EMPOWERING TECHNOLOGY

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Why calibration is important?

What is calibration: Calibration is a process of measuring an output of the measurement instrument or device in comparison with a reference or master instrument in a controlled environment or specific measurement conditions.

Here in this article, we will discuss calibration of accelerometers and microphones with more focus. No matter how expensive your measuring instruments are (an accelerometer or microphone or any measuring instrument/device) or of the highest quality your instrument is or the best in the market is, all measurement instruments require calibration in regular intervals.

Why we should calibrate: regular calibration of accelerometers and microphones and using the new calibrated sensitivity for your measurements and test, yields repetitive, accurate and precise test results.

A calibration certificate provides you with the deviation of the instrument with reference to the master instrument and the traceability to the Standards. Please find below calibration solutions what ADAMS could offer

Acoustic & Vibration Calibration Solutions

Shock calibration systems

Acoustic Calibration Solutions

Vibration Calibration Solutions

Acoustic & Vibration Calibration Solutions from - Spektra, Germany

Acoustic & Vibration Calibration Solutions from M/s. Spektra-DRESDEN, Germany

CV-01: Hand held 1g shaker

- Frequency: 159,15 Hz ±0,02%
- Acceleration: 10 m/s² ±2%

CV-10: Mobile calibration system for FIELD calibration of Accelerometers

- Frequency Range: 5 Hz ... 10 kHz
- Max. Amplitude: 200 m/s²
- Fully operational in a rugged case

CS-18 Systems: Vibration & Acoustic System:

Sensors – IEPE, Voltage, MEMS & PR
Frequency range: available in Low frequency, medium frequency & high frequency

Shock Calibration Systems from - Spektra, Germany

CS18 LS: Secondary calibration of shock-sensors

CS18P MS: Primary calibration of shock transducers

Acoustic Calibration Solutions from - GRAS Sound & Vibration AS, Denmark

Audiometer Calibration System

90AA
Level, frequency & distortion

Reference calibration Source

42AA: 114 dB, 250 Hz, Class 1
42AC: 134 dB, 250 Hz, Class 1
42AP: 114 dB, 250 Hz; Class 0

Field Use:
42AG: 250 & 100 Hz, 114 dB & 94 dB

Microphone calibration System

90CA-S2
Level (250 Hz, 114 dB) & Frequency (200 Hz-92 KHz) calibration

51AB: Intensity calibrator (for calibrating phase response of a pair of microphones used for measuring sound Intensity.

42AE: Calibration of microphones between the frequency as low as 0.1 Hz – 50 Hz

Vibration Calibration Solutions from MMF, Germany

VC120: Rapid and easy calibration of vibration measuring systems

VC 20 & VC21: Quick and simple calibration and fault detection of sensors

VC21D: Vibration magnitude selectable in 5 steps from 1 to 20 m/s²
Vibration magnitudes 1 / 2 / 5 / 10 / 20 m/s²

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