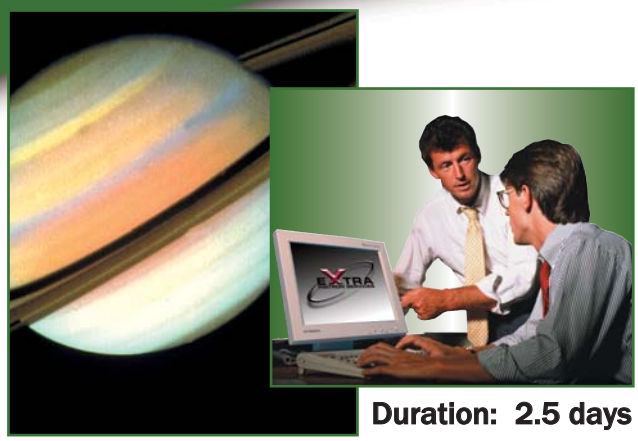


Duration: 2.5 days

Single Axis 8800 Series Operator's Course – MMI Front Panel and FastTrack™ Console Operation

Realise the potential of your operator personnel and investment in Instron® equipment through comprehensive 'hands-on' interactive instruction.

Who Should Attend?

- New 8800 operators
- Test instrument operators
- Lab supervisors
- Product engineers, product inspectors
- Anyone interested in advancing their knowledge of the Model 8800 operations

Classic FastTrack 8800 operator panel.

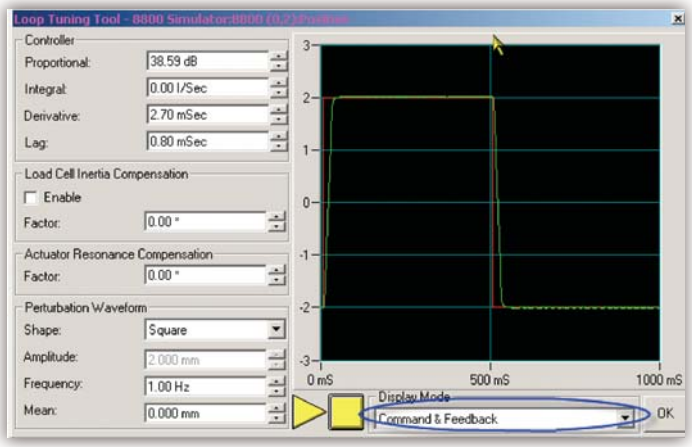
Course Description

Comprehensive instructions on the fundamental safe operation of the 8800 test system, via MMI Front Panel and FastTrack Console operation. Students will learn safe operation, components of the load frame and hydraulics and MMI Front Panel/FastTrack console operation to run simple fatigue test programs. Load cell calibration manual and automatic, units selection, load protect, amplitude control, event detectors, setup of displays, actuator mode controllers and hydraulic pump control will be covered. This course includes loop shaping, strain channel operation, setting channel limits, using event detectors, setting input and output digital lines.

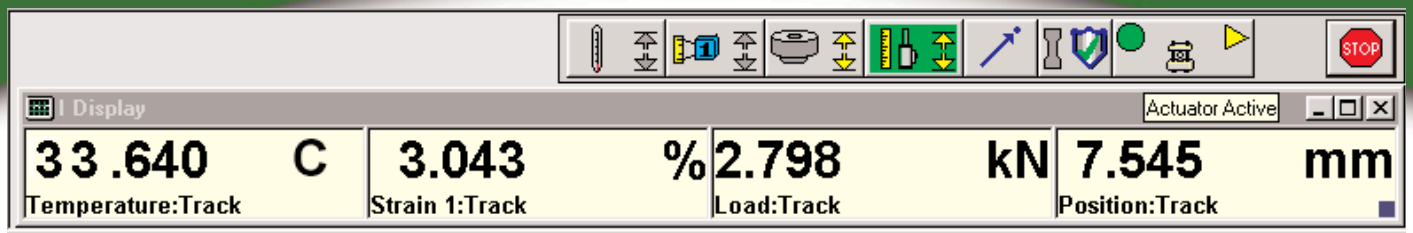
Course Objectives

After completing this course, students will be able to:

- Safely operate the test system including hydraulic pumps
- Run simple fatigue tests
- Identify all the main components of the test system
- Understand the functions of the 8800 control panel
- Understand the functions of the FastTrack console screen
- Set-up limits, events and closed-loop control gains (PID)
- Set-up the waveform generators
- Manually and electronically calibrate transducers
- Change system readout unit parameters
- Save and recall test parameters in user configurations
- Install load cells, grips and specimens on your load frame
- Output signals on the 8800 I/O ports
- Gain an appreciation of the various 8800 fatigue testing applications



Loop tuning tool.



FastTrack™ console real time data display

Course Outline

Day 1

9:00 a.m. - 4:45 p.m. (approximately)

- Introduction to 8800 and safety awareness
- Identification of load frame, hydraulic and tower components
- Handset controls
- 8800 front panel console functions and layout
  - Lower panel interactive display
  - Function keys
  - Numeric keypad and rotary control
  - Emergency stop
  - Waveform generator buttons
  - Function, counter/timer, set point, user and remote buttons
  - Load protect, amplitude control, status, output and event detector buttons
  - Real-time display - display 1, 2 and counter/timer areas
  - Actuator mode controllers
- 8800 FastTrack console layout
  - Emergency stop
  - Test toolbar functions and displays
  - Control and sensor button indicators
  - Waveform generator functions
  - Counter/timer, set point and user states
  - Specimen protect and amplitude control
  - Live displays
  - Actuator mode controllers and transfer

Day 2

9:00 a.m. - 4:45 p.m. (approximately)

- 8800 test system operation
- Startup and self -test
- Function key - unit selection and time, language selection
- Status key
- Hydraulic control panel
- Automatic and manual calibration of load cell
- SetPoint function
- Specimen installation
- Waveform selection - cyclic, ramps, trapezoidal ramps
- Loop shaping
- Define control loop - waveform generator, conditioned transducer output, signal driving servovalve including dither
- Loop gain – adjusting gain – proportional, integral, derivative, auto and manual loop gain adjustment

Day 3

9:00 a.m. - 1 p.m. (approximately)

- Adaptive control and inertia compensation
- Strain channel operation
- Selecting, installing and calibrating extensometers
- Loop shaping strain channel – automatic and manual
- Setting channel limits - define MAX™ and MIN
- Event detectors
- External inputs and outputs (digital lines)

Prerequisites:

- A fundermental operating knowledge of modern PC's, including the basic use of MS Windows®
- A familiarity with materials testing concepts and principles
- Test instrument operation experience would be an advantage

Training Material:

- Comprehensive Training manual included

To register for a course, please contact us at
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