



# TCM SERIES

MOTORIZED TEST STANDS  
100 lbf (500 N) & 350 lbf (1500 N)



# FEATURES

## Key Features

- **EASY OPERATION**

A single key press to start the test and a return to zero function save time. A high maximum speed of 40 in/min (1016 mm/min) further reduces cycle time.

- **SMART FUNCTIONALITIES**

The large touch sensitive buttons feature haptic feedback that reduces the time taken to configure and run a test while reducing operator errors. Tests can be configured to pull to a set position or cycle between 2 positions. When combined with specific Chatillon force gauges, additional features such as driving to a load limit and recording break forces become available.

- **ACCURATE TEST RESULTS**

Combined with the Chatillon DF II Series force gauges the load accuracy exceeds 0.1% full scale. Advanced electronics enable set speed accuracy of < 0.1% of set speed value and data sampling rates up to 10 KHz.

- **LARGE WORKING AREA - SMALL FOOTPRINT**

The compact TCM features a large throat depth enabling samples up to 7.96 in (200 mm) diameter to be tested, yet retains a compact footprint.

- **Data Analysis and Integrity**

Optional Chatillon ForceTest software allows viewing data in graphical form, data logging, result calculations, pdf report creation and data export. Password controlled access helps ensure the integrity of the data produced. Download your free trial version now at [www.ametektest.com](http://www.ametektest.com)

## Intuitive Effectiveness

The motorized TCM Series from Chatillon offers fast and effective force testing at an affordable price.

The TCM Series features a high frame stiffness, light weight bench top design suitable for both production and laboratory environments.

Force ranges of 100 lbf (500 N) and 350 lbf (1500 N) are available in both 16 in (406 mm) and extended 32 in (812 mm) travel versions.

Select from Chatillon's wide range of grips and fixtures to use the TCM Series for a wide variety of tests such as:

- Tension
- Compression
- Bending
- Peeling
- Adhesion
- Insertion and extraction



### Force Capacity

TCM100 .....	<b>100 lbf / 500 N</b>
TCM350 .....	<b>350 lbf / 1500 N</b>

### Crosshead Travel

TCM100 .....	<b>16 in / 406 mm</b>
TCM100 Extended ....	<b>32 in / 812 mm</b>
TCM350 .....	<b>16 in / 406 mm</b>
TCM350 Extended ....	<b>32 in / 812 mm</b>

# A MODULAR SYSTEM



The TCM Series offers you a flexible force measurement solution that matches your exact needs. This way you get a solution that lives up to your requirements, without costs for additional features you do not need. Should your needs change over time then it is easy to upgrade your TCM solution to fit your new requirements.

## BASE SOLUTION

The TCM Series can be used in combination with Chatillon DFE or DFS Series force gauges. This way, if you already have a Chatillon force gauge available, you only need to acquire the TCM Series test stand to get started on your force testing, enjoying all of the benefits that the TC Series has to offer:

- Easy operation
- Haptic feedback buttons
- LED color display
- Set position or cycle between 2 positions



## EXTRA BENEFITS

By adding a digital force gauge from the Chatillon DFE or DFS Series to your TCM Series test stand, additional features will become available enabling you to perform a more advanced, fast and easy force testing on your specimens.

- Drive to load limit
- Password protection
- Pass/Fail limits
- Average load
- Statistics
- Peak break force
- Contact close feature
- Access to ForceTest PC software



## FAST AND EASY ANALYSIS

Adding the Chatillon ForceTest software will power up your TCM Series force testing solution and will turn your analysis into a fast and simple process.

By combining the DFE or DFS Series gauge and the ForceTest software with the TCM Series you obtain:

- Seamless serial data communication from the test machine to your computer
- Save test setup and achieve faster workflow
- Export data as CSV or PDF
- Time and date stamped data
- Live data view during tests





# SPECIFICATIONS



## TECHNICAL SPECIFICATIONS

### Force Capacity

TCM-100 ..... 100 lbf / 500 N  
 TCM-350 ..... 350 lbf / 1500 N

### Speed Range

TCM-100 ..... 5.08 to 1016 mm/min /  
 0.2 to 40 in /min  
 TCM-350 ..... 5.08 to 1016 mm/min /  
 0.2 to 40 in /min

### Speed Accuracy

0.1% of set speed value

### Crosshead Travel

TCM100 ..... 16 in / 406 mm  
 TCM100 Extended .... 32 in / 812 mm  
 TCM350 ..... 16 in / 406 mm  
 TCM350 Extended .... 32 in / 812 mm

### Supply Voltage

207-253 VAC at 50 Hz or 103.5-126.5 VAC at 60 Hz

### Load Measurement

Chatillon DF Series gauge

### Software

ForceTest

### Weight

57 lbs / 26 kg - Standard height  
 69 lbs / 32 kg - Extended height

### Shipping Weight

85 lbs / 39 kg - Standard height  
 132 lbs / 60 kg - Extended height

### Throat Depth

3.98 in / 100 mm

### Operating Temperature

50-104° F / 10-40° C

To ensure you receive an accurate, reliable instrument of the highest quality, Chatillon force measurement machines are designed and handcrafted at our factories in the United States in accordance to ISO 9001.

The TCM Series is CE certified and supported by our global service centres in accordance to ISO 17025.

Quality and integrity are part of our DNA, and we would like to helpmake it a part of yours as well.

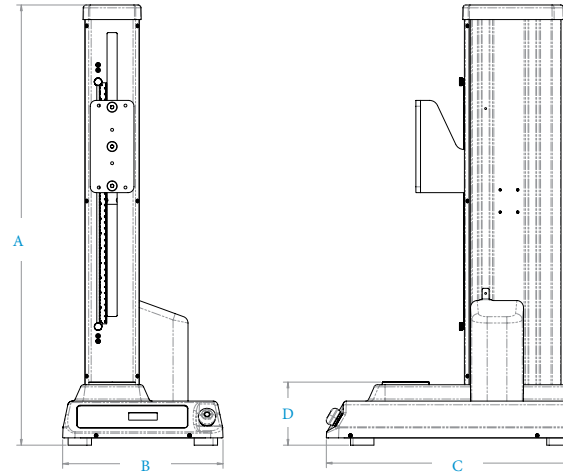


# SPECIFICATIONS & ORDERING



## DIMENSIONS

<b>A</b>	<b>Height</b>	TCM100	29.7 in/754 mm
		TCM100 Extended	45.7 in/1161 mm
		TCM350	29.7 in/754 mm
		TCM350 Extended	45.7 in/1161 mm
<b>B</b>	<b>Width</b>	TCM100	10.8 in/275 mm
		TCM350	10.8 in/275 mm
<b>C</b>	<b>Depth</b>	TCM100	17 in/431 mm
		TCM350	17 in/431 mm
<b>D</b>	<b>Base Height</b>	TCM100	4.3 in/108 mm
		TCM350	4.3 in/108 mm



## ORDERING

Order Number	Description
	<b>Model / Force</b>
TCM100	TCM100, 100 lbf / 500 N
TCM350	TCM350, 350 lbf / 1500 N
	<b>Crosshead Travel Height</b>
S	Standard 16"
E	Extended 32"
	<b>Power</b>
115	115 VAC 60 Hz, US Power Cord
230	230 VAC 50 Hz, UK and EU Power Cord
230CNAU	230 VAC 50 Hz, China and Australia Power Cord
	<b>Mounting</b>
A	1/2-20F thread in base with 5/16 18M and 10/32M Base Adapter Coupling Kit
B	5/8" Eye End in Base and 5/8" Eye End Adapter Kit for DFE/DFS gauges
	<b>Sample order number</b>
TCM100 E 230 A	TCM100 Extended, 230 VAC 50 Hz UK and EU Power Cord and with a Base Adapter Coupling Kit





# ACCESSORIES



## STANDARD ACCESSORIES

Description	Part Number	TCM A Version	TCM B Version
1/2-20F Thread Base Plate	6344-01	●	●
1/2-20M to 5/16-18M Coupling	17162	●	
1/2-20M to 10M/32M Coupling	NC003238	●	
5/8" Eye Adapter to 1/2 20 Male Thread/ w / Pin & Locking Rings	SPK-TLC-003		●
5/8" Eye End Kit and Grip Pin for DFE/DFS Gauges	SPK-TCM-001		●
TCM USB to PC USB Cable, 3M (for Upgrades & PC Connection)	SPK-TCM-016	●	●
TCM to DFG Cable (Load Limit Communication to TCM)	SPK-TCM-018	●	●

### TCM A Version



Coupling  
1/2-20M to 5/16-18M



Coupling  
1/2-20M to 10/32M

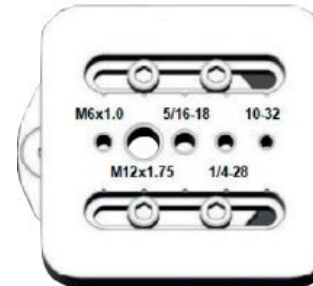
### TCM B Version



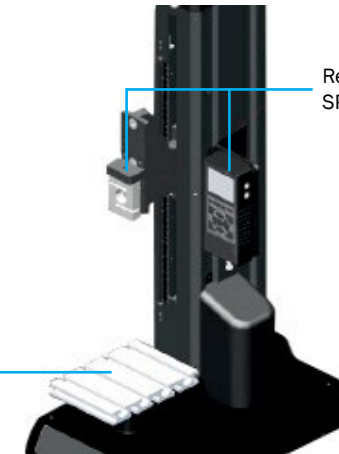
5/8" Eye End Kit  
SPK-TCM-001

## OPTIONAL ACCESSORIES

Description	Part Number
Multi-Thread Plate Kit	SPK-TCM-005
T-Slot Table	SPK-TCM-011
Foot Switch	NC002910
Splinter Shield	SPK-TCM-012
DFS Series Remote Load Cell Adapter Kit	SPK-TCM-014
3" Compression Platen	SPK-TCM-013



Multi-Thread Plate  
SPK-TCM-005



Remote Load Cell Adapter Kit  
SPK-TCM-014

T-Slot Mounting Table  
SPK-TCM-011

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