

Benefits and Features

- Choose load capacity to fit user needs from 45 and 90 kN (10,000 and 20,000 lbs.) models
- Total automation, control, data collection, and reporting of test results
- Prepare tables and plots of report quality within minutes of completing a test
- Geo-NET compatibility lets unit be accessed and controlled over a computer network
- Generate columns of data for easy reduction using your own spreadsheet software
- Accurate displacement rate control from 0.00003 to 35 mm per minute (0.000001 to 1.3 inches per minute)
- Stand alone through front keypad and LCD menu capability

Applicable Test Standards

- ASTM D4767 / D7181 / D2850
- AASHTO T297
- COE EM1110 Consolidated Undrained Compression / Extension Tests, Consolidated Drained Compression / Extension tests, Stress Path Tests
- BS (British Standard)

The LoadTrac II / FlowTrac II system for triaxial testing fully automates the conduct of CU, CD and any possible stress path triaxial test on soils. Once a soil sample is in place, and the test conditions are selected, the system will run the entire triaxial test from start to finish. This system is operated by software which automates the initialization, saturation, consolidation (isotropic, anisotropic, or K_0) and shear phases of the test.

The system comes as a complete, self-contained unit with all of the equipment required to perform fully automated triaxial and stress path tests. The LoadTrac II / FlowTrac II system utilizes high speed, precision micro stepper motors to apply the vertical load and pressures to the soil specimen. It includes one load frame for vertical stress, one flow pump for cell pressure and one flow pump for back pressure. The system is capable of applying a constant rate of strain at any displacement rate from 0.00003 up to 15 mm per minute (0.000001 to 0.6 inches per minute).

Sensor readings are displayed in SI or English units and stored in memory. With the network communications module and appropriate software, the entire test can be automatically controlled, data captured and displayed in real-time, and test reports prepared on a PC.



Standard Fully Automated
Triaxial and Stress Path System

Triaxial and Stress Path LoadTrac II / FlowTrac II

TECHNICAL SPECIFICATIONS

MOTOR

Stepper motor with built-in controls

TRAVEL

Built-in displacement transducer with 76 mm (3 in.) range and 0.0013 mm (0.00005 in.) resolution

DISPLACEMENT

Control from 0.00003 to 35 mm per minute (0.000001 to 1.3 in. per minute)

FLOW RANGE

0.000006 to 3 cc per second

POWER

110/220 V, 50/60 Hz, 1 phase

LOADTRAC II

Dimensions:

464 x 546 x 1206 mm
(18 x 21.5 x 47.5 inches)

Weight

55 kg (120 lbs.)

FLOWTRAC II

Dimensions:

203 x 406 x 470 mm
(8 x 16 x 18.5 inches)

Weight

14 kg (30 lbs.)

MODELS AND FRAME CAPACITY

LTH-10,000: 45 kN (10,000 lbs.)

LTH-20,000: 90 kN (20,000 lbs.)

FTII-250-nn: 250 cc capacity and 1400 kpa (200 psi) pressure

FTII-750-1400: 750 cc capacity and 1400 kpa (200 psi) pressure

ACCESSORIES

Triaxial cells up to 305 mm (12 in.) diameter, membranes, porous stones, and sample preparation accessories upon request

