sensor & calibration tips

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Greetings,

Welcome to Issue #43

Welcome! The seasons are changing... and like the seasons there is always something new around the corner at The Modal Shop. Innovation is one of our core values and we're happy to share the latest in new technologies and processes to help you make better dynamic measurements. This month you can learn more about both the practical topic of recalibrating your accelerometer calibration system and the exotic topic of the extreme displacements needed for ultralow frequency calibration. Don't forget to check out the growing vault of technical topics on dynamic sensing, applications and best practices in calibration...

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Tip of the Month

Recalibrating References

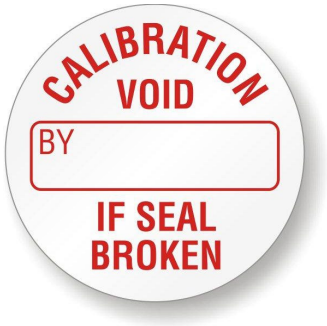
When reference standards get recalibrated, the data should be compared to previous data. Ask your calibration provider if they include this service. If not, it's something that you should do upon receipt of the reference standard.

Quick Links

NCSL
IMEKO
PTB
NIST
ISO TC 108 - Mechanical vibration, shock and condition monitoring
ISO TC 108/SC 3 - Use and calibration of vibration and shock measuring instruments
SAVIAC
Vibration Institute

Previous Newsletter

Calibrating the Calibration System



Control, confidence and low uncertainties are the hallmark characteristics of a quality metrology laboratory. The basis for this operation is quality calibration equipment, sensor specific operator knowledge, as well as solid business and calibration processes. One vital key in this type of operation is maintaining proper control and calibration of the calibration system. In general, there are three reference calibration paths a laboratory can choose which provide various tradeoffs in downtime, cost and risk...

Click here to read more
http://www.modalshop.com/calibration.asp?ID=461

A Game of Inches... or Centimeters

The game of American football is sometimes called a "game of inches." Just as an inch of extra forward progress can determine the outcome of an individual play, an inch (or centimeter) can also determine the quality of your calibration at low frequency. As a rule of thumb, in the low frequency range there is no substitute for a longer stroke exciter...

Click here to read more
http://www.modalshop.com/calibration.asp?ID=464

Blast from the Past...

sensor & cal tips #42 - Sensing Calibration News; Q&A on Calibration and Resonance Search

sensor & cal tips #41 - Sensing Calibration News; Can I Create My Own DVM?

Select Newsletter Articles by Topic

Function and Structure of Accelerometers

Similarities Between Charge and ICP Operation

Selecting Accelerometers for Mechanical Shock

Master List of Topics (T.O.C.)

PCB Group Companies

The Modal Shop website
PCB Piezotronics website
IMI website
Larson Davis website
PCB Load & Torque website

For those who may be new to our newsletter, we wanted to highlight an article from a previous *sensor & calibration tips* - **Aerospace and Defense Calibration**

Nowhere is the price of product or mission failure as high as it is in the aerospace and defense markets. A satellite failure can cost hundreds of millions of dollars, while an aircraft or military failure can cost incalculable value in the loss of lives. In response to this inherent market pressure, an extreme level of confidence is required of the test and data integrity. And, as with all measurement situations, confidence starts with the integrity of the calibration. Clearly, confidence is the key. This drives aerospace and defense (A&D) organizations to have heightened and specific needs in terms of accuracy, reliability and reputation in their sensor calibrations. This month we'll outline some of the details to filling these needs in A&D vibration sensor calibration...

Click here to read more
http://www.modalshop.com/calibration.asp?ID=314

We're happy you are with us each month for continuing news and learning on the growing and everchanging technologies in dynamic sensing and calibration. You may have noticed that when you click to read a full article, we have added a discuss feature at the bottom of the page. We've incorporated this feature to allow for questions, comments and interactive discussion. So, please, when you read the articles, go ahead and make a comment... We all have something to contribute and plenty to learn from one another!

Sincerely,

Michael J. Lally
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A PCB Group Company
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