LD- 300D computer controlled electro-hydraulic servo universal testing machine

LD- 300D computer-controlled electro-hydraulic servo universal testing machine sends control signals to the servo valve through the computer to control the opening and direction of the servo valve, thereby controlling the flow into the cylinder, and realizing the closed-loop control of constant velocity test force and constant velocity displacement. So as to realize the tensile, compression, bending and other mechanical performance tests of metal materials, non-metal materials, product parts, components, structural parts, and standard parts.

Product features :

1. The testing machine uses a microcomputer to control a high-precision electro-hydraulic servo valve, drives a precision hydraulic cylinder, and automatically controls the test force, displacement and deformation in various modes, and completes the tensile, compression, bending and bending tests of the sample. National standard GB/T228-2002 requirements.

2. The main body of the testing machine is divided into four types: A, B, C, and E:

Type A machine: the upper cylinder is installed, the upper jaw seat is driven by the piston, and the lower jaw is driven by the lower worm gear.

B-type machine: the oil cylinder is placed under the type, the piston drives the lower jaw seat, and the lower jaw is driven by the sprocket.

C-type machine: the oil cylinder is placed under the type, the piston drives the upper jaw seat, and the lower jaw is driven by the middle beam worm gear.

E-type machine: The cylinder under-mounted main engine integrated with the latest R&D and design of MTS technology in the United States can be expanded into a dynamic testing machine by replacing the software and controller, realizing dual-use in one machine.

3. Independent hydraulic clamping system, using original imported hydraulic pump unit and original hydraulic valve. Ensure that the system runs smoothly with low noise, and the sample is firmly clamped and does not slip during the test.

4. The independent hydraulic servo loading system adopts the original imported hydraulic pump unit, original hydraulic valve, and high-precision broadband electro-hydraulic servo valve to ensure the system is high-precision, high-efficiency, low-noise and fast-response.

5. Adopt brand microcomputer to complete the setting of test parameters, control of the test process, data acquisition, processing, analysis, storage and display (the test data includes: upper and lower yield point, tensile strength, breaking strength, elastic modulus, various Point elongation, δ0.2, etc.), precise and accurate control and measurement.

6. Equipped with special software for Windows universal testing machine, measure the performance parameters of each material according to national standards or standards provided by users, and perform statistics and processing of test data, and then output and print various required test curves and test reports, with test curves Zoom in, compare, traverse functions, smart, convenient.

7. Self-built powerful test database, test data can be saved, queried and called at any time, and data transmission and conversion with user local area network and the Internet can be realized.

8. With convenient manual open-loop control function, the operation is direct, fast and efficient.

9. Using high-precision amplifiers, it realizes six-speed measurement of test force (4-speed measurement for type A and B mainframes), automatic switching, accurate, stable and reliable.

10. Fully automatic (or manual) control of test force, stroke, stress and strain rate to realize tensile, compression and bending tests of various materials.

11. Powerful self-checking function and perfect protection function.

Main Technical Parameter :

Maximum test force	300kN
Test force indication accuracy	≤±1%
Test force measurement range	Maximum test force 2%～100%
Constant velocity stress control range	2-60(N/mm2•S-1)
Constant velocity strain control range	0.00025/s-0.0025/s
Constant velocity displacement control range	0.5-50mm/min
Clamping method	Hydraulic clamping
Round specimen clamping diameter range	Φ13～Φ60
Flat specimen clamping thickness range	0-55mm
Flat specimen clamping width	70mm
Maximum tensile test space	620mm
Maximum compression test space	580mm
Maximum size of control cabinet	1200×620×850mm
Host size	930×590×2000mm
Motor Power	2.1KW
Host quality	1500Kg
Column clearance	460mm
Upper and lower pressure plate size	Φ150
Curved prop spacing	300mm
Width of curved prop	140mm
Allowable curvature	100mm
Maximum piston stroke	200mm
Maximum moving speed of piston	About 80mm/min
Test space adjustment speed	About 150mm/min