

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. strain controlled tests
- Post-cyclic drained/undrained loading
- 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 D3999, D5311



Standard Cyclic Triaxial LoadTrac II / FlowTrac II

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

- GeoNet-U USB 2.0 network adapter and cable to link to PC/laptop
- 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

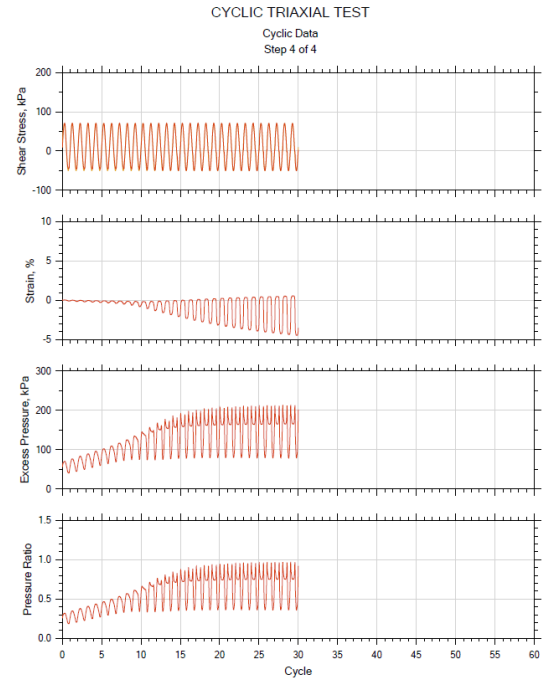
12 month warranty; extended warranties available

User Friendly Interface

Stress Ratio Amplitude	Maximum Peak-Peak Strain (%)	Maximum Pressure Ratio	Cycle Period (min)	Maximum Number of Cycles	Number of Readings per Cycle	Hold (min)	Drained
1	0.25	5	0	0.083333333333 30	512	0.166666666666	<input type="checkbox"/>
2	0.25	5	0	0.083333333333 20	512	0.166666666666	<input type="checkbox"/>
3	0.25	5	0	0.083333333333 30	512	0.166666666666	<input type="checkbox"/>
4	0.3	5	0	0.083333333333 20	512	0.166666666666	<input type="checkbox"/>
5	0	0	0	0	0	0	<input type="checkbox"/>
6	0	0	0	0	0	0	<input type="checkbox"/>
7	0	0	0	0	0	0	<input type="checkbox"/>
8	0	0	0	0	0	0	<input type="checkbox"/>
9	0	0	0	0	0	0	<input type="checkbox"/>
10	0	0	0	0	0	0	<input type="checkbox"/>

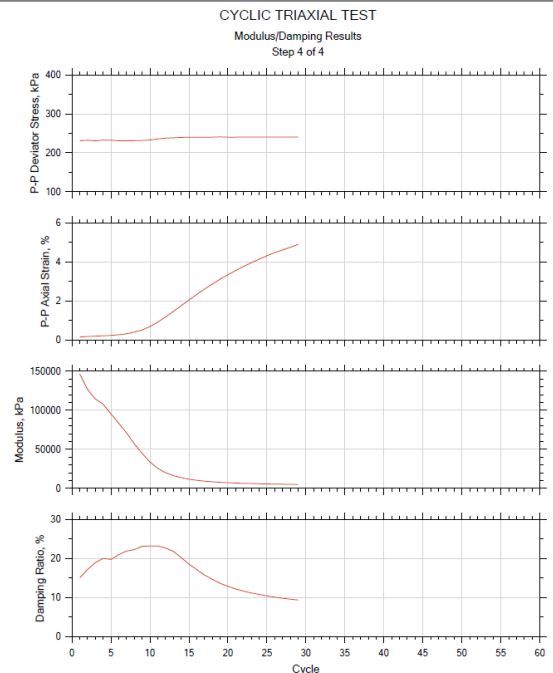
Cyclic Control: Stress | Desired Response Gain: 10 | Maximum Mean Strain: 500 %
 Gain Update Period: 0.032 Cycles | Maximum Total Strain: 500 %
 Gain Update Window: 0.5 Cycles | Filter Norm. Cutoff Freq: 0.25

Typical Test Output (example)



Project: CYCTRIAX	Location: Labtown, USA	Project No.: CYCTX123
Boring No.:	Tested By: rf	Checked By: vb
Sample No.:	Test Date: 02/23/2018	Depth:
Test No.:	Sample Type:	Elevation:
Description:		
Remarks:		

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Sample No.:	Test Date: 02/23/2018	Depth:
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