Mechanical Strength Glass Test System

LT-E0200 | Servo electromechanical loading and computer control

Tension • Compression • Bending • Static and cyclic loading



20 kN

TEST CAPACITY

1-30 mm

GLASS PLATE THICKNESS

EN 1288-3 • EN 1863-1 • EN 12150-1

Photographs and Components

Enclosed test area, central loading system and glass bending fixture

The Glass Test System evaluates mechanical behaviour of glass plates under controlled loading. An AC servo motor provides stable motion, while computer software records load and displacement data. Suitable fixtures support tension, compression and bending tests.

CONTROL PANEL

The upper panel carries operating buttons and an emergency stop button.

CENTRAL LOADING

The central loading assembly transfers force to the bending fixture.

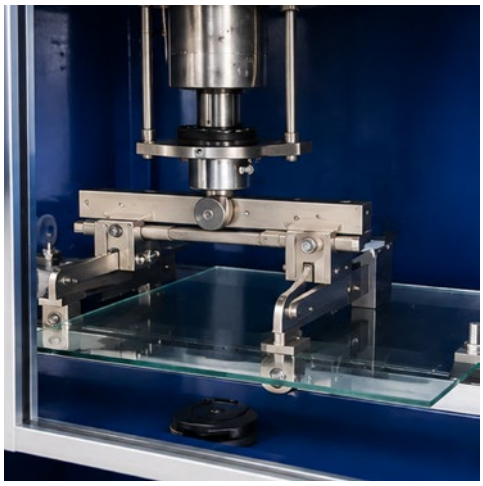


PROTECTIVE ENCLOSURE

The cabinet doors enclose the glass specimen and loading fixture.

GLASS AND SUPPORTS

The glass plate is positioned on supports for the selected bending arrangement.



Glass plate and bending fixture arrangement

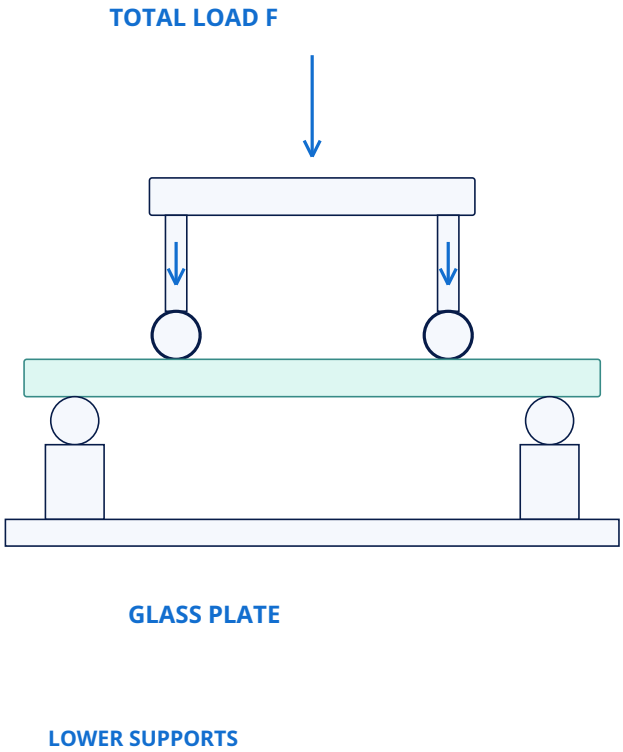


Glass plate bending under load

LT-E0200

Four-point Bending Arrangement

Two lower supports • Two upper loading points • Controlled force transfer



Position the Specimen

Align the glass plate on two lower supports. Set the upper loading points for the test method.

Servo-controlled Load

Select load or displacement control. Set movement speed within 0.001-50 mm/min.

Monitor Data

Software monitors and records load and displacement in real time. Define termination before testing.

In four-point bending, force is transferred through two upper loading points while two lower supports carry the specimen. Select support spacing and specimen geometry for the applicable method. Tension and compression use different fixtures.

Static and Cyclic Tests

Computer software defines test speed, load limits and termination conditions.

In addition to static testing, user-defined cyclic loading and long-duration controlled procedures are supported.

Electromechanical Drive

An AC servo motor controls loading movement. The system does not require hydraulic oil.

The large test area supports glass plates 1-30 mm thick and up to 1500 mm long.

LT-E0200

Technical Specifications

LT-E0200 • Capacity, specimen range, control and electrical supply

Technical Feature	Value / Function
Product Code / Capacity	LT-E0200 / 20 kN
Test Speed	0.001-50 mm/min
Displacement Resolution	0.0001 mm
Load Resolution	0.002 kN
Minimum Load Control Rate	0.01 kN/s
Test Area Height	At least 425 mm
Test Area Width	1600 mm
Glass Plate Range	1-30 mm thickness / up to 1500 mm length
Drive / Control	AC servo motor / load and displacement control
Software	Real-time records; static and cyclic tests
Weight	350 kg
Power Supply	220 V, 50-60 Hz, 1 phase

Standards and Fixture Selection

EN 1288-3 • EN 1863-1 • EN 12150-1. Select fixtures and specimen geometry for the applicable four-point bending, tensile or compression test method.

Test Workflow

01
Select Method
Select the test and suitable fixture set.

02
Position Glass
Align the plate on supports and close the enclosure.

03
Program Test
Set speed, load limits and termination.

04
Record Data
Review load and displacement results.

Product Page | liyatest.com.tr/en/urun/mechanical-strength-test-system-glass-test-system/