

Incremental Consolidation

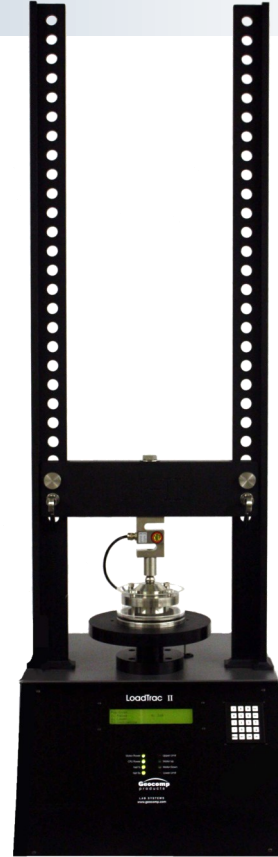
LoadTrac II

LoadTrac II system for incremental consolidation and swell testing fully automates an entire consolidation test. Constant load and constant volume swell tests can be run automatically. Once a sample is placed into the load frame, the test conditions programmed, and the test started, the LoadTrac II system performs the complete test without intervention by the user. The computer automatically increments to the next stress by using conditions specified by the user. Incremental consolidation test can be completed in 24 to 48 hrs. on most materials.

The LoadTrac II system utilizes a high speed, precision micro-stepper motor to apply the vertical load to the soil specimen. An embedded control board with a dedicated CPU takes readings from the force transducer and displacement transducer to control the stepper motor.

The base unit includes built-in data acquisition and display capability. Sensor readings are displayed in SI or English units and stored in memory. For incremental consolidation, the base unit is linked to a PC using the network communications module and the appropriate software.

Optional software running in Windows® XP, Vista, 7 completely automates the test, reducing the data and preparing test results.



Standard fully automated Incremental Consolidation system

User Benefits

- ▶ Choose capacity to fit user needs from 22, 45 and 200kN (5,000, 10,000 and 40,000 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

Applicable Test Standards

- ▶ ASTM D-2435 Incremental Consolidation
- ▶ AASHTO T-216 Incremental Consolidation
- ▶ ASTM D-4546 One dimensional swell or settlement potential of cohesive soils

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

DIMENSIONS

LoadTrac II	464 mm x 546 mm x1206 mm (18 in. x 21.5 in. x 47.5 in.)
WEIGHT	
LoadTrac II	55 kg (120 lbs.)

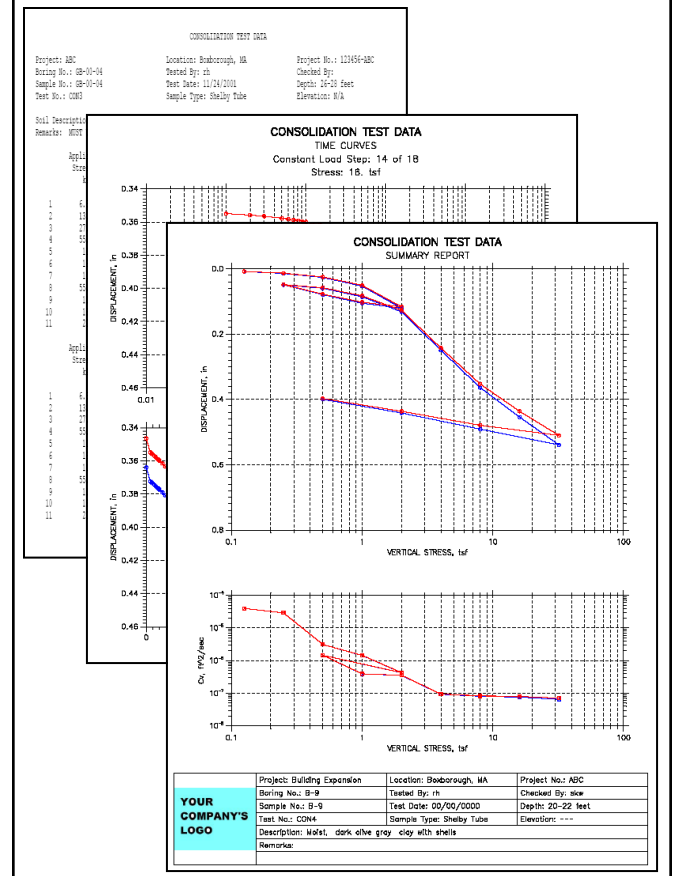
MODELS

LoadTrac II Models	Frame capacity
LTII-5,000	22 kN (5,000 lbs.)
LTII-10,000	45 kN (10,000 lbs.)
LTII-20,000	90 kN (20,000 lbs.)
LTII-50,000	222 kN (50,000 lbs.)

ACCESSORIES

1220	All stainless steel consolidation cell includes 63.5 mm (2.5 in.) sample ring, top cap, top and bottom porous stones.
Geo-NET™	Network/Communication card and cable to link load frame to PC.
ICONP	Software package to automatically run incremental consolidation test and swell tests with excess pore water pressure measurements capability
OPTIONS	Consolidation cell with back pressure and pore pressure measurements capabilities

Typical test output



User-friendly interface

