

UNCONFINED COMPRESSION

LOADTRAC III

The LoadTrac III load frame performs unconfined compressive strength testing under fully automated control with convenient remote monitoring and instant test results. The unconfined compression test allows you to quickly measure the compressive strength for cohesive soils and is a core offering for most laboratories. Once a soil sample is in place, and the test conditions selected, the system will run the entire test from start to finish.

- 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 D1663, D2166
- AASHTO T208



Standard Unconfined Compression System

UNCONFINED COMPRESSION LOADTRAC III



TECHNICAL SPECIFICATIONS

LOAD CAPACITY

Up to 11 kN (2.5 klb)

MOTOR

Micro-stepper system with built-in controls

RATE OF DISPLACEMENT

0.000013 to 42 mm per minute
(0.000001 to 0.6 in per minute)

TRAVEL

38.1 mm (1.5 in)

POWER

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

DIMENSIONS

305 x 381 x 838 mm (12 x 15 x 33 in)

WEIGHT

20 kg (44 lbs)

INCLUDED

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

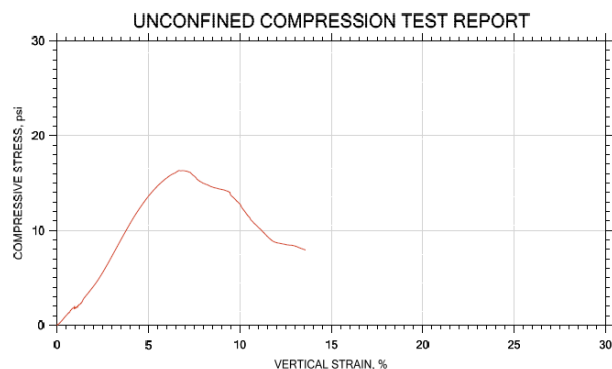
ACCESSORIES

UC.REPORT: editing/reporting software for multiple tests

WARRANTY

12 month warranty; extended warranties available

Typical Test Output (example)



Symbol				
Test No.	UC-1			
Diameter, in	2.87			
Height, in	5.98			
Water Content, %	25.00			
Dry Density, pcf	95.80			
Saturation, %	88.87			
Void Ratio	0.76			
Unconfined Compressive Strength, psi	16.34			
Undrained Shear Strength, psi	8.169			
Time to Failure, min	8.3409			
Strain Rate, %/min	1			
Estimated Specific Gravity	2.70			
Liquid Limit	41			
Plastic Limit	22			
Plasticity Index	19			
Failure Sketch				

GeoComp	Project: XYZ Bridge	Location: Anywhere, USA	Project No.: GTX-0000
	Boring No.: B-1	Tested By: MD	Checked By: JDT
	Sample No.: S-1	Test Date: 02/15/2018	Elevation: ---
	Test No.: UC-1	Preparation: Tube	Depth: 10-12 ft
	Description: Moist, grey clay		
Remarks: System A.			

User Friendly Interface

UC
— □ ×

File View Run Calibrate Control Report Options Help

Project Specimen Water Content Read Table Test Parameters

Read Table: Displacement ▼

Strain Rate: 100 %/min

Maximum Test Duration: 20 min

Minimum Duration after Peak Load: 10 min

Shutdown Load to Peak Ratio: 10

Maximum Load: 500 lb

Maximum Displacement: 3 in

V.3 ©GeoComp 6/2024