

REDUCING OPERATOR RISK ON ELECTROMECHANICAL SYSTEMS

eLearning Course Outline

The eLearning Reducing Operator Risk on Electromechanical Systems (Static) is an online based overview of basic safety guidance and system operation tasks that should be reviewed. Topics include general operator safety, proper equipment operation, and best practices of materials testing using Instron testing machine. There is a quiz at the end to evaluate the retention of the concepts presented. This course is ideal for operators and lab managers who want to ensure all operators have a basic understanding of the safety requirements when working with materials testing equipment.

Objective

After completing this course, the participant will become familiar with the basic safety requirements needed to conduct material testing safely. Note: this course is not intended to replace formal on-site safety training, or application-specific safety training.

Who Should Attend?

- System Operators
- Lab managers
- Health and Safety Representatives

Course Outline

Section 1: Safety and System Review (6 minutes)

Operator Safety

- Personal Protective Equipment (PPE)
- Overview of Risk Assessment
- Equipment Safety Reference Material
- Machine Operating Modes
- Operator Attentiveness
- Common Hazards with Material testing
- Hydraulic and Pneumatic Gripping Safety Differences

Proper Equipment Operation

- New Safety Features for 3400/6800 Testing Systems
- Collision Mitigation
- Smart Close Air Kit
- Operator Protect

Section 3: Safety and System Review Quiz (Time: 15 minutes)

Quiz consisting of 10 questions covering:

- Operator Safety
- Proper Equipment Operation
- Testing Best Practices

Section 2: How To Use A Electromechanical System Safely (4 minutes)

- Using the Emergency Stop Button
- Using the Physical and Software Transducer Limits
- Pneumatic Grip Safety
 - Toggle vs. Footswitch Mode
 - Limiting the Closing Gap
 - Using Jaw Face Shields
 - Adjusting Closing Speed
 - Using Clamping Devices
 -

Testing Best Practices

- Specimen Engagement
- Fixture an Adapter Load Ratings
- Setting Appropriate Limits