

LD-50KN Computerized Universal Testing Machine

LD-50KN Computer-controlled electronic universal testing machine (floor type) is widely used in tensile, compressive, and bending mechanical performance tests of metals and non-metals. It is suitable for various test fields such as quality supervision, teaching and research, aerospace, iron and steel metallurgy, automobiles, rubber and plastics, woven materials, etc.

The machine adopts a fully digital servo speed control system with high speed regulation accuracy and stable performance and a servo motor as the drive system. The Star controller is the core of the control system. The control and data processing software with WINDOWS as the operation interface realizes the test force and test. The screen display of peak force, beam displacement, test deformation and test curve, all test operations can be automatically completed on the computer by the mouse. Good humanized design makes the test operation easier. Combining the above technologies, the machine can almost perfectly realize the closed-loop control of test force, deformation, displacement and other parameters. It can realize the control modes of constant stress, constant strain, and constant displacement, and can smoothly switch between various control modes. The machine fully meets the requirements of the national standard GB/T228-2002 "Metal Material Room Temperature Tensile Test Method". At the same time, it can conduct tests and data processing according to GB, ISO, JIS, ASTM, DIN and various standards provided by users, and has a good Extension.



Working environment:

1 The room temperature is 10-35°C. 2 The relative humidity is 20%-80%. 3 There is no vibration around, no corrosive medium, and no strong magnetic field interference. 4 The

fluctuation of the power supply voltage does not exceed 10% of the rated voltage. 5 Install horizontally on a stable foundation with a level of 0.2/1000.

Main Technical Parameter :

Maximum test force	50KN
Testing machine accuracy	Level 1
Test force measurement range	0.4%-100%FS
Test force accuracy	Better than $\pm 1\%$
Test force classification	6 gears
Displacement resolution	0.001mm
Accuracy of displacement measurement	$\pm 1\%$
Deformation measurement range	0.2~100%FS
Relative error of deformation indication	Within $\pm 1\%$
Deformation resolution	0.001mm
Relative error of deformation control rate	When the rate is less than 2% FS, it is within $\pm 2\%$ of the set value; When the rate is $\geq 2\%$ FS, it is within $\pm 0.5\%$ of the set value
Beam speed measurement range	0.01~500mm/min
Constant force, constant deformation, constant displacement control range	0.5%~100%FS
Constant force, constant deformation, constant displacement control accuracy	When the set value $\geq 10\%$ FS, within $\pm 0.1\%$ of the set value; When the setting value is less than 10% FS, within $\pm 1\%$ of the setting value
Test space	600mm
Test width	400mm
Power supply	Single phase, 220V $\pm 10\%$, 50Hz
Host size	828×560×1850mm
Host weight	500kg