Chatillon[®] LTCM-500 Series Motorized Force Tester

Specification Sheet SS-LTCM500-0210 February 2010

The CHATILLON® LTCM500 Series is an economical, motorized tester optimized for product floor operation. When combined with a Chatillon DF Series digital force gauge, it provides users with an easy-to-use testing system for tensile, compression, peel and flexural testing applications.

The LTCM500 Series features a large working area and 5-inch (130mm) throat ideal for large sample sizes. The base features T-slot table for fitting fixtures and specialized testing jigs. Crosshead travel is controlled from a simple console or using an optional footswitch controller. Crosshead travel extends to 29 inches (750mm). Speed may be set from 0.2 to 20 in/min or 5 to 500 mm/min. A digital display indicates the travel speed during a test. The return speed may be configured to automatically return at maximum speed. Mechanical deflection limits, located on the column face can be used to set travel limit setpoints. The crosshead will stop when either the upper or lower deflection limit is contacted.

The LTCM500 Series is supplied with a hook and compression plate and certificate of conformance.

Features

- Tensile, Compression, Peel & Flexural Testing
- Compact, Lightweight, Benchtop Design
- Simple Operation
 - Console Controls for Speed & Travel
 - Optional Footswitch Control
 - Independent Return Speed
- Mechanical Deflection Limits
- Digital Load Limits (with Chatillon DF Gauge)
- T-Slot Work Area
- 2 Year Warranty

Specifications

Load Capacity: 550 lbf, 2.5 kN Crosshead Speed: 0.2 to 20.0 in/min

5 to 500 mm/min

Return Speed: 20 in/min, 500mm/min
Speed Accuracy: ±3% Unloaded
Travel Distance: 29 inches (750mm)
Power: 110/230V Switchable
Load Measurement: Chatillon DF Gauges
Operating Temperature: 40°F to 110°F

5°C to 45°C

Instrument Weight: 100 lbs (50 kg)
Shipping Weight: 120 lbs (60 kg)



Shown: LTCM500 Series with optional DFS Series force gauge.





Features

Easy Operation

The LTCM-500 console controls are intuitive and easy to use. Users can specify speed in either inches per minute or millimeters per minute. The speed control knob is used to adjust speed from 0.2 to 20.0 in/min or 0.5 to 500 mm/min. Speed accuracy is better than 3%. The Up and Down key is used to control crosshead direction.

Independent Return Speed

A separate return speed switch can be positioned so that the crosshead returns to zero at maximum speed or at the speed indicated by the display.

Adjustable Deflection Limits

Deflection limit switches are supplied on the front of the column. The column contains increments in inches and millimeters for positioning the limit switches and for measuring sample deflection. Position and "lock-in" a High and Low deflection limit to protect your gauge from overload conditions or for ending your test at a distance traveled. The crosshead travels up to 29-inches (750mm).

Ideal for Production or Lab

The LTCM-500's rugged construction and simple operation make it ideal for production environments, laboratory applications or for R&D applications. Combine with a Chatillon DFS Series force gauge and you have a force measurement system with a load accuracy of better than 0.1% full scale. The tester is ideal for tensile, compression, peel, shear, and flexural testing when used with the appropriate grips/fixtures.

Large Working Area

The LTCM-500 features are large working area capable of securing samples up to 10-inches in diameter. The crosshead throat is greater than 5-inches (127mm).

Flexible Fixturing

The crosshead has been optimized for use with Chatillon DF Series digital forces gauges. The DF Series mount directly to the crosshead without special adapters. The work surface features a T-slot table for installing grips or special fixtures.



Shown: The LTCM500 fitted with optional splinter shield.







Shown: An optional extended work table fits onto the T-Slot. Pre-drilled holes make fitting fixtures and specialized testing iiqs easy.

Ordering

LTCM500

| Model | Capacity | |
|------------|-----------------|---------|
| LTCM500 | 550 lbf, 2500 N | US Plug |
| LTCM500-EU | 550 lbf, 2500 N | EU Plug |
| LTCM500-UK | 550 lbf, 2500 N | UK Plug |

Standard Accessories

| Part No. | Description |
|--------------------------|--------------------------------|
| SPK-FMG-012C | Hook |
| 17109 | Compression Plate, 2" Diameter |
| NC002905 | DF Gauge Adapter Plate |
| NC002924 | Hex Key, 5mm |
| NC000846 | Hex Key, 5/32" |
| 1613 | Set Screw, #10-32 x 3/4" |
| SPK-FM200-034 | US Power Cord |
| SPK-FM200-022 | EU Power Cord |
| SPK-LTCM-UK230 | UK Power Cord |
| 01 11 21 0 III 0 11 20 0 | 0111 01101 0010 |

Optional Accessories

| Description | |
|----------------------------|--|
| Remote Control Footswitch | |
| DF Gauge Interface Cable | |
| Splinter Shield | |
| SLC Load Cell Mounting Kit | |
| Extended Work Table | |
| | |



Shown: Optional footswitch contoller allows for handsfree operation for improved productivity.





