

### 200P Electromechanical Test Machine

#### High Elongation Materials Testing

Tension & Compression

Max Forces to 500 lb (6.6 kN)

Max Travel to 55" (1.4 m)

Servocontrolled constant Load Rate & Speed

High Accuracy & Resolution



200P Series  
225 or 500 lb



200P225-55  
55" Travel

#### Choices & Options

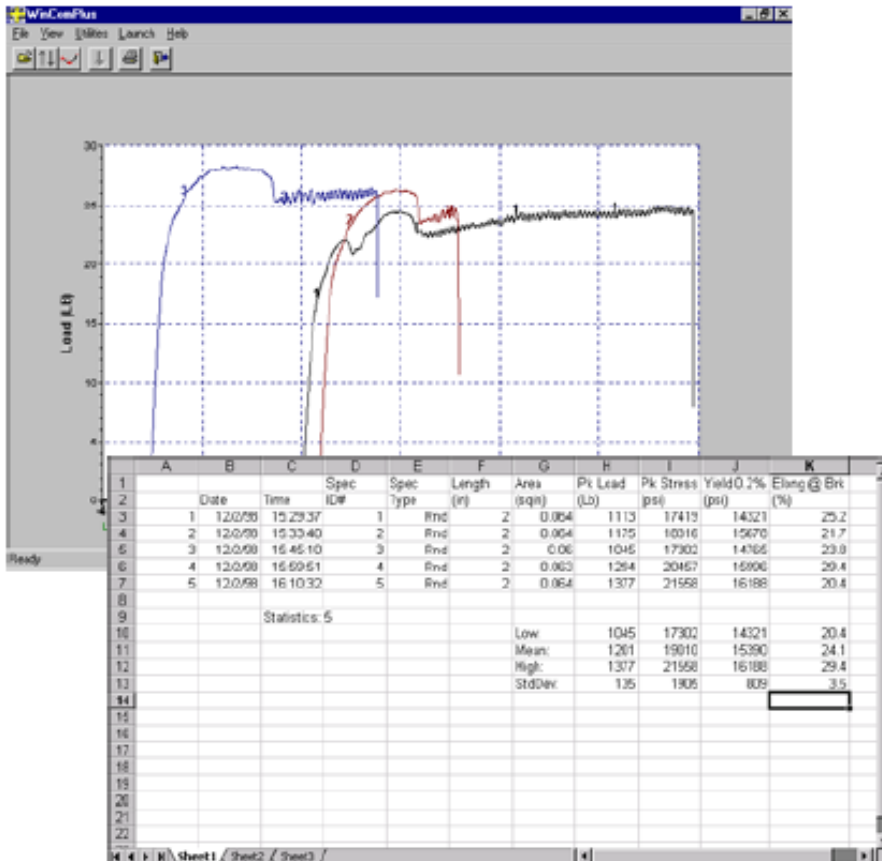
- **Crosshead Travel** – standard 31" (775 mm) or 55" (1400 mm)
- **Force Capacity** – 225 lb (1 kN) or 500 lb (2.2 kN)
- **Controllers** -- Standalone P or Q Controllers or PC based R Series
- **Load Cell** – many to choose from - full scale rating
- **Testing Accessories** – grips, fixtures, chambers and engineered solutions

## Modular Systems Approach

TestResources test systems are configured to serve each customer's test requirements. Each P Series system consists of a load frame or horizontal test table, an actuator, load and position transducer, test controller, and software. Due to a modular product structure, system modules can be swapped or re-configured during requirements change.

## P Controller \* Single Segment Ramp \* Constant Speed or Load Rate

P controllers feature adjustable constant speed, crosshead travel, or loading rate. Each test is controlled via single segment ramps which enable a single speed test from beginning to end in the pull (tensile) or push (compression) direction. As forces increase, speed stays constant. The test stops automatically based upon the specimen break, test time duration, or if the stop button pushed. P captures high resolution force and position data with limit switches to protect actuators from over travel. High resolution 24 bit A/D converter provides high quality load data while a high accuracy encoder measures position change. The controller memory captures, displays and exports test data to an optional PC using our optional software program to plot data. The P controller includes calculated analyses that help improve operator efficiency. The P Controller upgrades to the Q and R Series.



## Software to plot and export data

Software products are available to capture and document machine data as well as calculated results and raw load-displacement-time data. Single or multiple curves can be plotted on the same set of graph axes. The data is also available to common plotting programs such as Excel via ASCII data format.

## P Controller

- Displays load, position, and position rate during the test. Displays activated results when the test finishes.
- Calculate high, low, mean and standard deviation for a group of tests.
- Store up to 300 results to memory – including date, time, specimen ID plus all calculated parameters.
- Select data log rates from 0.5 to 1,000 samples per second to match long and short tests.
- English, Metric and SI engineering units.
- All test methods have one pre-test control segment which can be used as a pre-load function.
- Single segment profile - user defined position or load rate and end channel - either load, position, time or sample break.
- Use with self identifying or standard load cells.

## Calculated Analyses such as

- Maximum -- Load, Load/Width, Stress
- Minimum Load
- Average Load between Displacements
- Load -- at break, at displacement
- Displacement -- at break, at load
- Percent Elongation

## 200P Series Single Column Systems

Model	200P225	200P225-55	200P500	200P500-55
Load Rating	225 lb (1 kN)	500 lb (2.2 kN)	500 lb (2.2 kN)	500 lb (2.2 kN)
Max Travel	31" (775 mm)	55" (1400 mm)	31" (775 mm)	55" (1400 mm)
Max Speed	40 ipm (1000 mm/m)	20 ipm (500 mm/m)	20 ipm (500 mm/m)	20 ipm (500 mm/m)
Load Accuracy	+/- 0.5% of reading to 1/500 of load cell --- Meets ASTM E4, BS EN ISO 7500-1: 2004, DIN 51221			