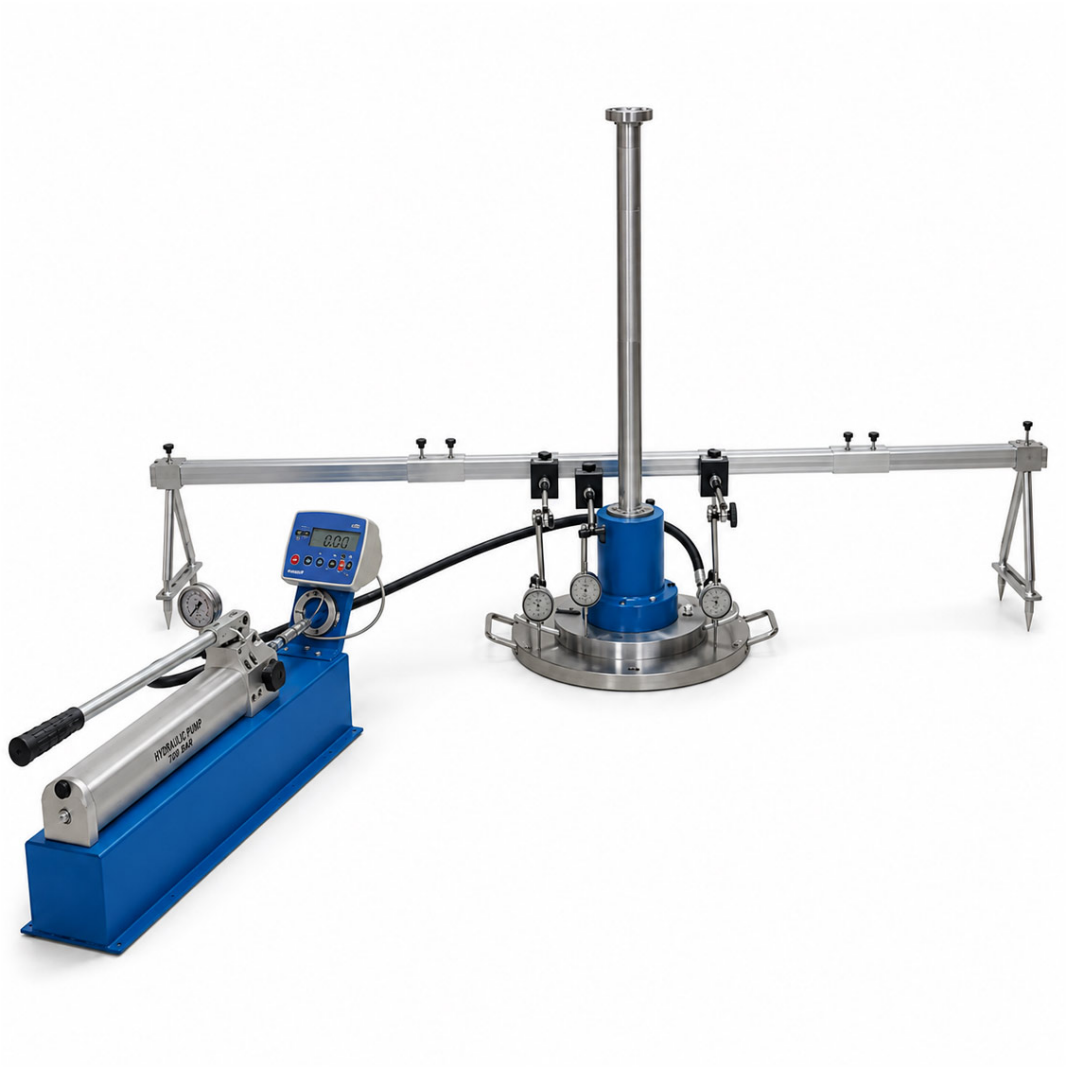
Plate Bearing Test Set

In-situ load testing of soil, base and sub-base layers

Hydraulic loading • Independent datum • Multi-point settlement readings



300-1000 kN

PRODUCT FAMILY CAPACITY OPTIONS

3 points

DIAL INDICATOR SETTLEMENT MONITORING

ASTM D1195 • ASTM D1196 • BS 1377-9

Photographs and System Components

Hydraulic loading, datum bar and dial indicators

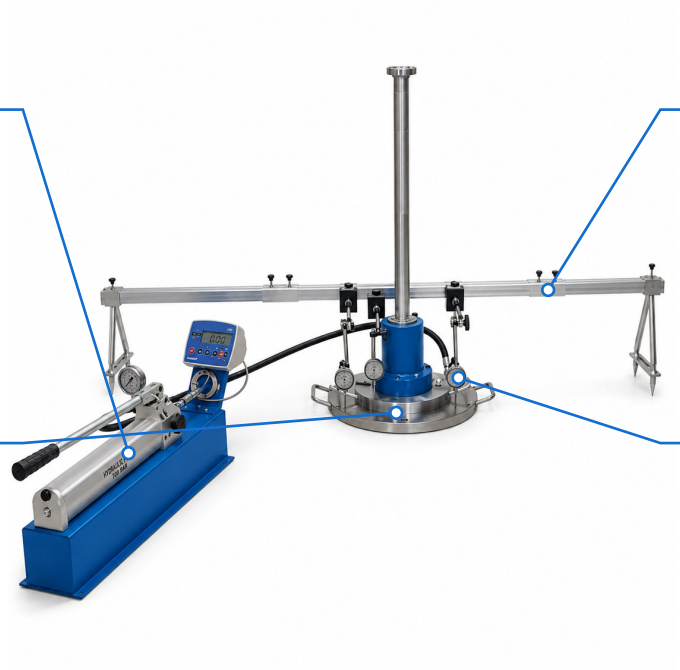
The plate bearing set monitors applied load and ground settlement together on site. Analog and digital measurement options are available within the product family. The datum bar provides a reference independent of the loading system.

HAND PUMP

The 700 bar hydraulic hand pump enables controlled loading through the piston.

DATUM BAR

The 2.4 m datum bar provides an independent reference for the dial indicators.



LOADING PLATE

The selected plate transfers load to the prepared ground surface.

SETTLEMENT READINGS

Three dial indicators monitor vertical plate movement at separate points.



Hydraulic piston, plate and three dial indicators

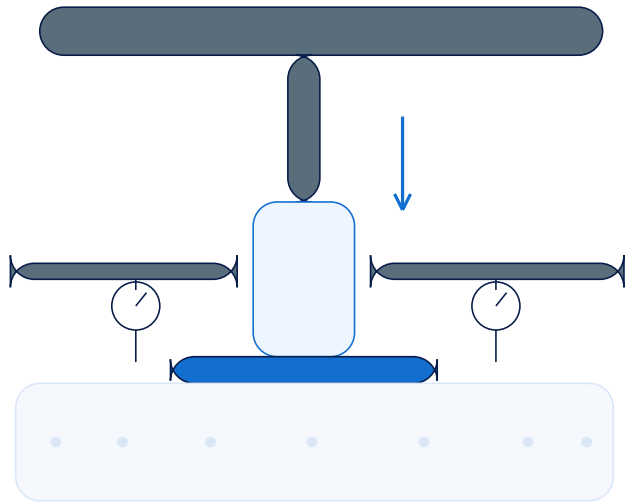


Hand pump and measuring arrangement

Staged Loading and Settlement Monitoring

Prepare the surface • Set up • Load in stages • Record settlement

REACTION + HYDRAULIC PISTON + PLATE



LOADING: CONTROLLED VERTICAL FORCE

MEASUREMENT: SETTLEMENT TO DATUM

Pair each load stage with settlement readings

Establish and evaluate the load-settlement curve

REPRESENTATIVE FIELD TEST ARRANGEMENT • NOT TO SCALE

Position the System

Place the plate on the prepared surface. Align the piston with a suitable reaction system.

Set the Datum

Reference the gauges independently. Check contact positions and zero settings.

Load and Record

Load according to the method. Record load, time and settlement together.

The hydraulic piston reacts against a suitable reaction system to load the plate onto the ground. Dial indicators monitor vertical displacement relative to an independent datum. Apply load stages and holding periods according to the selected test method.

Independent Measurement Datum

Position the datum bar supports and measuring arrangement in stable locations outside the direct loading influence. Monitor three measuring points to evaluate irregular plate movement.

The LT-G8001 dial indicator offers 30 mm travel with 0.01 mm graduation. Magnetic-base holders support positioning of the gauges.

Capacity and Plate Selection

Select loading capacity, plate diameter and reaction arrangement according to the test programme. The product family offers 300, 500 and 1000 kN capacities and Ø305, Ø457, Ø610 and Ø762 mm plate options.

Convert pressure readings to load using the calibration relationship for the piston system. Evaluate results together with plate diameter, loading sequence and surface condition records.

Model Options and Technical Components

Capacity and measurement type depend on the selected model

Model Code	Capacity	Measurement Option
LT-S0190	300 kN	Analog
LT-S0191	500 kN	Analog
LT-S0189	1000 kN	Analog
LT-S0192	300 kN	Digital
LT-S0193	500 kN	Digital

Component Code	Description / Specification
LT-G9000	Hydraulic hand pump • 700 bar
LT-G9005	Analog pressure gauge
LT-S0194	Datum bar with pointed feet • 2.4 m
LT-G8001	Dial indicator 30 × 0.01 mm • Holder: LT-G8001/1
LT-S0195 / LT-S0196	Loading plates • Ø305 / Ø457 mm
LT-S0197 / LT-S0198	Loading plates • Ø610 / Ø762 mm

LT-S0190: 300 kN Analog Model

Dimensions: 86.5 × 33 × 60 cm. Approximate weight: 120 kg. Piston codes: LT-S0190/1 (300 kN), LT-S0191/1 (500 kN), LT-S0189/1 (1000 kN).

Plate Bearing Test Workflow

01
Prepare
Prepare the surface and suitable plate.

02
Set Up
Position piston, reaction and datum.

03
Load
Record load stages and settlement.

04
Evaluate
Establish the curve and report results.

Product Page | liyatest.com.tr/en/urun/plate-bearing-test-set/