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sensor & calibration tips

www.modalshop.com www.pcb.com Your one-stop sound & vibration shop

Greetings,

Welcome to issue #35-

Please have a look (like thousands of your industry colleagues do each month!), and share it with a co-worker. We have more ways to stay connected and help serve your test and calibration needs. Friend our Facebook fan page to keep up with conferences and see what the team at TMS is up to. You can also follow the archive links below to where you'll find all the back issues with their wealth of information.

Join Our Mailing List!

Like us on Facebook

Tip of the Month

For shock impulse calibrations, it is important to use pulse durations of moderate width - not too long or not too short. For shock accelerometers, we target a pulse width of at least 100 microseconds to best stay within the useable bandwith of typical shock accelerometers.

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

NCSLi - Providence, RI (July 25-29)

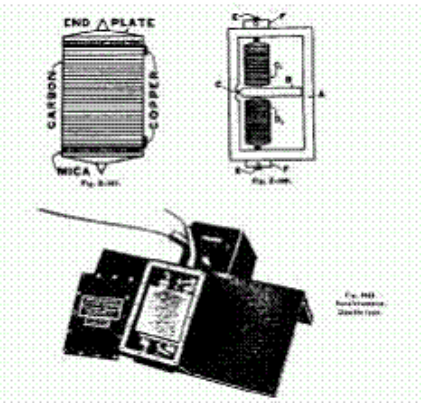
SAVIAC
Vibration Institute

Newsletter Archive by Topic

Master List of Topics

Function and Structure of Accelerometers

Accelerometer Technologies and Performance Characteristics



Early accelerometer design (circa 1920)

Recognize the early accelerometer design in the picture? Commercialized in the 1920's originally through Southwark (now BLH Electronics), it consisted of an E-shaped frame containing 20 to 55 carbon rings in a tension-compression Wheatstone half-bridge between the top and center section of the frame. By 1936, Southwark a version with "adjustable cork damping" was available. Reported applications were: "recording acceleration of an airplane catapult, passenger elevators, aircraft shock absorbers and to record vibrations of steam turbines, underground pipes and forces of explosions...". Follow the link to review PCB Piezotronics Vice President of Engineering, David Lally's presentation from Sensors Expo in Chicago earlier this month.

Click here to read more
http://www.modalshop.com/calibration.asp?ID=333

Video tutorial on Accelerometer Calibration

Embracing the profileration of YouTube and videos on the web, this month we offer a short video presentation on

[Accelerometer Internal Structure]

[Transduction Types: PE, PR, VC]

[Similarities Between Charge and ICP Operation]

[Specification and Behavior of Accelerometers]

[Common Options for ICP Accelerometers]

[Accelerometer Selection Considerations]

Newsletter Archive by Issue

[Full Table of Contents] - all the back issues

[sensor & cal tips #32] - Piezoelectric Transduction; Do I really need to calibrate?

[sensor & cal tips #33] - Forced ranking; The decline in quality

[sensor & cal tips #34] - Measurements Matter; Fundamentals of Modal Analysis

PCB Group Companies

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

accelerometer calibration. The video describes the basic operation of our accelerometer calibration system. Throughout the Summer, we'll be releasing more application training in video format so come back and check out The Modal Shop website often.

[Click here to see the video]
http://www.modalshop.com/calibration.asp?ID=334

2010 celebrates our 20th Anniversary. Become a fan of our [Facebook page] and see pictures of "Modal Shoppers" (and maybe some of your colleagues) from our past conferences, applications and celebrations. As you'll see in the pictures, we're here to serve you with all your dynamic sensor and calibration needs.

Sincerely,

Michael J. Lally
The Modal Shop
A PCB Group Company
mike.lally@modalshop.com

Forward email