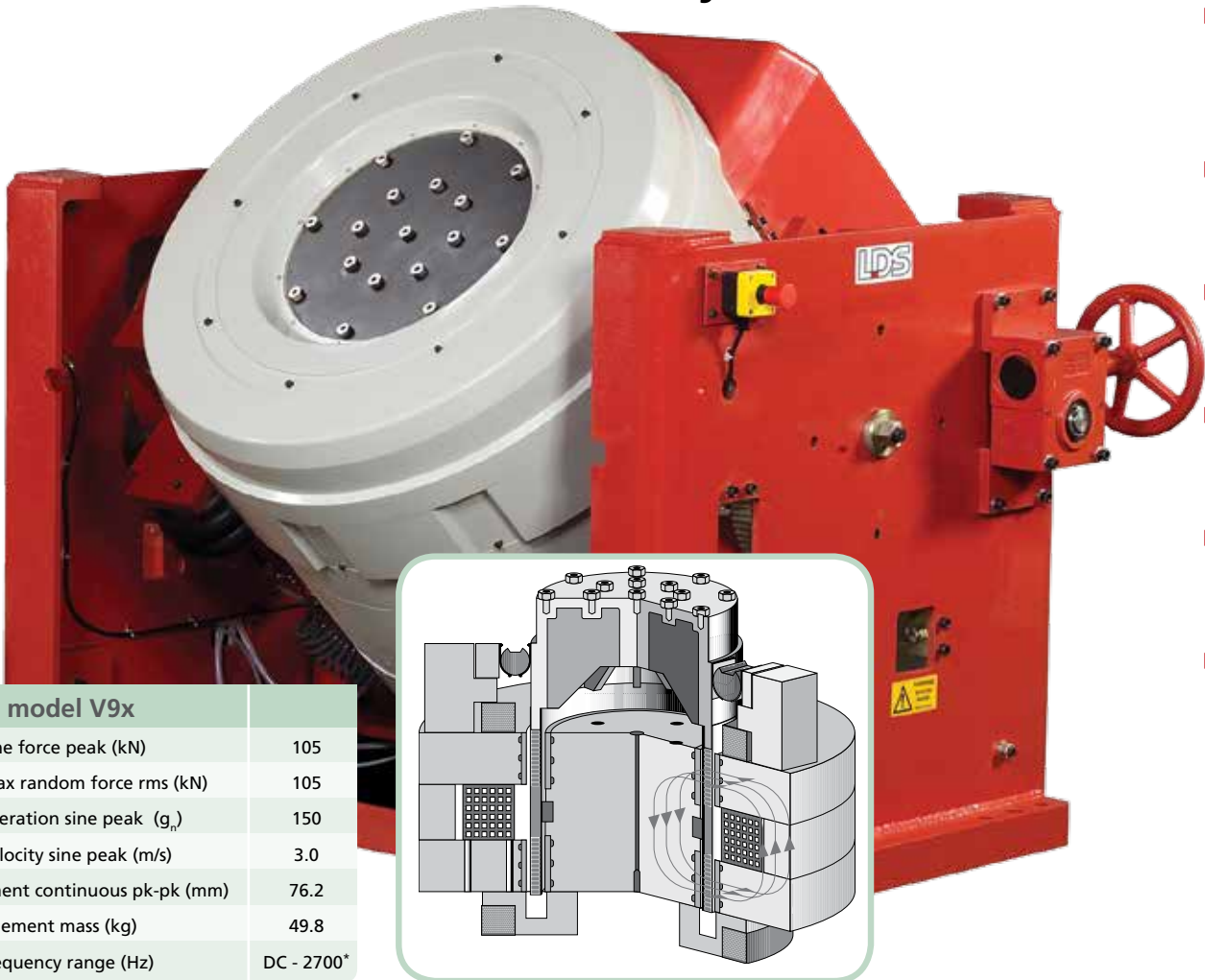
www.bksv.com/lds

V9x – Proven performance and versatility

- ▶ Versatile, multi-axis, multi-purpose shaker system with all the capability demanded for durability testing, stress screening and R&D qualification testing
 - Suitable for high-force, long-duration sine and random tests, as well as low-frequency and shock pulse tests
- ▶ Market-leading specifications. Maximum force, velocity and displacement provides the highest achievable envelope of testing parameters on very heavy payloads
- ▶ Fully water-cooled:
 - Enables prolonged and continuous testing at maximum force levels
 - Designed for operation in controlled environments such as clean rooms and for testing materials where minimal air circulation is required
- ▶ Proven performance – largest installed base of high-force shakers in the world

| Shaker model V9x | |
|--|------------|
| System sine force peak (kN) | 105 |
| System max random force rms (kN) | 105 |
| Max acceleration sine peak (g _r) | 150 |
| System velocity sine peak (m/s) | 3.0 |
| Displacement continuous pk-pk (mm) | 76.2 |
| Moving element mass (kg) | 49.8 |
| Usable frequency range (Hz) | DC - 2700* |

*Control strategy and isolation dependent



High-force electrodynamic shaker

- ▶ Long, 76.2 mm stroke allows greater acceleration at low frequencies, combined with higher maximum velocity
- ▶ Advanced switching power amplifier offers extreme reliability, simple installation and easy operation
- ▶ Powerful LDS vibration control system enables remote monitoring and control
- ▶ Heavy payload support – up to 1800 kg vertical and 12 tonnes for horizontal operation
- ▶ Systems can be tailored for special applications such as load-bearing platforms
- ▶ Lin-E-Air trunnion as standard allows vertical or horizontal operation with optional slip table

Resilient and flexible

- ▶ Minimises risk of failure and down-time – robust, reliable and efficient for continuous 24/7 operation
- ▶ Easily integrated with environmental chambers
- ▶ Proven to take on any test – from extreme testing where large sub-assemblies for cars and aeroplanes are exhausted and literally broken, to testing of delicate components for aerospace

Customised solutions and project management

The V9x has been delivered for many special requirements and applications:

- ▶ Multiple shaker system configured according to customer-specific needs – as one-offs, as dual parallel and push-pull applications, or even as a quad reconfigurable parallel/push-pull system
- ▶ Complete turnkey solutions with dedicated project management. From defining your needs to final installation and training

V9x – THE RESULT OF A 10-YEAR EVOLUTION – ALREADY IN USE ACROSS THESE INDUSTRIES WORLDWIDE



- SPACE TESTING**
- Rocket and satellite components
 - Space exploration vehicles and components
 - Telescope and telecommunication components
 - Fuel tanks and related components



- OIL DRILL TESTING**
- Drill bits and drill bit communication components (electronics)



- AUTOMOTIVE TESTING BY LEADING OEMS AND SUB-SUPPLIERS**
- Large automotive sub-assemblies and components such as engines
 - Full battery sub-assemblies for electric vehicles
 - Powertrain components
 - Cooling and exhaust systems



- AEROSPACE TESTING**
- Engine sub-assemblies
 - Undercarriage components
 - Avionics



- DEFENCE TESTING**
- Military equipment
 - Military transportation testing



- WIND TURBINE TESTING**
- Gearboxes and turbine components



- TRANSPORT SIMULATION AND PACKAGE TESTING**
- Consumer products in transport boxes and packaging
 - Delicate instrumentation



- HIGH-SPEED TRAIN TESTING**
- Sub-assemblies
 - Down scaled train testing



- TEST HOUSES**
- Continuous 24/7 testing of any payload

Brüel & Kjær and LDS – the perfect match

- ▶ One company, one approach – building on over 120 combined years serving the global sound and vibration market
- ▶ The world's largest producer of shakers with the largest installed base of vibration test systems, with the expertise to address any vibration test scenario

The full measurement chain

We cover the full measurement and test chain, giving everything you need from one experienced supplier

- ▶ Shakers
- ▶ Slip tables
- ▶ Head expanders
- ▶ Fixtures
- ▶ Amplifiers
- ▶ Transducers
- ▶ Cables
- ▶ Vibration controllers
- ▶ Data acquisition
- ▶ Structural analysis
- ▶ Advanced real-time analysis and post-processing



GENUINE
SPARE PARTS
LDS
Brüel & Kjær

World-class service and global support

Your choice of service partner is as critical as your choice of system. To help you get the most out of your investment, our support services include:

- ▶ On-site service, regular maintenance, and repair using original equipment and genuine spare parts
- ▶ Installation support and training by our global team of engineering experts to get you up and running
- ▶ Engineering test services
- ▶ Dedicated technical support with fast response times
- ▶ Service agreements and preventative maintenance plans

BRÜEL & KJÆR is a world-leading manufacturer and supplier of sound and vibration measurement systems.

We help our partners and customers measure and manage the quality of sound and vibration in products and the environment. Our focus areas are automotive businesses, ground transportation, aerospace, space, defence, airport environment, urban environment, telecom and audio.

Brüel & Kjær has an unparalleled portfolio of sound and vibration measuring equipment and is a renowned provider of innovative instrumentation solutions.

With more than 90 sales offices or local agents in 55 countries and a number of calibration centres worldwide, we provide immediate and comprehensive customer support.

WANT TO KNOW MORE?

If you would like more information, please contact your local sales representative or go to:

www.bksv.com/lds