

Product Code

LoadTrac
II FlowTrac
II



The LoadTrac II/FlowTrac II flow pump provides a unique and versatile way to run flexible wall permeability tests on a wide variety of materials quickly and accurately. By adjusting the gradient or the flow rate across the sample, the system can measure permeabilities of cohesive soils varying from 10⁻⁴ cm/sec to 10⁻⁹ cm/sec. With the appropriate test cells, this one system can determine the permeability of some silty clays within minutes.

The FlowTrac-II base unit includes a stepper motor, lead screw, pressure chamber and piston, pressure transducer, electronic controls and network communications. Versions of the unit are available with flow volumes of 250 cc and 750 cc. Flow rates can be set to any value between 0.000006 cc/sec. and 3.0 cc/sec. Flexible wall tests are run in a fully automated mode with three flow pumps and one LoadTrac-II; the FlowTrac-II's controls cell pressure and flow of cell, bottom sample and top sample. This configuration allows great versatility to run fully automated permeability tests with isotropic, anisotropic or K_o consolidation.

With the network communications module and the appropriate software, the entire test can be automatically controlled, data captured and displayed in real time, and test reports prepared on a PC. With GeoNet-LAN option, the test can be monitored and data reported from any PC located on a LAN to which the LoadTrac II/FlowTrac II system is connected.

Control and editing software runs in Windows® 2000, XP, Vista 7

Applicable Test Standards

- ASTM D-5084 - Flexible wall permeability
- ASTM D-2434 - Rigid wall permeability

User Benefits

- Choose load capacity to fit user needs from 10, 22, 45, and 90kN (2,000, 5,000,10,000, 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
- Choose volume capacity to fit user needs from 250, and 750 cc models
- Accurate displacement rate control from 0.00003 to 15 mm per minute (0.000001 to 0.6 in. per minute)
- Accurate pressure and volume measurements with integrated sensors
- Stand alone through front keypad and LCD menu

Accessories

- Triaxial/Permeability cells up to 150mm (6.00 in.) diameter, membranes, porous stones and sample preparation accessories upon request.
- Geo-NET PC network card and cable to link LoadTrac II / FlowTrac II to PC

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

	Dimensions	Weight (approx.)
LoadTrac	464 x 546 x1206 mm (18 x 21.5 x 47.5 in.)	55 kg
II FlowTrac	203 x 406 x 470 mm (8 x 16 x 18.5 in.)	14 kg

Models

FlowTrac II Models		
FTII-250-nn	250	cc
FTII-750-nn	capacity	750
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	