### **Hands-on Workshop**

# **Motor & Drive Measurements**

# Hands-on with the Fluke MDA-550 Series III Motor Drive Analyzer

#### **Who Should Attend?**

Technicians and engineers making electrical measurements on Variable Frequency Drives (VFDs).

#### **What You Will Learn**

- A range of measurements to identify electrical issues that can prevent the VFDs from functioning correctly or cause damage to other equipment.
- How non-linear loads and harmonics effect measurements in electrical power systems.
- Why traditional test tools can give incorrect readings on VFDs.

### **Class Outline**

- I. Introduction
  - a. Measurement Safety Standards
  - b. Review PWM Inverter and Basic Waveforms
- II. Input Measurements (Line Side of VFD)
  - a. Measurement Tools
  - b. Unbalance, Harmonics, Power Factor
- III. Drive Output Measurements
  - a. Measurement Tools
  - b. Pulse-Width Modulation (PWM), dV/dt,
  - c. Reflections and Shaft Voltage
- IV. Predictive Maintenance Tools for drive train analysis

#### **Price Includes**

Fluke 376 FC ac/dc Clamp Meter with iFlex™

- Transmit results wirelessly via Fluke Connect<sup>®</sup>
- Log and trend measurements









The Fluke MDA 550 Motor– Drive Analyzers save time and eliminate the hassle of setting up complex measurements, while simplifying the troubleshooting process for variable frequency drives.

### **Schedule & Registration**

#### **Time**

8:30 AM - 1:00 PM

#### **Date**

August 8th

#### Location

ES&E Rocky Mount 147 Red Iron Rd Rocky Mount, NC 27804

## Cost:

\$659.00 Lunch Included



**REGISTER NOW** 

