

The TSFM500-DC is an advanced motorized test stand offering all the mechanical specifications of the TSFM500. The test stand is designed for compression and tension testing of springs, packaging, metals, fabrics, and other items requiring up to 500 lbf of force. Generous clearance and throat depth accommodate a broad range of sample shapes and sizes. The TSFM500-DC's durable and rigid column minimizes bend, making it particularly well suited for precision spring testing. Other features include a manual fine adjustment knob and a stepper motor that prevents speed variation with load, making testing precise and repeatable.

The TSFM500-DC's controller adds a significant amount of sophistication, including an extended speed range, PC control capability, programmable cycling, auto return, overload protection, and other features.

Features / Specifications

Maximum force: 500 lb [2200 N]
Maximum travel: 4" [102 mm]
Speed range: 0.01 - 6 in/min [0.2 - 150 mm/min]
Speed accuracy: ±0.2% of setting, ±0% variation with load
Limit switch repeatability: ±0.001" [0.03 mm]
Universal power supply: 80-250 VAC
Remote controller
Mounting holes for bench mounting
Base may be removed for alternative mounting
Removable loading plate with 25 #10-32 threaded holes for fixture mounting
CE mark

» Digital travel display



» Limit switch kit



The TSFM500-DC is shown in a typical spring testing application, with Model M5-1000 digital force gauge and compression plate.

Optional Hardware Features

■ Digital travel display

6" [150 mm] travel, 0.0005" [0.01 mm] resolution, 0.001" [0.03 mm] accuracy, SPC output for automated data collection. For output of travel data to a PC, the following items are required: 09-1066 cable and MRS100A communication adapter.

■ Multi-function cable, Series 5/4 gauge to controller

Connects a Series 5 or 4 force gauge to the controller. This single cable is used to transmit set points, overload signals, and force data.

■ Serial cable, controller to PC

Bi-directional communication with a PC for computer control. Also sends force data from the controller to a PC.



The TSFM500H-DC is shown set up for a tensile test, with Model M5-1000 digital force gauge and wedge grips.

