sensor & calibration tips

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Greetings,

Welcome to Issue #49

Welcome back! With the ever impressive and expanding world wide web technologies, people can be connected all across the world. In fact, this edition of sensor & calibration tips comes to you from the beautiful city of Bergamo, Italy.

We are excited to bring you a host of tips and tricks for both dynamic sensing and calibration from across the world. Please remember to check out our growing archive for any topics you've missed along the way. As always, we are here to serve you - so let us know if there are topics you would like to see covered in a future edition!

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Tip of the Month

Leverage the boom in social media and join an active technical community.

Consider joining any number of forums found on LinkedIn by searching the terms below:
-Calibration
-Test and Measurement
-Vibration
-Acoustics
-Sound

Other miscellaneous forums:
-Vibration Institute
-Mechanical Acoustics/ Vibration Engineering Forum

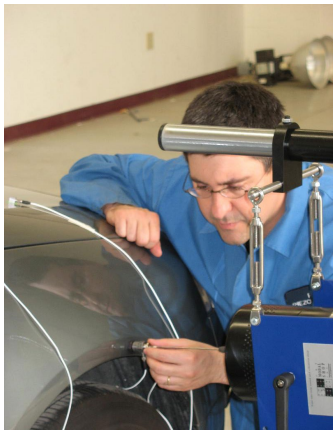
Quick Links

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

Tutorial in Modal Shaker Excitation: Methods and Mechanisms

So many shaker types... so many excitation signal types... so little time.

This excellent presentation from the International Modal Analysis Conference was coauthored by our own Marco Peres and presented by our friend and colleague Professor Peter Avitabile of the Structural Dynamics and Acoustic Systems Lab at UMass Lowell. Inside you'll find an overview on some shaker excitation techniques commonly employed in modal testing, a review of deterministic and non-deterministic methods, a presentation of excitation techniques that have been developed from a historical standpoint and last Multi-Input, Multi-Output (MIMO) modal testing information.



Click here to read more
http://www.modalshop.com/calibration.asp?ID=629

Dynamic Friends of TMS and PCB Group

One thing I absolutely enjoy about our dynamic test industry is the friendly and talented people I get to spend time with at conferences each year. I hope sometime you'll also have the chance to meet Professor Doug Adams and his team from Purdue University. They have been active

measuring instruments
SAVIAC
Vibration Institute
Equipment Reliability Institute (ERI)
TMS Video Vault
Learn More Calibration

Previous Newsletter

sensor & cal tips #48 -
ED and Reference Limitations in Low Frequency Calibration; Multiple Component Order Tracking

sensor & cal tips #47 -
Accelerometer Mounting; Accelerometer Technologies and Performance Characteristics

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
SimuTech website

researchers and users of PCB and TMS instrumentation for years. For over a decade, Dr. Adams has mentored a wide variety of research projects and applications utilizing dynamic pressure, sound, vibration and force sensors. His research facility, the Purdue Center for Systems Integrity (PCSI) operating under the Purdue Institute for Defense Innovation (Purdue IDI), investigates technology for asset health management in aerospace and automotive applications, composite material sustainment for aircraft, helmets and the like, and energy systems and sensors involving wind turbines and batteries. The Center for Systems Integrity has a large list of Theses, White Papers and Publications, located under the resources tab, of which many are related to applied dynamic measurements.

I encourage you to take a moment and peruse the site to see the caliber of the researchers and learn from their work. For a better understanding of PCSI and their research, please see their brochure.

Click here to read more
https://www.purdue.edu/research/vpr/idi/pcsi/

Blast from the Past

For those who may be new to our newsletter, we wanted to highlight an article from a previous sensor & calibration tips - "Calibration and ISO 9001, 17025, 16063-21 - How Standards Apply to Accelerometer Calibration"...

Already operating under an ISO9001 Quality Management System?

The world of standards, controlled processes, documentation and audits can sometimes be daunting... To help demystify this world when it comes to accelerometer calibration, we'll begin by discussing the relationships between the various parts of each of these quality system pieces.

Click here to read more
http://www.modalshop.com/calibration.asp?ID=167

We appreciate your interest and are glad to be

providing regular information to help you with your dynamic testing and calibration needs.

Sincerely,

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