

Benefits and Features

- Displacement transducers with up to 50 mm (2.0 in.) range and 0.0013 mm (0.00005 in.) resolution
- Choose capacity from 250 and 750 cc models
- Choice of pressure range to obtain required gradients and pressure resolution
- Built-in pressure transducer and electronics
- Accurate flow rate control from 0.000006 to 3 cc per second
- Built-in electronic controls for automatic display of data and control of test
- Geo-NET compatibility allows unit to be accessed and controlled over a computer network

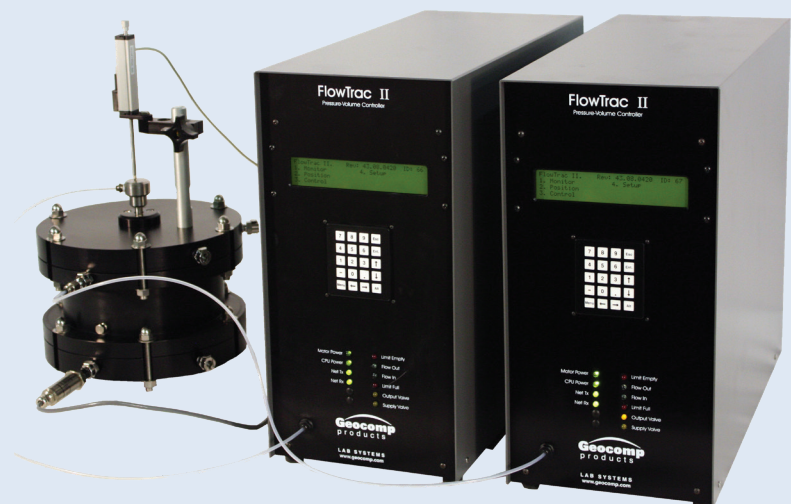
Applicable Test Standards

- ASTM D2435 One-Dimensional Consolidation Properties of Soils
- BS 1377 Part 6 Consolidation and Permeability Tests in Hydraulic Cells and with Pore Pressure Measurements

The hydraulic Rowe Cell system is used because of its multiple drainage (up to eight conditions) options as well as the capability of testing large diameter samples through the use of water pressure on a flexible diaphragm. Furthermore, free strain and equal strain can be applied by applying the water pressure on the top of the sample through a flexible platen or a rigid one.

The FlowTrac II system for consolidation testing using the hydraulic Rowe-type consolidation cell automates an entire consolidation test. Once a sample is placed into the Rowe cell, the test conditions programmed and the test started, FlowTrac II performs the entire test without intervention. The system automatically initializes, back pressure saturates, and consolidate incrementally by using conditions specified by the user. A typical incremental consolidation test can be completed in 36 to 48 hours on most materials.

This system may be programmed with a series of steps. At the end of each step, the system will automatically move to the next step based on the computer determining that the specified conditions for completion of consolidation for the previous step are reached. Any load-unload-reload pattern may be specified. FlowTrac II consolidation system lets you complete tests faster with less man time. An entire test can usually be completed in 12 to 24 hours. Complete detailed tabular and graphical reports can be prepared in minutes after completing the test using a PC and a printer or plotter.



Rowe Consolidation FlowTrac II

TECHNICAL SPECIFICATIONS

CAPACITY

250 and 750 cc

MOTOR

Micro-stepper motor with built-in controls

FLOW RANGE

0.000006 to 3 cc per second

POWER

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

DIMENSIONS

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

WEIGHT

14 kg (30 lbs.)

MODELS

FTII-250-nn: 250 cc capacity

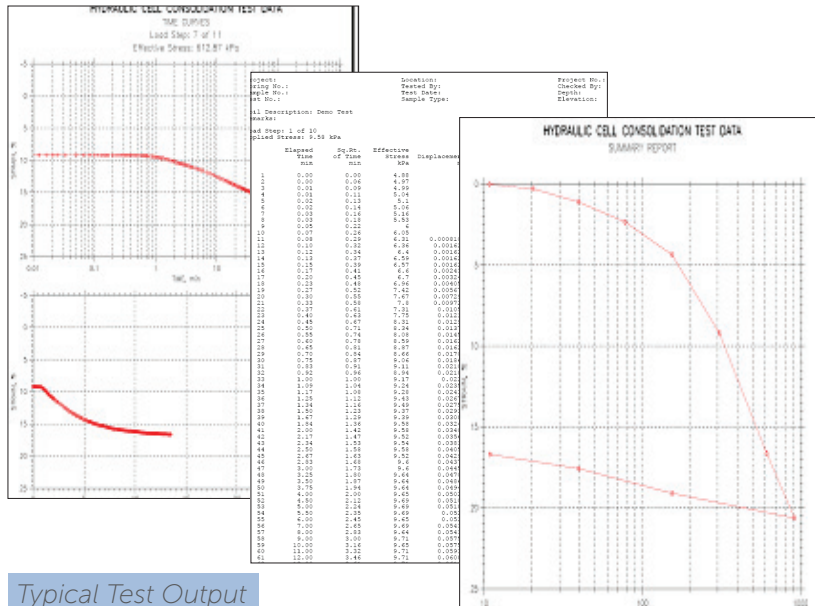
FTII-750-nn: 750 cc capacity

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)

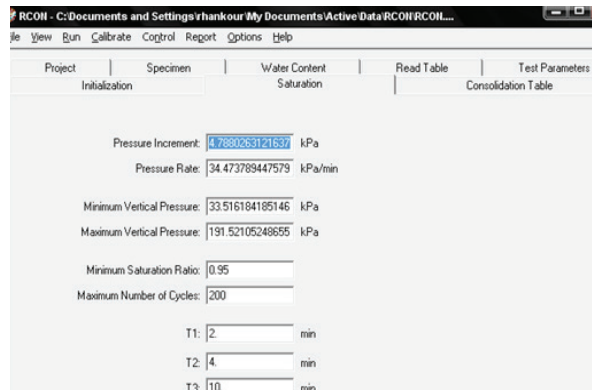
CELL ACCESSORIES

RWE-63.5: sample diameter 63.5 mm
(2.5 in.) Sample height 30 mm (1.2 in.)

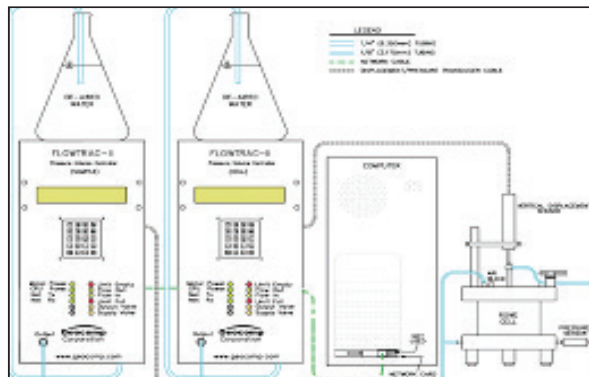
RWE-150: sample diameter 150 mm
(6 in.) sample height 50 mm (2 in.)



Typical Test Output



User-friendly Interface



Setup Diagram