

## Product Information

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By: KRD

### Chatillon Test Stands

Chatillon test stand fall into three categories, manual, motorized, and programmable motorized. The manual and motorized test stands support Chatillon force gages to collect force data. The motorized programmable uses separate load cell mounted to the cross arm and connected to the controller to collect force data. It also can provide distance related data.

#### Manual Test Stands

##### MT 150 Series

Features	
<input type="checkbox"/>	Large Working Area
-	150mm (6 in) Throat for Large Specimens
-	Universal Fixturing (Metric or Imperial)
-	150mm (6 in) Full Crosshead Travel
<input type="checkbox"/>	Modular Design
-	Bench, Horizontal or Wall Mounted
-	Lever or Handwheel Operation
-	Multiple Travel Lengths
<input type="checkbox"/>	2 Year Warranty
Specifications	
<b>Capacity:</b>	150 lbf (660 N)
<b>Loading Method:</b>	Quick-Action Lever or Handwheel
<b>Travel Rates:</b>	
- Lever	75mm (3 in) per Revolution
- Handwheel	12mm (0.5 in) per Revolution
<b>Column Height:</b>	
- Standard	750mm (29.5 inch)
- Extended	1000mm (39.4 inch)
- Ultra	1500mm (59 inch)
<b>Maximum Stroke:</b>	150mm (6 in) *Longer Strokes available
<b>Weight:</b>	Approx. 20 lbs (9 kg)



##### MT 500 Series

Features	
<input type="checkbox"/>	Large Working Area
-	150mm (6 in) Throat for Large Specimens
-	Universal Fixturing (Metric or Imperial)
-	150mm (6 in) Full Crosshead Travel
<input type="checkbox"/>	Modular Design
-	Bench, Horizontal or Wall Mounted
-	Lever or Handwheel Operation
-	Multiple Travel Lengths
<input type="checkbox"/>	2 Year Warranty
Specifications	
<b>Capacity:</b>	562 lbf (2.5 kN)
<b>Loading Method:</b>	Quick-Action Lever or Handwheel
<b>Travel Rates:</b>	
- Lever	75mm (3 in) per Revolution
- Handwheel	12mm (0.5 in) per Revolution
<b>Column Height:</b>	
- Standard	750mm (29.5 inch)
- Extended	1000mm (39.4 inch)
- Ultra	1500mm (59 inch)
<b>Maximum Stroke:</b>	150mm (6 in) *Longer Strokes available
<b>Weight:</b>	Approx. 22 lbs (10 kg)



#### Motorized Test Stands

##### LTCM-100

Features	
<input type="checkbox"/>	Tensile, Compressive, Peel & Flexural Testing
<input type="checkbox"/>	Compact, Benchtop Design
<input type="checkbox"/>	Simple Operation with Intuitive Controls
-	Crosshead Direction
-	Return Speed
-	Speed Selection
-	Emergency Stop
-	On/Off
<input type="checkbox"/>	Mechanical Limits & Positive Braking
<input type="checkbox"/>	Large Working Area and Throat for Large Samples
<input type="checkbox"/>	Selectable Display with Digital Speed Readout
-	Inches per Minute
-	Millimeters per Minute
<input type="checkbox"/>	2 Year Warranty
Specifications	
<b>Capacity:</b>	110 lbf (500N)
<b>Crosshead Speed:</b>	0.2 to 20 in/min (5 to 500 mm/min)
<b>Speed Accuracy:</b>	±3% at Full Capacity
<b>Travel:</b>	15-inches (380mm)
<b>Load Measurement:</b>	Chatillon Force Gauge
<b>Supply Voltage:</b>	110/230Vdc
<b>Operating Temperature:</b>	40°F to 110°F (5°C to 45°C)
<b>Weight:</b>	39 lbs (17.7 kg) approx.



##### LTCM-500

Features	
<input type="checkbox"/>	Tensile, Compressive, Peel & Flexural Testing
<input type="checkbox"/>	Compact, Benchtop Design
<input type="checkbox"/>	Simple Operation with Intuitive Controls
-	Crosshead Direction
-	Return Speed
-	Speed Selection
-	Emergency Stop
-	On/Off
<input type="checkbox"/>	Load Limits (DF Force Gauge Driven)
<input type="checkbox"/>	Large Working Area and Throat for Large Samples
<input type="checkbox"/>	Selectable Display with Digital Speed Readout
-	Inches per Minute
-	Millimeters per Minute
<input type="checkbox"/>	T-Slot Fixturing for Fast, Easy Testing
<input type="checkbox"/>	Options include Splinter Shield & Footswitch Operation
<input type="checkbox"/>	2 Year Warranty
Specifications	
<b>Capacity:</b>	550 lbf (2500N)
<b>Crosshead Speed:</b>	0.2 to 20 in/min (5 to 500 mm/min)
<b>Speed Accuracy:</b>	±3% (No Load)
<b>Travel:</b>	29-inches (750mm)
<b>Load Measurement:</b>	Chatillon Force Gauge
<b>Supply Voltage:</b>	110/230Vac
<b>Operating Temperature:</b>	40°F to 110°F (5°C to 45°C)
<b>Weight:</b>	100 lbs (45.5 kg) approx.



## Product Information

Motorized Test Stands can't

### Cycle Control

Adding automation to your LTCM test stands

**Cycle Control** conveniently plugs into the tester footswitch jack, enhancing the economical LTCM Series tester by providing 3 additional modes:

- In **Manual Mode** the tester will travel in the desired direction and stop at the preset mechanical limit.
- In **Single Cycle Mode** the tester will travel in the desired beginning direction and upon reaching the preset limit will reverse direction, travel to the preset opposing limit and stop.
- In **Cycle Mode** the tester will cycle continuously between preset upper/lower limits.
- **Cycle Control** also functions with the load limit feature on Chatillon® DF Series Digital Force Gages.

BY:

### K & M Products

A department of S. A. Meier Co. of Milwaukee, Inc.



Programmable Test Stands

### TCD Series

### Digital Force Testers

The CHATILLON® TCD Series is an advanced force testing system optimized for production, quality control and engineering applications. The TCD System consists of a powerful, yet easy-to-use console; a rugged frame and an intelligent load sensing system with measuring accuracies better than 0.1% full scale. The TCD console features a high resolution color graphical display featuring menus, function and numeric keys and status indicators that assist the user in setup, operation and analysis. Information may be displayed in large-format tabular and graphical formats for easy viewing. The frame employs an advanced closed-loop PID controller for precision travel (accuracy better than 0.25% unloaded), ideal for applications such as spring testing where exact distance control is required. The TCD System permits the user to measure heights based on a datum or absolute position. Deflection compensation is standard. Standard test setups for load limits, distance limits, time limits, break tests, rupture tests, cycling and loop tests are included. No computer software is necessary.

#### Features

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|--|--|--|
| <ul style="list-style-type: none"> <li>■ Advanced Yet Simple to Use Test Setups                     <ul style="list-style-type: none"> <li>- Limit Testing (Load, Distance, Time)</li> <li>- Break Testing</li> <li>- Cyclic &amp; Loop Testing</li> <li>- Multi-Stage/User Defined Testing</li> <li>- Height Measurement</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>■ Advanced Operator Control Console                     <ul style="list-style-type: none"> <li>- Simple Operation: Menus, Templates, Prompts</li> <li>- Secure Access</li> <li>- Tabular and Graphical Results</li> <li>- Embedded SPC</li> <li>- Ergonomic Design</li> <li>- Large, Color Display</li> <li>- No Computer Required</li> </ul> </li> <li>■ PID Closed-Loop Motion Control                     <ul style="list-style-type: none"> <li>- Precision Position Accuracy</li> <li>- Speed Accuracy Better than 1%</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>■ 1000Hz Data Sampling and USB Output                     <ul style="list-style-type: none"> <li>- Save Data to Flash Drive</li> <li>- Export Data Directly to Excel or OLE2 Formats</li> </ul> </li> <li>■ Large Working Area                     <ul style="list-style-type: none"> <li>- Ideal for Large and Small Samples</li> <li>- T-Slot Table Design Supports Custom Fixturing</li> </ul> </li> <li>■ Barcode Automatic Operation</li> <li>■ 1 Year Warranty</li> </ul> |
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## Product Information



### TCD Specifications

	TCD110 Series	TCD225 Series	TCD1100 Series
<b>Load Capacity</b>	110 lbf, 50 kgf, 500 N	225 lbf, 100 kgf, 1 kN	1124 lbf, 5 kN
<b>Maximum Speed</b> (per min)	20 in, 510 mm	50 in, 1270 mm	40 in, 1020 mm
<b>Minimum Speed</b> (per min)	0.001 in, 0.02 mm	0.001 in, 0.02 mm	0.001 in, 0.02 mm
<b>Return Speed</b>	User- Selectable	User- Selectable	User-Selectable
<b>Crosshead Travel</b>	15.0 in, 380 mm	20.0 in, 510 mm	30.0 in, 760 mm
<b>Instrument Weight (approx.)</b>	65 lbs, 30 kg	75 lbs, 34 kg	185 lbs (84 kg)
<b>Shipping Weight (approx.)</b>	86 lbs, 39 kg	96 lbs, 43 kg	210 bs (94 kg)

## Product Information

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### Common Specifications

#### Load Measurement System

- TLC Series Load Sensors
- Auto-Recognition, "Plug & Test"
- Sensor Overload History Log

#### Load Measurement System

- Accuracy better than 0.1% Full Scale
- Calibrate On-site to Better than 0.25% Reading
- Measuring system meets or exceeds the following:  
ASTM E4, BS 1610, DIN 51221, ISO 7500-1, EN 10002-2, AFNOR A03-501 (*AMETEK recommends system verification on-site at the time of installation by an authorized Chatillon Representative, as required by ASTM E4 and ISO 7500-1*)

#### Strain Measurement System

- Position accuracy better than 0.001 in (0.02mm) or 0.05% displacement (whichever is greater)
- Strain measurement system meets or exceeds the following:  
ASTM E83, BS 3846, ISO 9513, EN 10002-4
- Deflection Compensation Standard

#### Speed Accuracy

- Better than 1% Full Scale

#### Distance Accuracy

- Better than 0.25% of reading unloaded
- Resolution is .001 inch or .02 mm

#### Display Language Options

- English
- Chinese (Simplified & Traditional)
- French
- German
- Korean
- Portuguese
- Russian
- Spanish
- Turkish

#### Data Sampling

- 1000Hz
- User Selectable Sampling/Filters (1-1000 Hz)

#### Data Output

- USB Serial Data and RS232 Data Output
- Save Data Directly to USB Flash Drive
- Interface to USB Serial Devices, e.g. Barcode Scanner/Reader, Printers, Keyboards, Hubs
- Export Data to Excel or any OLE2 Compatible Platform
- Save Test Results Locally in Console Memory

#### Test Setups

- Load Limit
- Distance Limit
- Time Limit
- Break or Rupture
- Cycle or Loop
- Multi-Stage (Define a custom test with multiple stages)

#### Operating Temperature

- 40°F to 110°F (5°C to 45°C)

#### Storage Temperature

- 0° to 130°F (-17° to 54°C)

#### Relative Humidity

- 20% to 85%

#### Conformance

- BS EN 61010-1:2001 Safety Requirements for Electrical Equipment
- BS EN 61000-6-3:2007 EMC Generic Emissions Standard
- BS EN 61000-6-1:2007 EMC Generic Immunity Standard

#### Single Phase Voltage

- 100, 120, 220 or 240Vac  $\pm 10\%$ , 47 to 63Hz. Power must be free of spikes, surges, and sags exceeding 10% of the average voltage.

### Pricing

Prices depend on features and capacity.

- A basic manual tester can be set up with a gage for as low as \$1500.
- A motorized tester can be set up with a gage for as low as \$3600 and with Cycle Control module included \$4800.
- A programmable motorized tester with a load cell can be setup for as low as \$7250.

A wide range of grips are available to meet virtually every testing need. Contact us for a quotation and more information.