

PC Controlled Electromechanical Test Machine

Flexibility & Power

Control and measure load, strain, stroke

Calculated Analyses & Custom Test Reports

Ideal for all tests including high elongation materials

Max Forces to 500 lb (6.6 kN)

Max Travel to 55" (1.4 m)

High Accuracy & Resolution



200R Series
225 or 500 lb



200R225-55
55" Travel

Choices & Options

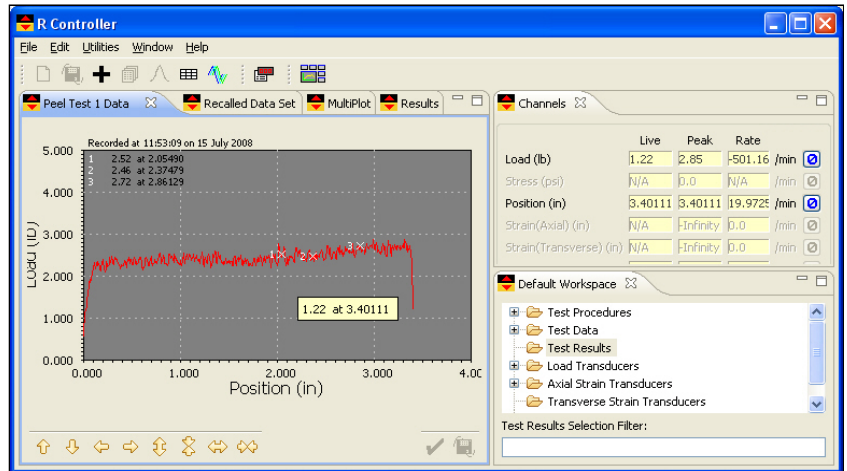
- **Crosshead Travel** – standard 31" (775 mm) or 55" (1400 mm)
- **Force Capacity** – 225 lb (1 kN) or 500 lb (2.2 kN)
- **Controllers** -- Standalone P or Q Controllers or PC based R Series
- **Load Cell** – many to choose from - full scale rating
- **Testing Accessories** – grips, fixtures, chambers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

Modular Systems Approach

TestResources test systems are configured to serve every customer's unique circumstances and test requirements. Each system consists of a load frame or test table, actuator, load and position transducer, controller, and test software. Due to our structure, modules can be swapped or re-configured as requirements change.

R Controller Overview

- Complete Total Solution
- Straightforward Intuitive Design
- High Performance Hardware
- Customizable Test Protocols
- Standardized Tests
- Common Analyses
- All Applications included



The R Controller offers a complete solution to the needs of operators performing static and dynamic tests on materials and products. Highly integrated hardware and software enables users to create, maintain, and execute virtually any mechanical test protocol and features precise machine control and measurement. R Series servocontrolled test machines perform static or dynamic tension, compression, stress-strain, stress relaxation, creep, tear, peel, adhesive and sophisticated cyclic tests. Perform almost any mechanical test, collect the data, analyze results, and produce a custom test report.

The standard controller includes a load, position and auxiliary channel with the option to add additional strain channels for extensometers. We can configure the controller for special requirements, collect data from all sensors, plot a stress strain curve in real time, and perform multiple tests in sequence – with reports to match. Each test procedure may be saved and rerun as desired. Produce sinusoidal load and position controlled tests including customized tests assembled by segmented control profiles and blocks of repeated profiles – e.g. ramp, hold, sinewave cyclic, hold, sawtooth cyclic profile under the control mode of choice.

R test systems are easy to learn and use and well suited for labs where operators or tests change day to day and new tests are common. PC based controls improve test data quality and efficiency because test setups and test data are saved, built upon or available for re-analysis. The R is a good fit for high throughput test labs and research labs where flexibility is needed.

Create, save and recall your special test methods. Protect different set up modes with a password as desired. The R package also includes many calculated routines for established test analyses and procedures. Produce full single test reports or reports covering multiple tests. Generate load - deflection (XY) plots to match ASTM, JIS, SAE, TAPPI, Euro Norm and other standard requirements. Data and plots can be presented in a single test report or a group of like tests can be combined to generate a statistical summary for each analysis result. The multiple test report stores a group of tests to the same file and provides a statistical summary for each analysis parameter. A plot with multiple XY curves overlaid on the same set of graph axes is optional. Store test data and results to hard disk in ASCII delimited format for easy import into popular spreadsheet and database programs. Large easy-to-read numeric displays present friendly live, peak and rate readings. Up to 5 channels of sensors are available to collect data or provide control of load, encoder position, LVDT, strain, or auxiliary use (10V DC). R hardware uses proven noise reduction techniques to lower the noise floor to effective resolution of one part in a million.

200R Single Column PC Controlled Test Machines

Model	200R225	200R225-55	200R500	200R500-55
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			