

# MCEMAX® DATA ANALYSIS TRAINING

Course Length: 2 Days

Date(s) April 23-24

Location: 4110 US Hwy 61 St. Francisville, LA 70775

Cost per person: \$1,800 (lunch provided)



**RSAW**

RED STICK ARMATURE WORKS



## Course Description

In this two-day interactive training course, we cover MCE (off-line) testing and data analysis regarding squirrel cage, wound rotor, and synchronous motors, as well as MCE (off-line) testing and data analysis of direct current motors. Emax (on-line) testing and data analysis regarding squirrel cage, wound rotor, and synchronous motors is also covered. This course is comprised of 14 hours of classroom instruction. PowerPoint presentations are used to supplement the course instruction. Actual MCEMAX test data will be presented during the data analysis training sessions.

### I. MCE Testing and Data Analysis

- Squirrel Cage Motors
- Wound Rotor Motors
- Synchronous Motors
- Stator Winding Analysis and Evaluation
- Rotor Bar Analysis and Evaluation
- Air Gap Analysis and Evaluation
- Synchronous Rotor Field Pole Analysis and Evaluation
- AC Motor Power Circuit Evaluation
- DC Motor Field Winding Analysis and Evaluation
- DC Motor Armature Winding Analysis and Evaluation
- DC Motor Power Circuit Evaluation

### II. MCE Tests

- MCE AC Standard Test
- MCE Rotor Influence Test (RIC)
- MCE Polarization Index Test
- MCE Auto Test
- MCE Step Voltage Test

### III. EMAX Testing and Data Analysis

- Squirrel Cage Motors
- Wound Rotor Motors
- Synchronous Motors (Slip Ring Type)
- Synchronous Motors (Brushless Excitation)
- Stator Winding Analysis and Evaluation
- Squirrel Cage Rotor Bar Analysis and Evaluation
- Squirrel Cage Air Gap Analysis and Evaluation
- AC Motor Power Circuit Evaluation

### IV. EMAX Tests

- EMAX Auto Test
- EMAX Power Capture
- EMAX Rotor Bar Test
- EMAX Air Gap Test
- EMAX Advanced Spectral Analysis (Demodulation)
- EMAX In-Rush Test

Presented by:



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**RLA** RICHARD LOVE ASSOCIATES  
ELECTROMECHANICAL APPARATUS  
INDUSTRIAL TRAINING AND EDUCATION

## 8 Course Objectives

1. Learn which MCE tests apply to alternating and direct current motors.
2. Learn which MCE test data parameters apply to specific motor components.
3. Learn how to correlate all MCE test data to determine if motors are acceptable or suspect.
4. Learn which EMAX tests apply to alternating current motors.
5. Learn which EMAX test data parameters apply to specific motor components.
6. Learn how to correlate all EMAX test data to determine if motors are acceptable or suspect.
7. Learn how to correlate MCE and EMAX test data to evaluate overall motor health.
8. Learn how to communicate test and data analysis results and recommend corrective actions.

To sign up please email: [sales@rsaworks.com](mailto:sales@rsaworks.com)