

CONSTANT RATE-OF-STRAIN (CRS) CONSOLIDATION

LOADTRAC II / FLOWTRAC II OR III

The LoadTrac II / FlowTrac II or III system fully automates performing a Constant Rate-of-Strain Consolidation (CRS) test. Once a soil sample is in place, and the test conditions selected, this system will run the entire CRS test from start to finish. The LoadTrac II / FlowTrac II or III system consolidates the sample through a loading path specified by using constant rate of strain loading. The FlowTrac II or III is used during the back pressure saturation as well as maintaining a constant cell pressure during the consolidation phase of the test. To avoid running the test too fast or too slow, the system uses Excess Pore Pressure Ratio Limits.

- Built in safety features
- Smart and sophisticated technologies to simplify testing
- Repeatable, reliable, and accurate results you can trust
- Real-time and remote test parameter changes for quality control
- Convenient reporting and data export
- Faster, smarter, better: designed with full automation and manual control options
- Easy upgrade to perform additional test types
- Designed and manufactured in the USA

Applicable Test Standards

- ASTM D4186
- ISO/TS 17892-5



Standard Constant Rate of Strain (CRS)
Consolidation System

CRS CONSOLIDATION

LOADTRAC II / FLOWTRAC II OR III



TECHNICAL SPECIFICATIONS

LOAD CAPACITY

45 kN (10 klbf) to 90 kN (20 klbf)

MOTOR

Micro-stepper system with built-in controls

RATE OF DISPLACEMENT

0.00003 to 25 mm per minute
(0.000001 to 1.0 in per minute)

PRESSURE/VOLUME CAPACITY

- 150 psi (1035 kPa) / 200 cc
- 200 psi (1400 kPa) or 500 psi (3500 kPa) / 250 cc
- 200 psi (1400 kPa) / 750 cc

FLOW RATE

Min Speed 0.0003 cc/min 0.00001 fl oz/min
Max Speed 1054 cc/min 36 fl oz/min

TRAVEL

Built-in displacement transducer with 76 mm (3 in) range and 0.0013 mm (0.00005 in) resolution

POWER

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

DIMENSIONS

LoadTrac II	FlowTrac II	FlowTrac III
464 x 546 x 1206 mm (18 x 21.5 x 47.5 in)	203 x 406 x 470 mm (8 x 16 x 18.5 in)	203 x 457 x 260 mm (8 x 18 x 10.25 in)

WEIGHT

LoadTrac II	FlowTrac II	FlowTrac III
55 kg (120 lbs)	14 kg (30 lbs)	11 kg (25 lbs)

INCLUDED

- GeoNet-U USB 2.0 network adapter and cable to link to PC/laptop
- CRC software module to automatically run and report tests

ACCESSORIES

Back Pressure Consolidometer (stainless steel) with 200 psi (1400 kPa) pressure sensor. Allows measurement of pore pressure and permeability. Includes sample cutting ring and porous stones.

- Standard sizes - 2.5 in (63.5 mm) and 4.0 in (101 mm)

WARRANTY

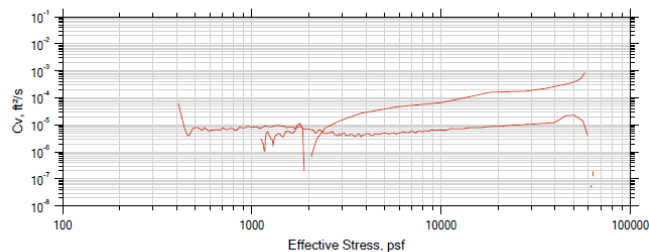
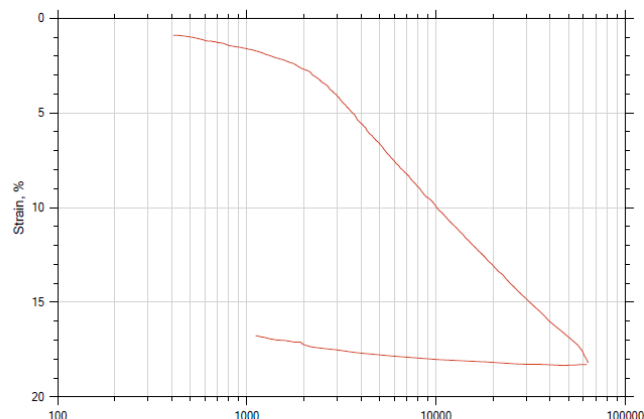
12 month warranty; extended warranties available

Test Methods

- Constant rate of strain
- Constant rate of stress
- Constant gradient
- Constant pore pressure ratio

Typical Test Output (example)

CRS TEST
Summary Curves



Project: ABC Project	Location: Anywhere, US	Project No.: 999999
Boring No.:	Tested By: JI	Checked By:
Sample No.:	Test Date: 02/28/2018	Depth:
Test No.:	Sample Type: Resedimented	Elevation:
Description:		
Remarks:		

User Friendly Interface

File View Run Calibrate Control Report Options Help

Project Specimen Water Content Read Table Test Parameters Initialization Saturation Consolidation Table

Start Phase: Initialization
 Saturation
 Consolidation

Start Compression Curve: Initialization
 Saturation
 Consolidation

Machine Correction: Enable

Final Height: in

Resample Time: min

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