

sensor & calibration tips



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Your one-stop sound & vibration shop

Greetings,

Welcome to Issue #44

Welcome to the April issue of our Dynamic Sensing and Calibration Newsletter. We continue our commitment as a leader in the dynamic measurement industry to bring you monthly articles, technical papers, presentations and tips to help you make better dynamic measurements. The Conference and Exhibition season is in full swing and The Modal Shop and PCB are participating in over 40 tradeshows this year... just another commitment to bring our technology closer to you. Stop in and talk to one of our knowledgeable application engineers, we're always happy to help.

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Tip of the Month

Consider laser primary calibration...

For your best accelerometer calibration system uncertainties, consider requesting a laser primary calibration of your reference accelerometer. Laser primary calibration can reduce your single biggest uncertainty contributor by as much as 30-70% depending on frequency ranges and uncertainties claimed.

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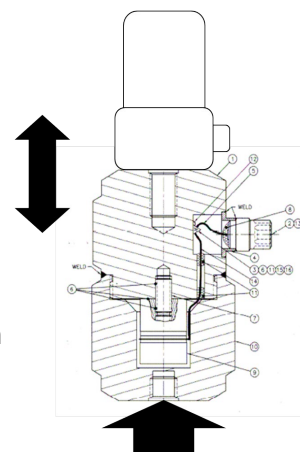
[ISO TC 108](#) - Mechanical vibration, shock and condition monitoring

[ISO TC 108/SC 3](#) - Use and calibration of vibration and shock measuring instruments

[SAVIAC](#)

Evolution of the Calibration Reference Accelerometer

In the early days of vibration measurement and calibration, users were plagued by a calibration conundrum that supposedly identical input to accelerometers placed next to each other (or even on top of each other!) on a controlled shaker gave different responses. What at first glance seemed to be a contradiction, quickly began to show what we clearly know now: dynamics occur in *ALL* structures of *ALL* sizes...

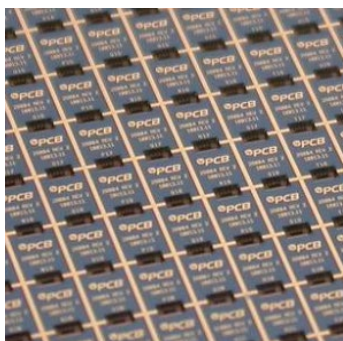


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<http://www.modalshop.com/calibration.asp?ID=523>

Progress on 60,000G MEMS Sensor

Continued advancements in MEMS fabrication are allowing for improved shock accelerometers. MEMS silicon fabrication techniques are producing extremely rugged shock accelerometers with wide frequency response, stable high dynamic range and low bias shift. A presentation given by Bob Sill, Senior Scientist of the PCB Advanced Sensor Design Center, during the most recent SAVIAC offers insight into the progress of MEMS. SAVIAC is held annually in various locations around the United States. If planning to attend this fall, be aware that some sessions require US citizenship and security clearances...



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http://www.modalshop.com/filelibrary/Progress_on_MEMS_Sensor.pdf

Previous Newsletter

[sensor & cal tips #43](#) -
Sensing Calibration News;
Calibrating the Calibration System

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

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Thanks again for your interest in The Modal Shop and PCB Group technology. Our technology, products and services are expanding to meet the growing needs of customers around the world... and we are locating more application engineers in your region to support you in your toughest dynamic measurement problems. Whether you are located near Chicago, Chamonix or Shanghai, we are close by and ready to help. Just call or click to connect with us. We're here to serve you.

Sincerely,



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