

## Mitech MTNL Vertical Manual Spring Torsion Testing Machine

### Overview

Mitech MTNL vertical manual spring torsion testing machine, by manual loading test force, can be used for a variety of coil spring torsion test, the use of manual loading, computer control, digital intelligent display, its stable performance, simple operation, strong structure, Simple, high efficiency. Widely used in spring manufacturing, low-voltage electrical appliances, power machinery, institutions of higher learning and scientific research units and other fields, is to improve production efficiency and save production costs necessary professional precision testing equipment.

### Technical Parameters

Technical Parameters	MTNL				
	MTN-50L	MTN-100L	MTN-200L	MTN-500L	MTN-1000L
Structural form	Floor type				
Measuring range	50N.mm	100N.mm	200N.mm	500N.mm	1000N.mm
Display range	0 - full load				
Load resolution	0.001/0.01/0.1/1/10				
Test angular range	0-±9999.9°				
Torsional angular resolution	0.1°				
Accurate measurement range	2% -100% Maximum test torque				
The height of the test specimen	≤70mm				
The sample length is tested	≤160mm				
Indication accuracy	±1%				
Torque plate diameter	100mm				
Power supply	220V				

### Working Principle

Spring torsion test machine measured by the sensor force generated by the signal into the measurement amplifier amplified into the A / D converter into a digital signal is accepted by the computer system, the digital processing, the computer system to deal with the operation of the A / D converter to the signal through the LCD display data.

### Features

- Widely used in spring manufacturing, low-voltage electrical appliances, power machinery, institutions of higher learning and scientific research units and other fields;
- Modeling novel, strong structure, high reliability, high precision measurement;
- Left and right arbitrary rotation, the angle of any set, simple, convenient;
- The angular displacement sensor (photoelectric encoder) can be used to correct the angular

displacement of the torque sensor automatically.

- With peak hold, overload protection, stiffness calculation and other functions, is conducive to user utility expansion;
- Equipped with micro-printer that can be real-time print the test result;
- After testing, the test data and the test curve are automatically saved for later retrieval analysis;
- Adopt liquid crystal display, menu-type user interface, simple and intuitive, convenient and quick;
- Consistent with GB, ISO, ASTM, DIN and other relevant domestic and foreign standards.

### Scope of application

Widely used in spring mechanical performance test.

### Applications

- Spring manufacturing industry
- Power machinery industry
- Experimental teaching experiment in colleges and universities
- Scientific research institutions of material analysis test
- Quality inspection departments quality testing links

### Working conditions

- Operating temperature: room temperature ~ 45 °C;
- Relative humidity: 20% to 80%;
- No vibration around, no corrosive media, no strong magnetic field interference;
- Horizontal installation on a solid basis;

### Configuration

	No.	Item	Quantity	Note
Standard Configuration	1	Testing machine host	1	
	2	Control system	1	
	3	Power cable	1	
	4	Attached fiels	1	

### Maintenance and care

- Before using this instrument, please read the instruction manual carefully, understand the operation steps and precautions, avoid the damage caused by improper operation or personal safety accident;
- Test machine is a large precision instruments, should pay attention to water, moisture. Exposed workstations, upper and lower beam parts and attached parts should be coated with anti-rust oil to prevent rust;
- If idle for a long time, at least once a week and move the upper and lower beams, so that beam position, silk mother often activities to prevent rust;
- Should be at least once a year for the instrument to do periodic testing to ensure the accuracy of the test machine;
- Electrical connection cable and equipment should be careful when connected, moderate efforts, remember not swipe, hard pull.
- Don't disassemble the instrument without authorization, maintenance related matter, please

