

Mitech MDW-Y300D Automatic Pressure Testing Machine

Overview

Mitech MDW-Y300D Automatic Pressure Testing Machine, equipped with corresponding auxiliary tools for compressive strength test or anti-folding test for ordinary cement mortar or oil well cement. It adopts built-in controller, AC servo motor, stable performance, strong structure, high reliability, simple operation, high degree of automation, with the help of a computer aided method to achieve powerful features. It is widely used in the field of hardness testing of building materials, quality inspection of quality inspection department and scientific research experiment of institutions of higher learning. It is a professional precision testing instrument that guarantees the quality of construction and improves the safety performance.

Technical Parameters

Technical parameters	Technical parameters
Max. test force	300KN
Force measuring range	6-300KN
Test accuracy	Better than $\pm 1\%$ of the indicated value
Test force speed adjustable range	1-10KN/s
Speed governing range	0.01-50mm/min
Maximum distance between the upper and lower plates	200mm
Size of upper and lower plates	Diameter 140mm
Test mode	Can do single test; Each group of six experiments can be completed consecutively
Power supply	220V
Dimensions	830*530*1500mm
Weight	350kg

Working Principle

The testing machine is the product of combining the testing machine technology with the mechanical transmission technology, the sensor technology, the automation control technology and so on, which is composed of the drive system, the control system, the measurement system. The drive system is mainly used for the movement of the beam of the testing machine, and the speed of the beam can be controlled by changing the motor speed. The control system regulate the testing machine by the console , getting the state of the test machine and the test parameters through the display screen. The measuring system can conduct the measurement of force, deformation and beam displacement using the sensor, signal amplifiers, photoelectric encoders and data processing systems. This machine can conduct the mechanical performance testing of the material pull, pressure, bending and so on through the coordination of the drive system, control system, measurement system and other subsystems .

Features

- Widely used in ordinary cement mortar or oil well cement compressive strength test or bending test;
- The speed of the beam during the test can be pre-set by the program or manually;
- All-digital AC servo motor through the no noise synchronous toothed belt, high precision seamless ball screw drive to ensure its smooth load, no gap, high transmission efficiency;
- High precision and high stability of the tire tension and compression strain sensor, coupled with high-precision measurement and amplification system to ensure that the test force of high precision;
- Built-in controller to ensure that the test machine can be specimen deformation, test force and displacement of the closed-loop control;
- Automatically according to the size of the load can be switched to the appropriate range to ensure the accuracy of measurement data;
- Zero adjustment, calibration, storage, etc. without any analog adjustment link, the control circuit is highly integrated;
- Sample process a high degree of automation, the system can achieve the accuracy of the automatic calibration;
- After testing, test data and test curve automatically saved for later retrieval analysis;
- Can be batch test, the sample of the same parameters can only be set by one test;
- With a brand computer to control the software operating system, Chinese and English Windows operating platform, menu prompt, mouse operation, it has the characteristics of high speed, mild interface and easy operation. It can meet the test measurement needs of different materials;
- Consistent with GB, ISO, ASTM, DIN and other relevant domestic and foreign standards.

Scope of application

Widely used in ordinary cement mortar or oil well cement compressive strength test or bending test;

Applications

- Building materials hardness testing
- Teaching experiment of scientific research in Institutions of higher learning
- Material analysis test of scientific research institutions
- Quality inspection link of Quality inspection department

Working Conditions

- Operation Temperature: Ambient temperature ~45°C;
- Relative humidity: 20% ~ 80%;
- In an environment free from vibration, corrosive medium and high magnetic field
- Installed on a flat basis.
- Power supply voltage fluctuation does not exceed 10% of rated voltage.

Configurations

Configuration Instructions	NO.	Name	QTY.	Remarks
Standard	1	Testing machine	1	Contains sensor, limit

Configuration		host		
	2	Control system	1	
	3	High precision load sensor	1	
	4	Power cable	1	
	5	Channel lines	1	
	6	Upper and lower pressure plate	1	Φ 140mm
	7	Computer	1	Contains host and monitor
	8	Printer	1	
	9	Attached files	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;
- After the experiment should be promptly cleaned up debris and other dirt, to prevent accidental damage to the instrument, to avoid shortening the life of the test machine;
- After the completion of the test, will be attached to a good, to prevent the loss of equipment for the next use;
- Electrical connection cable and equipment should be careful when connected, moderate efforts, remember not to swipe, hard pull.
- Don't disassemble the instrument without authorization, maintenance related matter, please contact MITECH after-sale service department with 4000600280.