

Elastomer Testing on Controllers with MTS Series 793 Software

3 day course

COURSE OUTLINE

I. Day 1

- A. System Overview
- B. Elastomer Software Overview
- C. Typical Static Deflection Test
- D. Static Deflection Test Data
- E. Basic Elastomer Theory Part 1
- F. Static Deflection Test in Simulation
- G. Static Deflection Lab
- H. Static Deflection Macros

II. Day 2

- A. Basic Dynamic Characterization Test
- B. Dynamic Characterization Test Data
- C. Basic Elastomer Theory Part 2
- E. Dynamic Characterization Test in Simulation
- F. Dynamic Characterization Lab
- G. Dynamic Characterization Macros

III. Day 3

- A. Finish up Dynamic Characterization
- B. Basic Elastomer Theory Part 3
- C. Transmissibility
- D. Control Parameter Sets
- E. Process Settings
- F. Demo Mode
- G. Load Path Deflection Correction Set
- H. Conditioning Errors
- I. Acceleration Errors
- J. Tech Support

This is a basic course that covers the use of MTS Elastomer Test Systems using digital controllers with Series 793 Software. Training includes an overview of viscoelastic theory, test system setup, and operation with practical test examples and data analysis as it pertains to tests available with the **MTS Model 793.31 Dynamic Characterization and Model 793.33 Static Deflection software**. Test setup, execution, and analysis are covered through classroom lectures and laboratory exercises.

Note: This course does not include the ElastomerExpress™ Application.

Who should attend

This course is targeted for engineers new to elastomer testing using MTS controllers with Series 793 software, whether they are new to the test lab or they are just setting up a test system. For more advanced topics that address your specific testing needs, contact MTS about consulting services.

Prerequisites

Students must have a thorough understanding of Series 793 software including PID tuning, signal offsets, and limit settings. For those who are new to the MTS controllers with Series 793 software, MTS strongly recommends attending either the *MTS Hardware Concepts and Series 793 Software course* or the *MTS Series 793 Software with MultiPurpose TestWare (MPT) Test Design* course prior to taking the Elastomer Applications class. All prerequisites are the responsibilities of the student.