



Intertechnology Strain Gauge Workshop



Two Day Strain Gauge & Instrumentation Workshop

The object of this workshop is to provide practical training in the application of strain gauges and theoretical data to achieve improved results and correct analysis.

In this comprehensive, hands-on Strain Gauge Technology Workshop, participants make several complete strain gauge installations including electrical connection, check-out, and environmental protection; and use appropriate read-out instrumentation to verify results of their own installations.

A wide range of strain measuring devices are described in detail, guidelines for proper instrumentation selection and band usage are thoroughly reviewed. In the instrumentation portion of the program, some electrical circuitry is discussed. Familiarity with Ohm's Law series and parallel circuits and the Wheatstone bridge is helpful.

To express your interest Tel. 1-800-465-1600 or 416-445-5500 Ext.230 or e-mail Karin Blessing kblessing@intertechnology.com for a registration form.

Instructor: Jonathan Loewenstein Ext.248.

What will this workshop cover?

STRAIN GAUGE CHARACTERISTICS

- Gauge Factor Sensing
- Alloys Transverse
- Sensitivity Strain
- Limits
- Fatigue Endurance

INSTALLATION TECHNIQUES

- Surface Preparation
- Adhesive Selection
- Gauge Installation
- Procedures and Checkout
- Leadwire Attachment
- Protective Coatings

STRAIN GAUGE SELECTION AND CONSIDERATIONS

STRAIN GAUGE CIRCUITRY

- Quarter, Half and Full Bridges
- Leadwire Compensation

BRIDGE EXCITATION

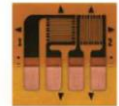
- Power Levels
- Self-Heating

STATIC MEASUREMENT

- Strain Indicator Characteristics
- Multi-channel and Computer-based systems

DYNAMIC MEASUREMENT

- Signal Conditioning
- Frequency Response
- Readout Instrumentation



GAUGE INSTALLATION WITH CYANOCRYLATE AND EPOXY ADHESIVES

Room Temperature Installation

Leadwire Attachment

Measuring Strain Level

Protective Coatings

TEMPERATURE MEASUREMENT TECHNIQUES

Strain Gauge Self-Heating Effects

Hostile Test Environments

Special Sensors

NOISE REDUCTION

Shielding

Grounding

Leadwire Considerations

CALIBRATION TECHNIQUES

ENGINEERING APPLICATION OF STRAIN GAUGES

ROSETTE ANALYSIS

Presented by:

Mr. Jonathan Loewenstein, Applications Specialist at Intertechnology Inc. has over 30 years experience in the experimental stress analysis field, advising and working on projects in industries including Automotive, Defense, Research, Education, Aerospace and Steel plants.

Don't miss out on your opportunity to learn more about Stress Analysis or to refresh your technique.

We can also run on-site workshops for companies.

Dates November 19th and 20th, 2019

Times: 8:15am to 5:00 pm

Venue: Intertechnology Inc.

19 Waterman Avenue Suite 102

Toronto ON

M4B 1Y2

Cost: \$ 965.00 plus taxes CANADIAN FUNDS

Entrance off Cranfield "R" Door,