



Air-cooled vibration testing facility

Data Physics SignalForce V2644 air-cooled shaker

Electrodynamic shaker system in custom-built enclosure for performance of full range of vibration tests.

Features and benefits

- Four-channel controller for accurate acceleration control
- Acceleration time history capability allowing reproduction of field-measured accelerations
- Resonance search functionality allowing the identification of structures' resonance frequencies
- Mounted on isolated trunnion to allow tilting the shaker for vibration tests on elongated structures (eg pipework)

Some applications

- Modal characterisation of structures and mechanisms through identification of resonance frequencies
- Reproduction of field-measured real vibrations for accurate testing and validation of structures and systems
- Joining qualification under vibration
- Electric boards and hybrid system testing and qualifications
- Characterisation and validation of anti-vibration and active vibration control systems
- Correlation of numerical simulations and testing
- Testing additively manufactured parts designed with optimised damping characteristics

Technical specification

- Maximum vertical payload: 500Kg
- Frequency range up to 3000Hz
- Maximum sine force: 26.7kN
- Maximum random force: 22.2kN
- Maximum acceleration: 68g
- Maximum half-sine shock: 80kN
- Maximum velocity: 1.5m/s
- Maximum peak-to-peak displacement: 51mm
- Table diameter: 440mm

