



800 Series Advanced Universal Electromechanical Materials Testing Machines



Features:

- Position Measurement Accuracy $\pm 0.02\text{mm}$
- Position resolution $0.15 \mu\text{m}$
- 30,000 data sampling
- 100 Hz selectable data capture
- Automatic recognition and calibration
- Digitized technology

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Universal Electromechanical Materials Test Equipment

Description:

800 Series universal testing machines are capable of tensile and compression testing modes within a single frame. In addition, select frames are capable of reverse stress testing.

Test types include tensile, compression, shear, flexure, peel, tear, cyclic and bend tests.



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Specification:

- Control Electronics and User Interface
- With 100 Hz data collection and control rates, AI's 880 electronics feature unparalleled accuracy and advanced real-time control. These electronics can control the frame using any combination of load, strain, or speed rates-often a requirement for today's testing standards. Automatic recognition and calibration of transducers ensure safe and proper testing
- Controller
 - The controller includes these high performance features
 - 30,000 data sampling
 - 100 Hz selectable data capture
 - Digitized technology
 - 24-bit resolution, converting time 17 usec
 - Load measurement accuracy:
 - ± 0.4% of reading
 - down to 1/100 of load cell capacity and ± 0.5% down to 1/250 of load cell capacity
- Position Measurement Accuracy: ± 0.02mm or 0.05% of displacement
- Position resolution up to 0.15 μ m
- Crosshead Speed Accuracy (Zero or constant load):
 - ± 0.1% of set speed



- Strain Measurement Accuracy:
 - ± 0.5% of reading down to 1/50 of full range with extensometer
 - Intelligent datum logging responds automatically to change material properties during the test
 - Dedicated electronics provide advanced real-time control, error detection, and limit checking which are independent of the PC
 - Automatic recognition and calibration of load cells and strain transducers
 - Designed to work with Greendale materials testing software



800 Series Advanced Universal Electromechanical Materials Testing Machines

800 Series Advanced Materials Testing System									
Models		Single Column			Twin Column				
		Tabletop Models			Tabletop Models				
		842	843	844	864	865	866	867	869
Load Capacity:	kN	0.5	1	2	5	10	30	50	
	kgf	50	100	200	500	1000	3000	5000	
Maximum Speed:	mm/min	1000			2500	1000	500		
Minimum Speed:	mm/min	0.05			0.005	0.001			
Maximum Force at Full Speed:	kN	0.5	1	2	1	5	10	30	25
Maximum Speed at Full Load:	mm/min	1000				500		250	
Return Speed:	mm/min	1500			2500	1200	600		500
Position Control Resolution:	μm	0.156		0.208	0.236	0.118	0.057	0.054	0.063
Total Crosshead Travel:	mm	500	917		1135				
Total Vertical Test Space:	mm	659	1076		1249		1205		
Height:	mm	875	1275		1597				
Width:	mm	375			909				
Depth:	mm	500			700				
Weight:	kg	32	37		136		182	240	
Maximum Power Requirement:	VA	225		400	300		600	700	

GreenDale Materials Testing Software

- Simple and Powerful for Any Materials Testing Application
Greendale is a fully integrated modular software package that provides with easy, tailored application solutions for today's laboratory managers and test technicians. Greendale offers a truly innovative, intuitive interface while providing the most powerful and flexible materials testing package.
- Features
Greendale provides the most powerful and flexible material testing package along with an intuitive web-like design that users at all levels are easy to use and learn. From the simplicity of a basic peak load test to the power required for a complex cyclic test, users shall appreciate the minimum learning and training required.

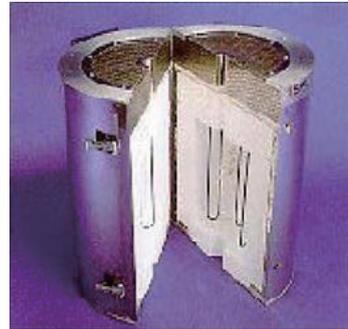


800 Series Advanced Universal Electromechanical Materials Testing Machines

Specification:

DL Split Furnaces

- Internal bore 38 (mm)
1200 °C
 - Single or triple zone versions
 - Horizontal mounting
 - Wide range of sizes



- Application

High temperature sintering, specimen or material heat treatment, preconditioning and suitable for various materials testing applications. DL tube furnaces are available in a range of bore inner diameter from 38 to 105 mm together with three heating length options of 300, 450 and 750 mm. Each furnace can be supplied with either single or three zone capability. The standard configuration is with a free standing PID controller, Eurotherm model 2216.

- Three Zone Option

The three zone option should be selected when a superior temperature gradient along the work tube is required.