LD- 1000D computer controlled electro-hydraulic servo universal testing machine

LD- 1000D 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 adopts a computer-controlled full-digital broadband electro-hydraulic digital valve, drives a precision hydraulic cylinder, and performs multiple modes of automatic control of test force, displacement, and deformation, and completes the tensile, compression, and bending tests of the sample. It meets the requirements of the national standard GB/T228-2002 ``Metallic Materials Tensile Test Method at Room Temperature'' and other standard requirements.

2. The main machine of the testing machine adopts the hydraulic cylinder under-mounted type; the power and transmission device for adjusting the test space are installed at the bottom of the testing machine, and the transmission is stable; the upper and lower jaw seats are fully open structure, automatic hydraulic tightening system, convenient sample clamping and stability good.

3. Use Lenovo brand microcomputer to complete the test parameter setting, test process control, data acquisition, processing, analysis, storage and display during the test process (test data includes: material tensile strength, elastic modulus, elongation, yield Strength, specified non-proportional extension strength, etc.). Control and measurement are precise and accurate.

4. Control technical parameters:

Using high-precision amplifier and 24-bit high-precision AD converter, effective internal code: ±120000; test force resolution 1/120000.

PID control is adopted to realize the constant speed control of the load, and the speed range: 0.2-5%FS/S with load holding function

PID control is used to realize constant speed control of displacement, speed range: 0.6-60mm/min with displacement maintaining function

PID control is used to realize constant speed control of strain, speed range: 0.00025/S-0.0025/S with strain holding function

Main Technical Parameter :

Maximum test force	1000kN
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	80mm
Maximum tensile test space	640mm

Maximum compression test space	600mm
Maximum size of control cabinet	1200×620×850mm
Host size	910×740×2200mm
Motor Power	2.5KW
Host quality	2700Kg
Column clearance	580mm
Upper and lower pressure plate size	Φ300
Curved prop spacing	400mm
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