

## PNEUSHOCK™ CALIBRATION WORKSTATION



The Shock Calibration Workstation Model K9525C allows the user to measure the sensor sensitivity at high acceleration levels up to 10,000g in accordance with ISO 16063-22. This system is fully turnkey, includes a PC and data acquisition card, stores shock calibration results using Microsoft Access, and has an easy-to-use software interface. PneuShock™, a state-of-the-art shock exciter, makes use of a pneumatically operated projectile to strike an anvil and excite the sensor. By controlling both the air pressure and the duration of which the pressure is applied, the user gains greater control and consistency of the impacts.

The PneuShock™ Calibration Workstation Model K9525C features an ICP® reference accelerometer, PCB Model 301A12, for calibrations according to ISO 16063-22. Printed certificates fulfill the requirements set forth by ISO 17025 for calibration certificates, and are fully customizable using the Microsoft Excel environment.

### **BENEFITS:**

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- Provides calibration and linearity check from 20 g to 10,000 g
- Uses state-of-the-art pneumatically actuated exciter (requires 90 to 150 psi) providing controlled and consistent impacts
- Includes variety of impact anvils and projectiles to tailor the impulse shape for frequency content and shock level
- Compatible with standard back-to-back shock reference accelerometers
- Provides graphical indication of sensor amplitude linearity
- Electronic control unit provides user control of projectile drive pressure and pulse width
- Digital pressure indication aids in control and repeatability



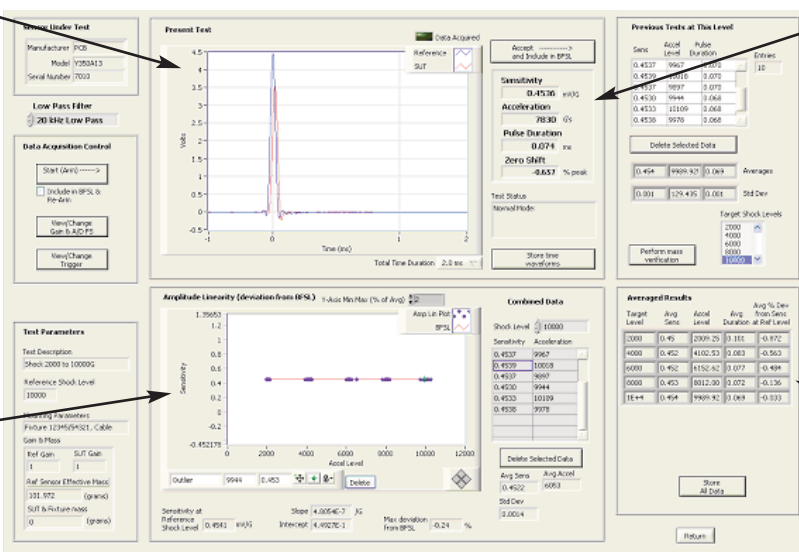


# MODEL K9525C

The K9525C Shock Calibration system provides verification and linearity check from 20g to 10,000g allowing accurate calibration of shock accelerometers at amplitude levels used in actual testing. The K9525C can easily be upgraded to a full Model 9155C Accelerometer Calibration Workstation.

Acceleration Range	20g - 10,000g [196 - 98,000 m/s <sup>2</sup> ]
Reference	PCB Model 301A12
Type	ICP® Accelerometer
Sensitivity	0.5 mV/g
Uncertainty	2.5% typical
Sensor Mounting	1/4-28 UNF Thread Size
Air Supply Pressure	90 - 150 psi [6.2 - 10 bar]
ISO 8573.1 Quality Class	4
Air Filter Requirements	
Dirt (Particle Size)	15 micron
Water Pressure Dewpoint (100 psi gauge)	37 °F [3 °C] (128 ppm vol.)
Oil (including vapor)	5 mg/m <sup>3</sup>

Displayed time data allows technician to view waveform and check for anomalies in the shock pulse



Linearity plot provides a good overview of test results during the test

Software automatically computes values such as sensitivity, acceleration, pulse duration and zero shift

Results table provides a quick look at the average results for all test levels

## OTHER CALIBRATION SYSTEMS:

9155C - Turnkey Accelerometer Calibration Workstation. Calibrates accelerometers per ISO 16063-21 from 5 Hz to 20 kHz.

K394A30/A31 - Precision Air Bearing Shaker System. Performs accurate calibrations from 2 Hz to 15 kHz (or 20 kHz using the K394A31) and resonant searches to 50 kHz.

9350C - Precision Acoustic Calibration Workstation. Calibrates 1/4", 1/2" and 1" microphone cartridges (open circuit sensitivity), microphone cartridges with preamplifiers (closed circuit sensitivity), as well as microphone Frequency Response Function.

9963C - Structural Gravimetric Calibration System. Calibrates accelerometers, force sensors, and impact hammers utilizing the Earth's gravitational field as a reference.

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