A 2-Day Workshop Covering Strain Gage Fundamentals Focusing on Plastics and Composites At the Huntsville Marriott (next to Space Museum)

MICROE MEASUREMENTS AVPG Brand

November 7-8, 2017 Huntsville Marriott 5 Tranquility Base Huntsville, AL 35805

Registration: 8:15 AM Tuesday morning 8:30 AM – 4:30 PM, Tuesday- Workshop Day 1 8:30 AM – 4:30 PM, Wednesday- Workshop Day 2

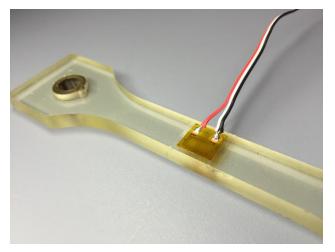
The electrical resistance strain gage is an accurate, reliable measuring instrument when properly installed on the structure to be tested. In this hands-on workshop, each participant completes three installations using strain gages selected for the testing of aluminum, composite and a printed plastic beam. We will include training and demonstrations of the common ASTM Standards that are used to characterize the properties of plastics including ASTM D3039 Poisson's Ratio, ASTM D695 Compression and ASTM D5379 Shear Modulus.

The workshop will begin with a review of strain/stress analysis principles, and then move toward performance characteristics of the strain gage and selection criteria, followed by selection of the adhesive systems. The hands on exercises will provide training of the installation and wiring of strain gages and compare data collected with instrumentation to calculated theoretical values. Topics that are of particular concern for applications on plastics that we will cover include self-heating, leadwire attachment, proper STC selection, reinforcement, etc.

The program is conducted by experienced members of our Technical Staff. All materials are provided, including a complete binder of class notes and reference material. Liberal use is made of technical demonstrations and other audio-visual aids, including closed-circuit television when appropriate.

This strain gage workshop will be beneficial to technicians, engineers and strain gage installation specialists who install strain gages, or managers who supervise the installation and performance of strain measuring systems.

Provision is made for attendees to discuss their specific test requirements with members of the Micro-Measurements technical staff.



Topics Include

- Planning the Test
- Surface Preparation
- Adhesive Selection and Handling
- Strain Gage Characteristics
- Temperature Effects
- Three Gage Installations by Participants
- Leadwire Connections
- Checkout and Calibration
- ASTM Standards
 - D3039 Poisson's Ratio
 - D695 Compression
 Demo
 - D5379 Shear Demo
- Environmental Protection
- Electrical Circuit Elements

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Registration Form

Registration fee is **\$890** per person for the **2 Day Workshop (Plastics and Composites) on November 7-8, 2017 at the Huntsville Marriott in Huntsville, AL.** Fee includes all instructional materials, morning and afternoon refreshments, and lunches. Payment may be made by purchase order, check, Visa, MasterCard, or American Express. Full refund will be made only if notice is received one week prior to the course. Please make sure that the registration form accompanies payment. You may also register online at <u>www.micro-measurements.com/training-programs/.</u>

Name	_ CHECK METHOD OF PAYMENT:	
Title	\Box Payment in the amount of \$is enclosed.	
Company	Company purchase order is enclosed.	
Address	My company will send purchase order.	
City, State, Zip	Credit Card: VISA MasterCard AMEX	
Telephone	Card No	
Fax	Exp. Date: Security Code No:	
Email	Authorized Signature:	

SEND REGISTRATION INFORMATION TO:

Training Program Coordinator * Micro-Measurements * P.O. Box 27777, Raleigh, North Carolina 27611 Phone: (919) 365-3800 x134 * Direct Dial: (919) 374-5529 * Fax: (919) 365-3945 * Email: <u>mm.us@vpgsensors.com</u>

	S-T-C Mismatch Curve Rotation
	Thermal Output (microstrain) (microstrain) (microstrain) (microstrain) (microstrain) (microstrain) (microstrain) (microstrain)
	-120 -70 -20 30 80 130 180 230 280 330 380 430 Temperature (Deg F) — STC 13 on Aluminum — STC 13 on 304SS