

CYCLIC TRIAXIAL LOADTRAC II / FLOWTRAC II / CYCLIC - RM

The Geocomp cyclic triaxial system completely automates cyclic and static triaxial testing in a single, versatile unit. The system is comprised of only three main components and does not require extra air bladders, vacuum pumps, or wall-mounted elements that take up valuable lab space and require extra maintenance. An advanced, high-performance linear actuator with low inertia servo drive system provides the fastest response time. This is combined with a high-resolution feedback control system (closed loop and adaptive) for the most accurate and repeatable results. The benefit of a fully active load frame allows users to add their compression tests to the system at low cost to maximize their investment.

- **Consolidate isotropically, anisotropically or K_0**
- **Run drained and undrained cyclic stress or strain controlled tests**
- **Post-cyclic drained/undrained loading**
- **Unmatched automation from test start to finish - 2 to 32 times faster results and labor time savings of 30% to 95% vs. manual testing**
- **Flexible design - perform additional testing on the same platform and save money and space in your lab**
- **Full test control and remote monitoring allows you to take your testing on the go - view real-time results, check test quality, and change parameters**
- **Convenient reporting - produce complete, compliant reports instantly or export data for desired manipulation**
- **Designed for consistent and repeatable testing you can be confident in**



Standard Cyclic Triaxial LoadTrac II / FlowTrac II

Applicable Test Standards

- ASTM D3999, D5311

CYCLIC TRIAXIAL LOADTRAC II / FLOWTRAC II / CYCLIC -RM

TECHNICAL SPECIFICATIONS

LOAD CAPACITY

4.5 (1 klbf) or 9 kN (2 klbf) at 200 mm (8 in) per second

CONTROL

- Stress (load)
- Strain (displacement)

CYCLIC RATE

Up to 10 Hz

TYPE OF CYCLIC LOADING

Cyclic stress/strain controlled sinusoidal and irregular user defined waveform

PRESSURE

0-1400 kPa (0-200 psi)

POWER

208-240 V, 50/60 Hz, 1 phase

DIMENSIONS

LoadTrac II	FlowTrac II	Cyclic-RM
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 406 x 470 mm (8 x 16 x 18.5 in)

WEIGHT

LoadTrac II	FlowTrac II	Cyclic-RM
55 kg (120 lbs)	14 kg (30 lbs)	14 kg (30 lbs)

INCLUDED

- Geo-NET network card and cable to link to PC
- CYCLIC7N software module to automatically run and report tests

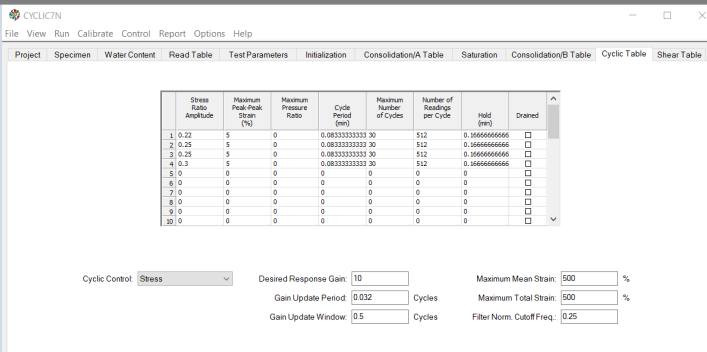
ACCESSORIES

- FlowTrac II models available
 - 200 psi (1400 kPa) or 500 psi (3500 kPa) / 250 cc
 - 200 psi (1400 kPa) / 750 cc
- Triaxial cells up to 152 mm (6 in) diameter
- Membranes, porous stones, and sample preparation accessories upon request
- TRIAXIAL.REPORT: editing/reporting software for multiple tests

WARRANTY

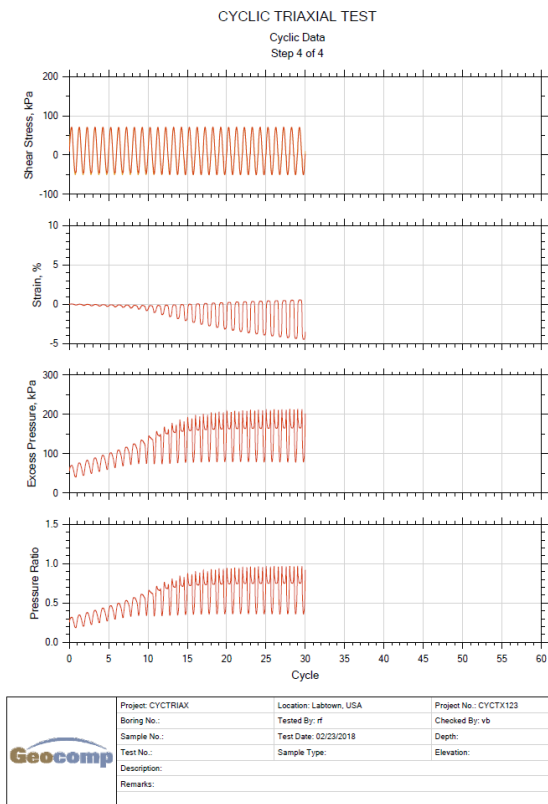
- 12 month warranty; extended warranties available

User Friendly Interface



The screenshot shows the CYCLIC7N software interface. At the top, there is a menu bar with options: File, View, Run, Calibrate, Control, Report, Options, Help. Below the menu bar is a toolbar with buttons for Project, Specimen, Water Content, Read Table, Test Parameters, Initialization, Consolidation(A) Table, Saturation, Consolidation(B) Table, Cyclic Table, and Shear Table. The main area contains a data table with columns: Stress Ratio Amplitude, Maximum Peak-Peak Strain (%), Maximum Pressure Ratio, Cycle Period (min), Maximum Number of Cycles, Number of Readings per Cycle, and a checkbox for 'Dried'. The table has 10 rows of data. Below the table, there are control parameters for 'Cyclic Control' set to 'Stress'. Other parameters include: Desired Response Gain: 10, Gain Update Period: 0.032 Cycles, Gain Update Window: 0.5 Cycles, Maximum Mean Strain: 500 %, Maximum Total Strain: 500 %, and Filter Norm. Cutoff Freq.: 0.25.

Typical Test Output (example)



Typical Test Output (example)

