

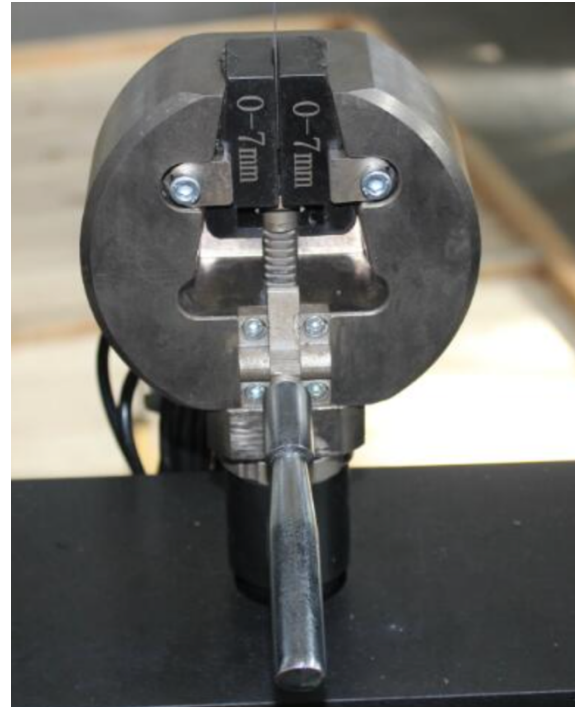
# LD-10KN Computerized Universal Testing Machine

LD-10KN The microcomputer-controlled electronic universal testing machine is a new generation of dual-space microcomputer-controlled electronic universal testing machine specially designed for

universities and research institutes. The design of the main machine and auxiliary equipment of the testing machine draws on the advanced technology of Shimadzu, which is beautiful in appearance, easy to operate, and stable and reliable in performance. The computer system controls the rotation of



the servo motor through the Star controller and the speed control system. After deceleration by the deceleration system, the moving beam is driven up and down by the precision screw pair to complete the stretching, compression, bending, and shearing of the sample. Mechanical performance test, pollution-free, low noise, high efficiency, has a very wide speed range and beam moving distance, and is equipped with a wide range of test accessories. In the mechanical performance test of metal, non-metal, composite materials and products, It has a very broad



application prospect. This machine is widely used in material inspection and analysis of construction materials, aerospace, machinery manufacturing, wire and cable, rubber and plastics, textiles, home appliances and other industries. It is used by scientific research

institutions, universities, industrial and mining enterprises, technical supervision, commodity inspection and arbitration, etc. Ideal test equipment.

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.

#### Main Technical Parameter :

|                                      |                       |
|--------------------------------------|-----------------------|
| Maximum test force                   | 10KN                  |
| Testing machine accuracy             | Level 1               |
| Test force measurement range         | 2%-100%               |
| Test force accuracy                  | Better than $\pm 1\%$ |
| Displacement resolution              | 0.01mm                |
| Accuracy of displacement measurement | Better than $\pm 1\%$ |
| Test speed range                     | 0.01-500mm/min        |
| Stretching space (without fixture)   | 600mm                 |
| Compressed space                     | 600mm                 |
| Column spacing                       | 400mm                 |

|                                     |                                                          |
|-------------------------------------|----------------------------------------------------------|
| Wedge-shaped fixture blessing range | Flat specimen 0-21mm, round specimen Φ4-26mm             |
| Host size                           | 720*500*1800mm                                           |
| Host weight                         | 400Kg                                                    |
| Motor Power                         | 0.75KW                                                   |
| Power supply                        | 220V, 50Hz                                               |
| working environment                 | Room temperature—35℃, relative humidity no more than 80% |