

FULLY-AUTOMATED CONSTANT RATE of STRAIN CONSOLIDATION SYSTEM

Product Code

LoadTrac II FlowTrac II

The LoadTrac-II/FlowTrac-II system fully automates the performance of a Controlled Strain Loading Consolidation (CSL) test. Once a soil sample is in place, and the test conditions selected, the LoadTrac-II/ FlowTrac-II system will run the entire CRCS test from start to finish. The LoadTrac II/ FlowTrac-II system consolidates the sample through a loading path specified by the user using constant rate of strain loading. To avoid running the test too fast (excess pore pressures become too large for the transducer) or too slow (the test takes too long), LoadTrac II/FlowTrac-II uses Excess Pore Pressure Ratio Limits. If the measured excess pore pressure divided by the current total vertical stress exceeds the Upper Pore Pressure Ratio Limit, the current strain rate is automatically decreased by a factor of 2. If the measured excess pore pressure divided by the current total vertical stress falls below the Lower Pore Pressure Ratio Limit, the current strain rate is increased by a factor of 2. These limits give the user a great deal of control over how a constant strain rate test is run.

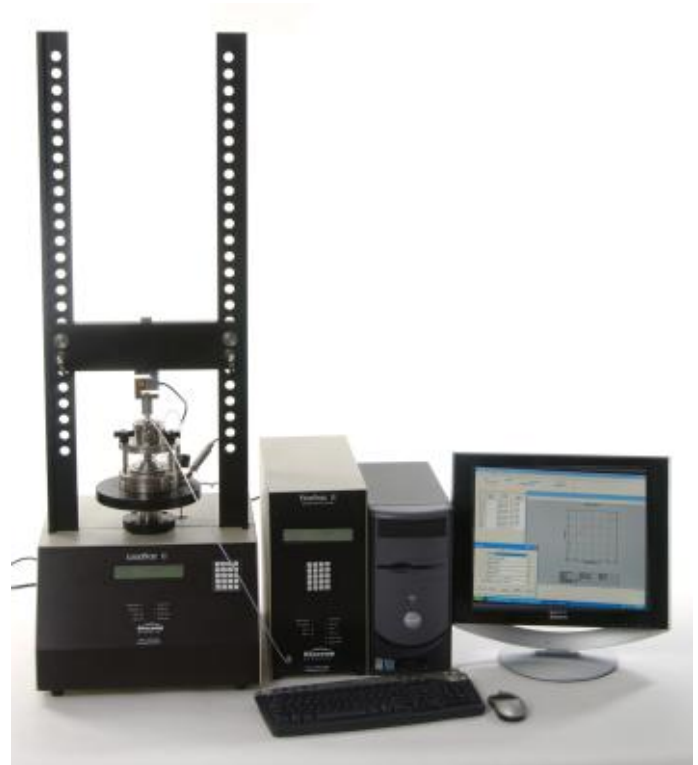
The FlowTrac II is used during back pressure saturation as well as maintaining a constant cell pressure during the consolidation phase of the test. A typical consolidation test can be completed in 24 to 36 hrs. on most materials.

Applicable Test Standards

- ASTM D-4186 One-Dimensional Consolidation
- Properties of Soils Using Controlled - Strain Loading

User Benefits

- Choose capacity to fit user needs from 22, 45 and 90 kN (5,000, 10,000 and 20,000 lbs.) models
- Total automation of data collection and reporting of test results
- Prepare tables and plots of report quality within minutes of completing a test
- Generate columns of data for easy reduction using your own spreadsheet software
- Ability to access and control the unit over a computer network using Geo-Net option



Models

FlowTrac II Models

FTII-250-nn	250 cc capacity
FTII-750-nn	750 cc capacity

LoadTrac II Models

LTII-5,000	22 kN (5,000 lbs.) frame capacity
LTII-10,000	45 kN (10,000 lbs.) frame capacity
LTII-20,000	90 kN (20,000 lbs.) frame capacity
LTII-50,000	222 kN (50,000 lbs.) frame capacity

Accessories

1230	All stainless steel consolidation cell with backpressure saturation capability, 62.5mm (2.5 in.) sample diameter standard. External stainless steel pressure sensor. Other sample sizes are available upon request
------	--

	Dimensions	Weight (approx.)
LoadTrac II	464 x 546 x 1206 mm (18 x 21.5 x 47.5 in.)	55 kg
FlowTrac II	203 x 406 x 470 mm (8 x 16 x 18.5 in.)	14 kg

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 15 mm per minute (0.000001 to 0.6 in. per minute)
Flow Range	0.000006 to 3 cc per second
Power	110/220 V, 50/60 Hz, 1phase