Direct Shear Test Machine

LT-S0260 | Consolidated drained soil shear-strength evaluation

Automatic consolidation • Controlled horizontal movement • Digital evaluation



7″ TFT

TOUCH-SCREEN CONTROL DISPLAY

5 geometries

SHEAR BOX SPECIMEN OPTIONS

ASTM D3080 • AASHTO T236 • ISO 17892-10

LT-S0260

Photographs and Instrument Components

Shear box, horizontal loading arrangement and touch-screen control panel

The Direct Shear Test Machine evaluates soil shear strength by applying controlled horizontal movement under normal load. Automatic consolidation and digital data monitoring support management of the test stages.

HORIZONTAL LOADING

Provides controlled horizontal movement to one part of the shear box.

SHEAR BOX

Holds the specimen in a defined geometry; the two parts define the shear plane.



TOUCH-SCREEN CONTROL

The 7″ TFT display allows test settings and measurement values to be monitored.

VERTICAL MEASUREMENT

The measuring arrangement supports monitoring of vertical specimen movement.



Shear box and horizontal load transfer



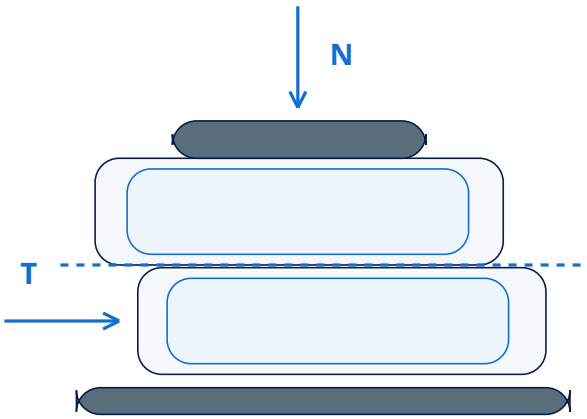
Touch screen and control panel

LT-S0260

Controlled Shear under Normal Load

Position specimen • Consolidate • Shear • Evaluate results

NORMAL FORCE + HORIZONTAL SHEAR MOVEMENT



NORMAL LOAD: CONSOLIDATION AND SHEAR

HORIZONTAL MOVEMENT: CONTROLLED DISPLACEMENT

Monitor shear force and displacements together

Determine c and ϕ from different normal stresses

REPRESENTATIVE SHEAR BOX DIAGRAM • NOT TO SCALE

Prepare the Specimen

Select a suitable box. Position the specimen, drainage and loading components.

Consolidate and Shear

Apply normal load. After consolidation, shear at the rate required by the method.

Evaluate Strength

Use tests at different normal stresses together to establish the strength envelope.

Consolidate the specimen under normal load, then move one part of the shear box horizontally. Monitor shear force and horizontal and vertical displacements throughout testing. Evaluate strength parameters using tests conducted at different normal stresses.

Consolidation and Shear Control

Automatic consolidation management and user-adjustable shear rate support controlled testing. Select a rate appropriate to specimen properties and drainage conditions according to the method.

Check shear box preparation, zero settings and normal loading. Retain consolidation and shear records under the same specimen identification.

Data Monitoring and Specimen Options

The 7″ TFT touch screen and computer connection support monitoring and evaluation of test data. Tests at different normal stresses are used to calculate cohesion and internal friction angle.

Shear box assemblies can be selected with compatible loading pads, retaining plates, porous plates, grids, specimen cutters and extractors.

LT-S0260

Technical Features and Shear Boxes

LT-S0260 | Automatic consolidation and controlled direct shear

Model / Feature	Description / Specimen Option
Product Code	LT-S0260
Control Display	7″ TFT touch screen
Test Management	Automatic consolidation and controlled shear
Data Evaluation	Computer connection • Graphs • c and ϕ calculation
Measurement Monitoring	Shear force • Horizontal and vertical displacement
LT-S0265	Shear box assembly • 60 × 60 mm
LT-S0270	Shear box assembly • Ø60 mm
LT-S0275	Shear box assembly • 100 × 100 mm
LT-S0280	Shear box assembly • Ø100 mm
LT-S0285	Shear box assembly • Ø2.5 inch

Link Each Test Series to Its Normal Stress Records

Retain specimen geometry, normal load, consolidation records and shear rate. Evaluate the strength envelope using tests at different normal stresses and report results with the method used.

Direct Shear Test Workflow

01
Prepare
Position the specimen in a suitable shear box.

02
Consolidate
Consolidate under the selected normal load.

03
Shear
Monitor data during controlled horizontal movement.

04
Evaluate
Calculate strength parameters and report.

Product Page | liyatest.com.tr/en/urun/fully-automatic-direct-shear-test-machine/