

Incremental Consolidation LoadTrac II

Benefits and Features

- Choose capacity to fit user needs from 45 to 90 kN (10,000 to 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

Applicable Test Standards

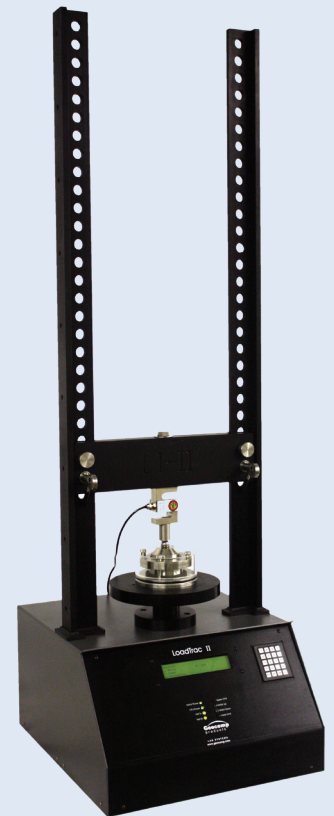
- [ASTM D2435 Incremental Consolidation](#)
- [AASHTO T216 Incremental Consolidation](#)
- [ASTM D4546 One Dimensional Swell or Settlement Potential of Cohesive Soils](#)

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 hours 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® completely automates the test, reducing the data and preparing test results.



*Standard Fully Automated
Incremental Consolidation System*

Incremental Consolidation LoadTrac 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 15 mm per minute (0.000001 to 0.6 in. per minute)

POWER

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

DIMENSIONS

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

WEIGHT

55 kg (120 lbs.)

MODELS

LoadTracII Models: Frame Capacity

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

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

FlowTracII Models: Frame Capacity

FTII-250-nn: 250 cc capacity

FTII-750-nn: 750 cc capacity

nn: Maximum pressure range for system: 700, 1000, 2000, and 3500 kPa (150, 300, and 500 psi) available (resolution of pressure will be 0.00005 times the range)

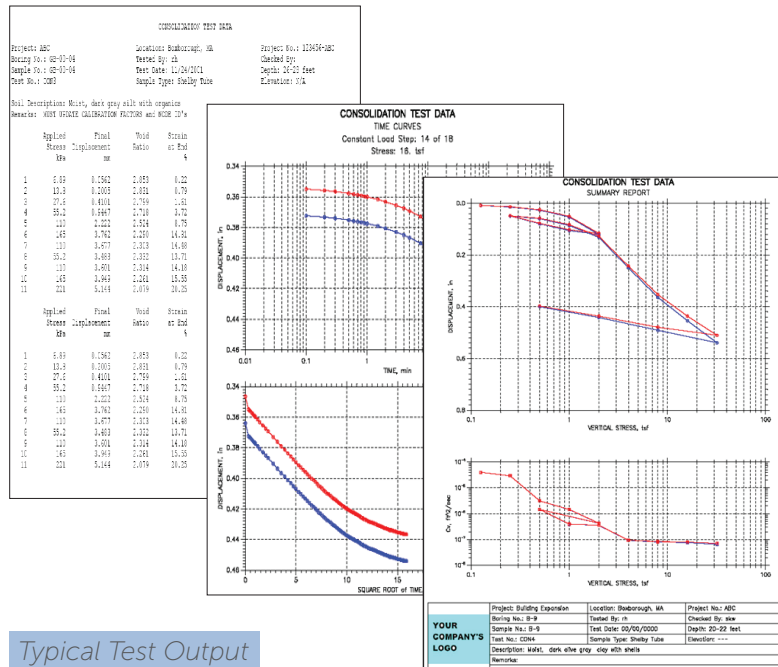
ACCESSORIES

1220: All stainless steel consolidation cell includes 63.5 mm (2.5 in.) sample ring, top cap, top and bottom porous stones.

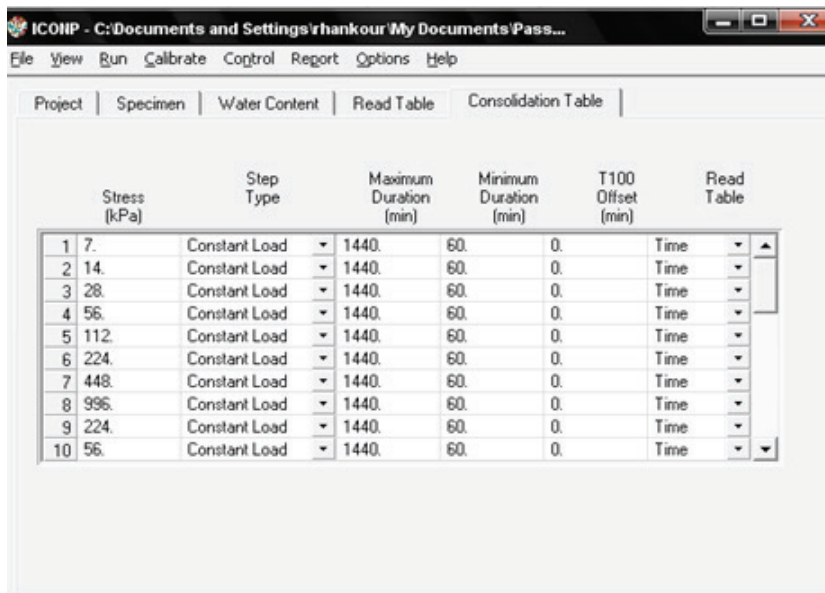
Geo-NET™ Network / communication card and cable to link load frame to PC.

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