

TRIAXIAL

LOADTRAC III / FLOWTRAC II OR III

The LoadTrac III / FlowTrac II or III system for triaxial testing offers an affordable, high-quality solution for any lab setting. It performs Unconsolidated Undrained (UU), Consolidated Undrained (CU) and Consolidated Drained (CD) testing. Once the sample is placed and test parameters set, the system automates all phases of the test from start to finish - initialization, saturation, consolidation (isotropic, anisotropic, or K_0) and shear. The LoadTrac III and FlowTrac II or III units take minimal space, require no external connections other than water source, and need minimal maintenance. Additional common test methods can easily be added (1-D Incremental Consolidation, CRS Consolidation, Unconfined Compression), which makes return on investment best on the market.

- 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 D2850, D4767, D7181
- AASHTO T296, T297
- BS 1377-6, BS 1377-7, BS 1377-8
- ISO/TS 17892-8, ISO/TS 17892-9
- AS 1289.6.4.1, AS 1289.6.4.2



Standard Triaxial System

TRIAXIAL LOADTRAC III / FLOWTRAC II OR III



TECHNICAL SPECIFICATIONS

LOAD CAPACITY

Up to 11 kN (2.5 klbf)

MOTORS

Micro-stepper system with built-in controls

RATE OF DISPLACEMENT

0.000013 to 42 mm per minute
(0.0000005 to 1.6 in per minute)

PRESSURE/VOLUME CAPACITY

- 150 psi (1035 kPa) / 200 cc
- 200 psi (1400 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

38.1 mm (1.5 in)

POWER

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

DIMENSIONS

LoadTrac III 305 x 381 x 838 mm (12 x 15 x 43 in)	FlowTrac II 203 x 406 x 470 mm (8 x 16 x 18.5 in)	FlowTrac III 203 x 457 x 260 mm (8 x 18 x 10.25 in)
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WEIGHT

LoadTrac III 20 kg (44 lbs)	FlowTrac II 14 kg (30 lbs)	FlowTrac III 11 kg (25 lbs)
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INCLUDED

- GeoNet-U USB 2.0 network adapter and cable to link to PC/laptop
- UU, CU & CD software modules to automatically run and report tests

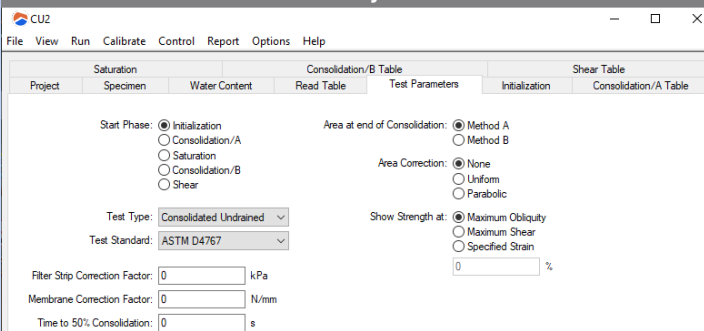
ACCESSORIES

- Triaxial cell for samples up to 2.0" (50.8 mm) diameter
- Membranes, porous stones, and sample preparation accessories upon request
- Software modules and equipment to perform additional test methods I-D Incremental Consolidation, CRS Consolidation and Unconfined Compression

WARRANTY

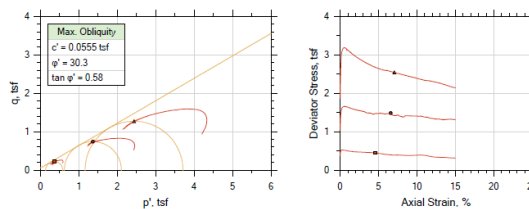
12 month warranty; extended warranties available

User Friendly Interface



Typical Test Output (example)

Consolidated Undrained by ASTM D4767



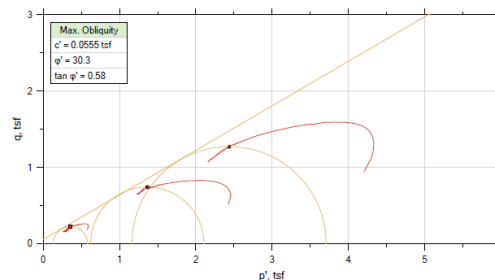
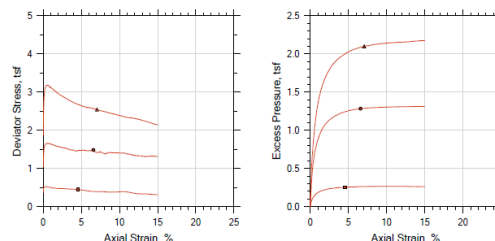
Symbol	■	●	▲
Sample ID	U-3	U-3	U-3
Depth	10-12 ft	24-26 ft	50-52 ft
Test Number	CK0U-1	CK0U-2	CK0U-3
Height, in	4.250	4.100	4.200
Diameter, in	2.010	2.020	2.010
Moisture Content (from Cuttings), %	31.4	32.0	32.8
Dry Density, pcf	90.1	92.0	90.9
Saturation (Wet Method), %	93.6	99.6	99.5
Void Ratio	0.899	0.899	0.924
Moisture Content, %	29.3	25.2	22.6
Dry Density, pcf	96.0	103	107
Cross-Sectional Area (Method A), in ²	3.073	3.188	3.147
Saturation, %	100.0	100.0	100.0
Void Ratio	0.821	0.705	0.653
Back Pressure, tsf	9.892	9.892	10.87
Vertical Effective Consolidation Stress, tsf	0.7395	2.882	5.039
Horizontal Effective Consolidation Stress, tsf	0.3922	1.904	3.263
Vertical Strain after Consolidation, %	1.372	9.654	14.50
Volumetric Strain after Consolidation, %	1.622	9.598	14.19
Time to 50% Consolidation, min	0.0000	0.0000	0.0000
Shear Strength, tsf	0.2242	0.7425	1.232
Strain at Failure, %	4.55	6.58	7.05
Strain Rate, %/min	0.01600	0.01600	0.01600
Deviator Stress at Failure, tsf	0.4485	1.465	2.544
Effective Minor Principal Stress at Failure, tsf	0.1331	0.6208	1.163
Effective Major Principal Stress at Failure, tsf	0.5816	2.106	3.708
B-Value	0.95	0.95	0.96

Notes:
- Initial Shear Strain set to 100% for stress calculation.
- Moisture Content determined by ASTM D2116.
- Shear Strength determined by ASTM D4767.
- Deviator Stress includes membrane correction.
- Values for c and φ determined from best fit straight line for the specific test conditions.
- Actual strength parameters may vary and should be determined by an engineer for site conditions.

Project Name: ABC Project	Location: Anywhere, USA	Project Number: TRIAX-1234
Boring Number: B-1	Tester: vwx	Checker: yz
Sample Number: U-3	Test Date: 02/18/2018	Depth: 10-12 ft
Test Number: CK0U-1	Preparation: tube	Elevation: Not Recorded
Description: Moist, gray clay		
Remarks:		

Typical Test Output (example)

Consolidated Undrained by ASTM D4767



Sample No.	Test No.	Depth	Tested By	Test Date	Checked By	Check Date	Test File
■	U-3	CK0U-1	10-12 ft	vwx	02/18/2018	yz	CK0U-1.dat
●	U-3	CK0U-2	24-26 ft	vwx	02/18/2018	yz	CK0U-2.dat
▲	U-3	CK0U-3	50-52 ft	vwx	02/18/2018	yz	CK0U-3.dat

Project Name: ABC Project	Location: Anywhere, USA	Project Number: TRIAX-1234
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