

Unconfined Compression Mini LoadTrac III

Benefits and Features

- 11 kN (2,500 lbs.) load capacity and 50 mm (2.0 in.) travel
- Total automation of data collection and reporting of test results
- Prepare tables and plots of report quality within minutes of completing a test
- Generate columns of data for easy reduction using your own spreadsheet software
- Ability to access and control the unit over a computer network using Geo-Net option

Applicable Test Standards

- ASTM D2166 / AASHTO T208
Unconfined Compression
Testing of Soils
- ASTM D1663 Compressive
Strength of Molded Soil-
Cement Cylinders

The Mini LoadTrac III load frame provides compression/extension testing for a number of geotechnical tests that must have accurate control of the rate of displacement during loading. With accessories, the unit can perform unconfined compression, and triaxial shear phase testing.

The base unit includes a stepper motor, lead screw, vertical tension rods and crosshead, displacement transducer, electronic controls and network communications. Versions of the unit are available to test loads up to 11 kN (2,500 lbs.). Displacement rates can be set to any value between 0.00003 and 15 mm per minutes (0.000001 to 0.6 inches per minute).

The base unit can run in stand-alone mode without a computer. It includes built-in data acquisition and display capability. Sensor readings are displayed in S1 or English units and stored in memory.

Optional software running in Windows® completely automates the test, reducing the data and preparing test results.



Standard Fully Automated
Unconfined Compression System

Unconfined Compression Mini LoadTrac III

TECHNICAL SPECIFICATIONS

MOTOR

Stepper motor with built-in controls

TRAVEL

External displacement transducer with 50 mm (2 in.) range and 0.0013 mm (0.00005 in.) resolution

DISPLACEMENT

Control from 0.00003 to 15 mm per minute (0.000001 to 0.6 in. per minute)

POWER

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

DIMENSIONS

464 x 546 x 1206 mm
(18 x 21.5 x 47.5 inches)

WEIGHT

55 kg (120 lbs.)

ACCESSORIES

7020: 75 mm (3.0 in.) platen with load cell adaptor

Geo-NET™: Network / communication card and cable to link load frame to PC

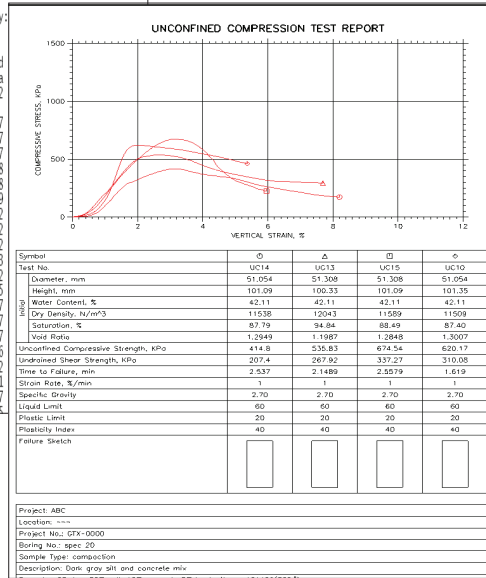
UC: Software package to automatically run and report UC tests

OPTIONS

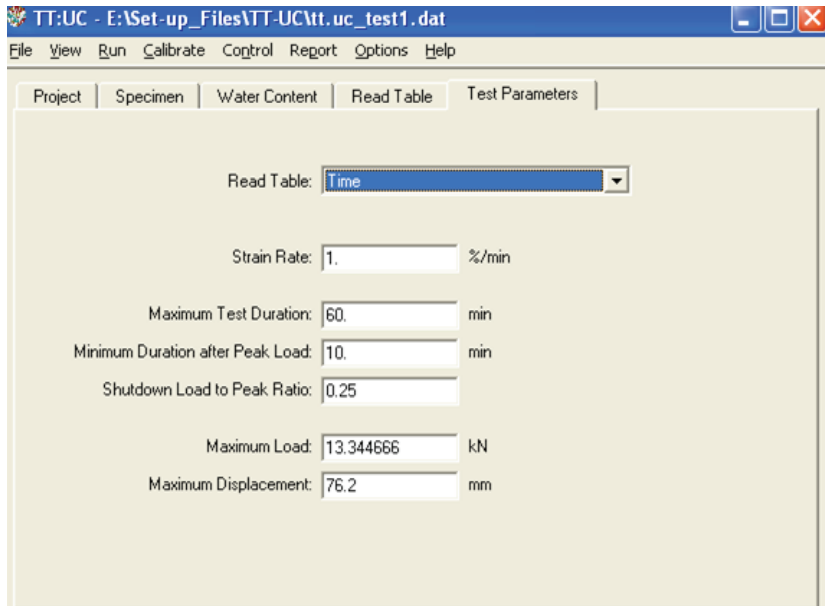
UC Report: Editing / reporting software for multiple tests

Object: test	Location: Tulsa, OK	Project No.:
Ring No.: B-1	Tested By: ss	Checked By:
Sample No.: ss-1	Test Date: 05/16/2006	Depth: 0.5-2
St No.: 1	Sample Type: CLS,red	Elevation:
Soil Description: Sndy Lean Clay, rred marks: Trying Out		
Specimen Height: 70.61 mm	Liquid Limit: 35	Cap Mass: 0
Specimen Area: 1641.73 mm ²	Plastic Limit: 18	
Specimen Volume: 115.93 cc	Estimated Specific Gravity:	

	Time min	Axial Displacement mm	Axial Strain %	Load N	Corrected Area mm ²
1	0	0	0	1.8055	1641.7
2	0.0039333	0	0	1.8055	1641.7
3	0.0081	0	0	1.8055	1641.7
4	0.012267	0.0011969	0.001895	2.4074	1641.8
5	0.016433	0.0047876	0.0067801	2.4074	1641.8
6	0.0206	0.0071813	0.01017	3.0092	1641.9
7	0.024767	0.0095751	0.01356	3.0092	1642
8	0.028933	0.011969	0.01695	3.0092	1642
9	0.0331	0.014361	0.02034	4.2129	1642.2
10	0.037267	0.016754	0.02373	4.8148	1642.3
11	0.041433	0.019146	0.02712	7.824	1643.2
12	0.1706	0.12089	0.1712	16.25	1644.5
13	0.33727	0.25374	0.39355	36.111	1647.7
14	0.50415	0.3842	0.5441	58.981	1650.7
15	0.67098	0.51107	0.72378	80.045	1653.7
16	0.83725	0.63315	0.89667	125.18	1656.6
17	1.0042	0.74327	1.0526	191.99	1659.2
18	1.1706	0.86415	1.2238	263.61	1662.1
19	1.3373	0.97547	1.3814	408.65	1664.7
20	1.5042	1.0916	1.5450	605.46	1667.5



Typical Test Output



User-friendly Interface