

LD25.204/ 304 /504 MATERIAL TESTING SYSTEM

The LD25 series load frame system is designed with integrated bench top at an ergonomic working height, providing comfort and convenient test operation. Engineered for long-term reliable performance demanded by quality assurance and R&D validation use, the LD series incorporates a low-maintenance Yaskawa drive system, a stiff load frame structure, and proven control technology. To protect the equipment from unnecessary downtime, smart technologies such as automatic specimen protection and collision-avoidance mechanisms are standardized across all models in the series.

Typical Specimens:

Metal sheets, composites, polymer materials, bio-medical materials, alloys, and many other non-metal materials for tests according to ISO and ASTM standards

Features:

- High-stiffness compact load frame, pre-loaded ball screws & robust guide columns to ensure accurate, stable and linear crosshead movement
- High performance control system minimizes response latency
- Intuitive test software with a comprehensive pre-built test template library
- Handset for convenient test setup
- Overload protection to ensure operator safety and prevent equipment damage



High Resolution Control System

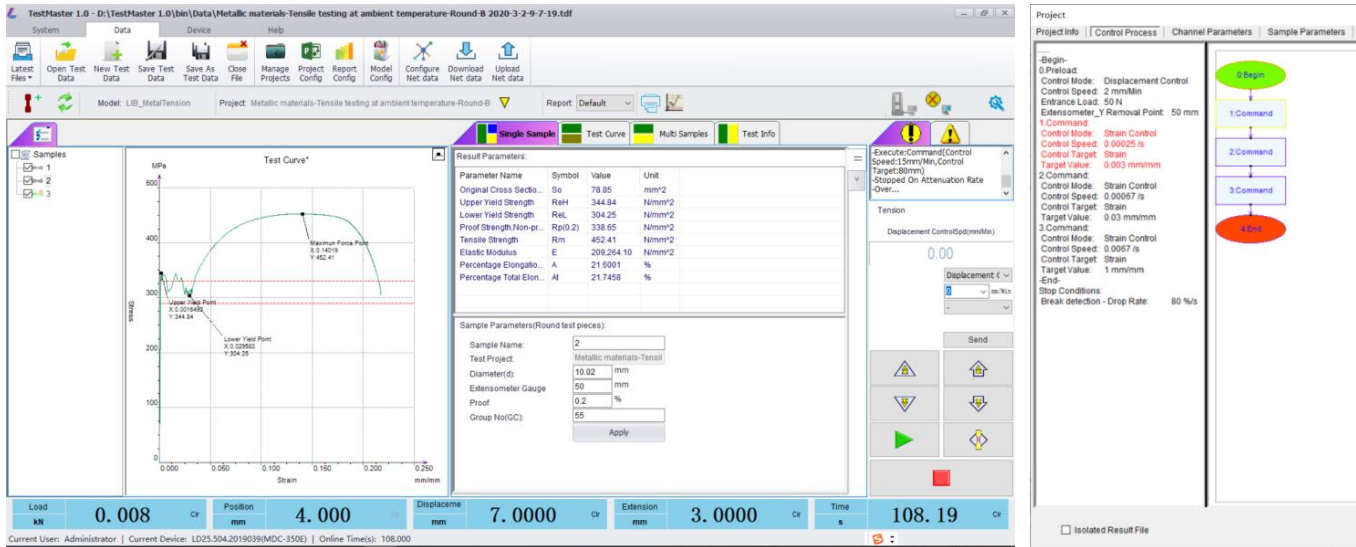
- Modern multi-core processor for fast response and ultra-low control latency
- 8 universal measurement channels, compatible with various sensors
- 250Hz data acquisition
- 3 closed-loop control modes: Load, Displacement, Strain
- TEDS-compatible, with 128-segment calibration

Wide Selection of Accessories

- Tensile Grips
- Compression Platens
- Flexural Fixtures
- Environmental Chambers and High Temperature Furnace
- Clip-on Extensometers
- Automatic Extensometers
- Non-Contact Optical Extensometers



Versatile and Intuitive TestMaster Software



TestMaster is a powerful and versatile universal testing software designed to meet virtually all static testing requirements, including tension, compression, bending, tearing, peeling, shearing, and custom cyclic tests. It can also integrate external devices for control and measurement, such as environmental chambers, strain gauges, video extensometers, encoders, and other peripherals.

The software provides real-time graphical display of test progress with instant result calculation. Its flexible user interface allows users to customize charts and screen layouts to fit various testing needs. The powerful yet easy-to-use data analysis tools support post-test recalculation, drag-and-zoom chart interaction, test playback, data annotation, multi-chart stacking, and more.

TestMaster includes a comprehensive library of pre-configured test templates based on ISO and ASTM standards. Users can run these templates directly or modify them to create new test methods. A flowchart-style template builder further simplifies the creation of customized test procedures.

Key Specifications

Model	LD25.204/304/504
Load Capacity	20/30/50kN
Force Measurement Accuracy	Within $\pm 0.5\%$ of reading to 0.04% of full load
Position Resolution	0.000065mm
Displacement Measurement Accuracy	Within $\pm 0.2\%$ of reading or 0.001mm
Minimum Speed @Full Load	0.001mm/min
Maximum Speed @Full Load	500mm/min
Speed Accuracy	Within $\pm 0.2\%$ of set speed
Control Mode	Displacement/Load/Strain
Data Acquisition Rate	250Hz
Vertical Testing Space	1000mm
Horizontal Testing Space	410mm
External Dimensions (mm)	2250(H) x 760(W) x 610(D)
Power Supply	220V $\pm 10\%$ (1 Phase), 850/850/1300W
Weight	400kg

