

## Computerized Electronic Universal Testing Machine LTDW-50M



(picture for reference)

### 一、 Use of equipment:

This machine is mainly used for testing the mechanical properties of various metal and non-metal materials. According to the national standard or the standard measurement material performance parameters provided by users, the test data are counted and processed, and the test curves and test reports of various requirements are printed out. It is widely used in construction engineering quality inspection departments, product quality inspection departments, universities and aerospace research institutes.

### 二、 Technical Parameter:

1. Maximum test force: 10 kN;
2. Measurement range of test force: (0.1-10) kN;

3. Accuracy of test force: better than the indication value (1%);
4. Crossbeam displacement measurement: resolution is higher than 0.001 mm;
5. The relative error of displacement is less than ( $\pm 0.3\%$ ).
6. Speed range of cross beam: 0.01 mm/min to 500 mm/min, stepless speed regulation and arbitrary setting;
7. Effective tensile space: 600 mm;
8. Power supply voltage: single-phase, 220V  $\pm 10\%$ , 50Hz;
9. Working environment: room temperature to 30 C, relative humidity not exceeding 80%;
10. Main engine shape size: 690 \*770 \*1780 (mm);
11. Weight: 450kg

### 三、 Main Configuration:

1. 10KN high precision load sensor;
2. Full digital servo motor and servo driver;
3. Precision ball screw with high precision;
4. Lenovo Brand Computer, Wide-screen LCD;
5. HP color inkjet printer;
6. High-precision data acquisition board (24-bit A/D data acquisition) can realize full digital adjustment, high-precision amplification and precise control (built-in computer).
7. Each set of tension and compression fixtures。

### 四、 Function and Features:

1. Host
  - 1.1 The product adopts door structure, the whole machine is exquisite and beautiful.
  - 1.2 Conventional configuration of tension and compression fixtures each set;
  - 1.3 AC motor and servo driver, reliable and stable performance, with over-

current and over-voltage protection devices;

1.4 Precision screw and precision deceleration mechanism are used for transmission, which is smooth, low noise and no clearance.

## 2. Measurement and Control System

2.1 Auto-clearing: After the main control system receives the test start instruction, the system automatically clears.

2.2 Automatic gear shifting: automatically switch to the appropriate range according to the load size to ensure the accuracy of measurement;

2.3 Automated test: After the test setting is finished, the test process can be completed automatically.

2.4 Batch test: For the same specimens, the same batch test can be automatically completed by setting one time.

2.5 Automatic Printing: After the test is finished, the test results can be printed automatically.

2.6 Real-time display: real-time display of test force and test peak value;

2.7 Limit protection: It has two kinds of limit protection functions: programmable control and mechanical protection.

2.8 Overload Protection: When the load exceeds 2%-10% of the maximum value, the machine will stop automatically.

2.9 Emergency shutdown: It is equipped with emergency shutdown switch to cut off power supply in case of emergency.