



MANUAL TEST STANDS

## MANUAL FORCE TESTERS

### MTL MANUAL TESTERS

The MTL Manual Testers are single column, manually-operated force testers. These testers operate with a quick-action lever in either tension or compression directions. Two models are available- the MTL-110 and MTL-330. Force measurement is performed using a Starrett DFC or DFG digital force gage.

#### MTL-110

The MTL-110 can measure force up to 110lbf (500N, 50kgf). This tester is ideal for component testing and its compact design fits small work spaces. The MTL-110 has a 6" (152mm) stroke. The tester's quick-action lever moves the rack and pinion crosshead 3" (76mm) per revolution. The lever may be positioned anywhere along the 20" (508mm) column, and with a 6" (152mm) throat, large samples can be accurately tested. Options include a digital scale for measuring deflection distance. The base adapter adjusts to accommodate different gage models.

#### MTL-330

The MTL-330 can measure force up to 330lbf (1500N, 150kgf). This tester can be used for tensile and compression testing applications, and is ideal for spring testing. Fit the MTL-330 with a Starrett digital force gage and optional digital scale to determine spring rates, initial tension and more. The MTL-330 can be easily mounted to your workbench for secure testing.

Like the MTL-110, the quick-action lever moves the rack and pinion crosshead 3" (76mm) per revolution. The lever may be positioned anywhere on the 30" (762mm) column, and with a 4" (102mm) throat, large samples can be accurately tested. Optional gage adapter kits are available for use with non-Starrett force gages.

The MTL may be equipped with optional legs so that you can test in a horizontal position.

#### FEATURES

- Two Capacities: 110lbf, 330lbf (500N, 1500N)
- Compact Design is Ideal for Lean Manufacturing Environments
- Lever-type, Quick-action Crosshead Movement
- Precision Rack and Pinion
- Excellent Position Resolution: Single Rotation for 3" (75mm)
- Adjustable Gage Mounting



MTL - Manual Force Tester, Lever Control

| Model No. | Load Capacity |     |     | Crosshead Travel |     | Resolution/Rotation |    | Throat |     | Weight |     | Vertical Test Space (max.) |     | Thread     |
|-----------|---------------|-----|-----|------------------|-----|---------------------|----|--------|-----|--------|-----|----------------------------|-----|------------|
|           | N             | KGF | LBF | in               | mm  | in                  | mm | in     | mm  | lbs    | kgs | in                         | mm  | mm         |
| MTL-110   | 500           | 50  | 110 | 6                | 152 | 3                   | 76 | 4      | 102 | 18     | 8.2 | 9                          | 230 | M6, #10-32 |
| MTL-330   | 1500          | 150 | 330 | 6                | 152 | 3                   | 76 | 4      | 102 | 20     | 9.1 | 15                         | 381 | M10        |



## MTH MANUAL TESTERS

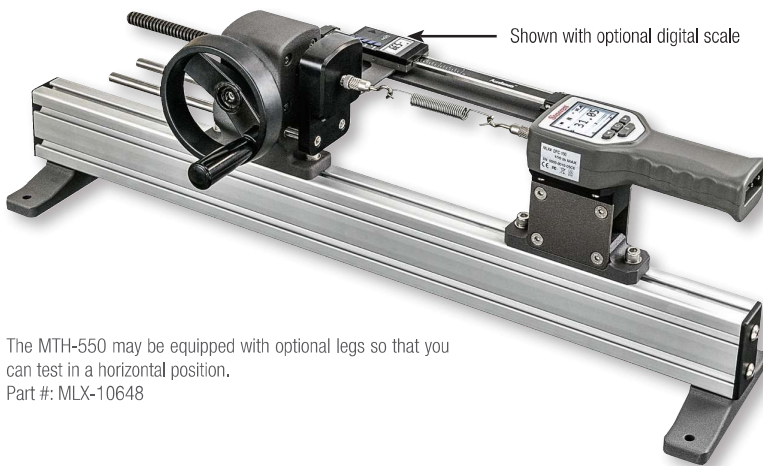
The MTH Manual Tester is a single column, manually-operated force tester. The MTH has a load measurement capacity of 550lbf (2500N, 250kgf) and can be used for compression or tensile testing. The mechanical advantage afforded by the MTH-550's precision, high-resolution worm gear design lets you test effortlessly. One rotation of the hand wheel positions the crosshead 0.03" (0.75mm). Total stroke for the MTH-550 is 4" (102mm). Force measurement is performed using a Starrett digital force gage.

The MTH-550 is an ideal, affordable solution for spring testing. Fit the MTH-550 with a digital force gage and optional digital scale to determine spring rates, initial tension and more.

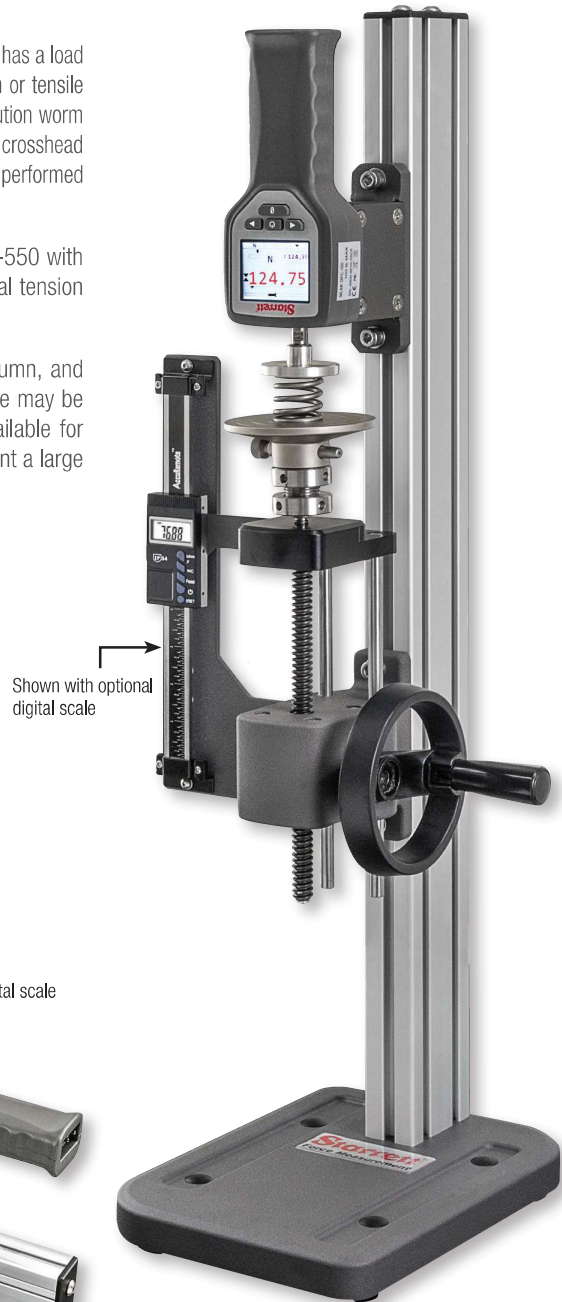
The hand wheel may be positioned anywhere along the 30" (762mm) column, and with a 4" (102mm) throat, large samples can be accurately tested. The base may be permanently affixed to your workbench. Optional gage adapter kits are available for use with non-Starrett force gages. Quick-change clevis adapters let you mount a large selection of Starrett testing fixtures.

## FEATURES

- Tension or Compression Testing
- Excellent for Cost-Effective Spring Testing
- Effortless Crosshead Movement
- Precision Worm Gear Design
- Excellent Position Resolution: Single Rotation for 0.03" (0.75mm)
- 30" (762mm) Column Height, 15" (380mm) Working Area
- Adjustable Gage Mounting



The MTH-550 may be equipped with optional legs so that you can test in a horizontal position.  
Part #: MLX-10648



### MTH - Manual Force Tester, Hand wheel Control

| Model No. | Load Capacity |     |     | Crosshead Travel |     | Resolution/Rotation |      | Throat |     | Weight |     | Vertical Test Space (max.) |     | Thread mm    |
|-----------|---------------|-----|-----|------------------|-----|---------------------|------|--------|-----|--------|-----|----------------------------|-----|--------------|
|           | N             | KGF | LBF | in               | mm  | in                  | mm   | in     | mm  | lbs    | kgs | in                         | mm  |              |
| MTH-550   | 2500          | 250 | 550 | 7.5              | 190 | 0.03                | 0.75 | 4      | 102 | 22     | 10  | 15                         | 381 | M10 x 1.5-5H |