

# LARGE DIRECT / RESIDUAL SHEAR

## SHEARTRAC III

The ShearTrac III system is capable of performing the consolidation and shearing phases of a direct or residual shear test on a 305 x 305 x 205 mm (12 x 12 x 8 in) soil/aggregate specimen. With additional accessories, the same system can also perform direct simple shear, interface shear, or rock shear testing. Testing is performed under fully automated control with convenient monitoring and instant test results. It consists of a computer-controlled unit using independent, electro-mechanical micro-stepper systems to apply highly precise vertical and horizontal loads.

- 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 D3080, D5607, D6528
- AASHTO T236
- BS 1377-7
- ISO/TS 17892-10
- AS 1289.6.2.2



Standard Large Direct/Residual Shear System

# LARGE DIRECT / RESIDUAL SHEAR SHEARTRAC III



## TECHNICAL SPECIFICATIONS

### LOAD CAPACITY

Up to 90 kN (20 klb) vertical  
Up to 90 kN (20 klb) horizontal

### VERTICAL MOTOR

Micro-stepper system with built-in controls

### HORIZONTAL MOTOR

Micro-stepper system with built-in controls

### SPEED RANGE

0.00003 to 7.5 mm per min  
(0.000001 to 0.3 in per min)

### VERTICAL TRAVEL

100 mm (4 in)

### HORIZONTAL TRAVEL

+/- 100 mm (4 in)

### DIMENSIONS

610 x 1194 x 1168 mm (24 x 47 x 46 in)

### WEIGHT

311 kg (685 lbs)

### INCLUDED

- GeoNet-U USB 2.0 network adapter and cable to link to PC/laptop
- DS4 software module to automatically run and report tests

### ACCESSORIES

- Reduced sample size inserts - 152 mm (6 in) or 205 mm (8 in)
- Gripping plates
- Rock shear rings and jig set
- Direct simple shear hardware
- DS4.REPORT: editing/reporting software for multiple tests

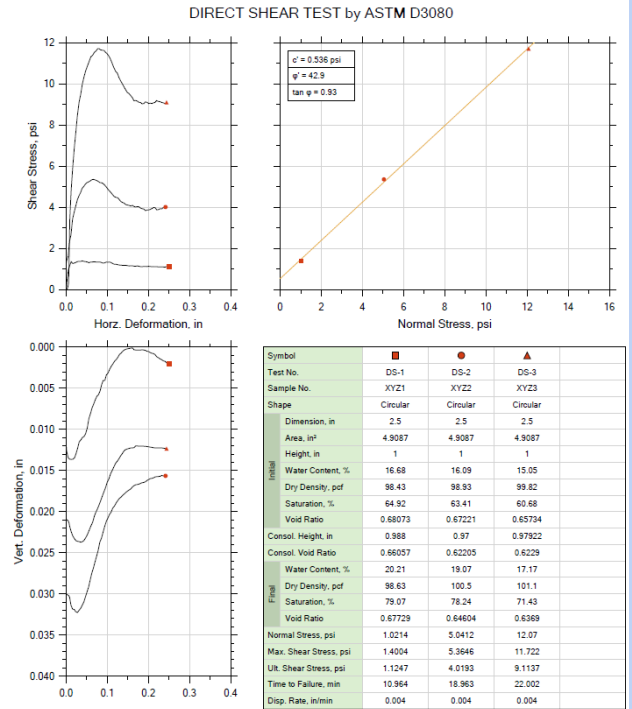
### WARRANTY

12 month warranty; extended warranties available

## User-Friendly Interface

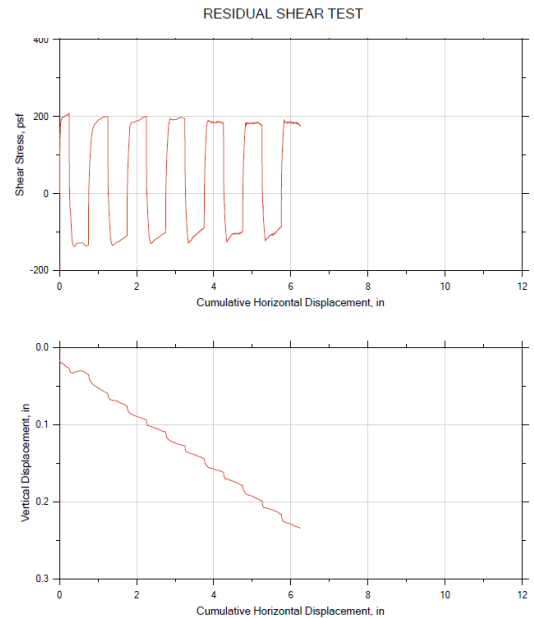
	Delay s	Shear Control	Rate /s	Maximum Disp. mm	Maximum Force N	Read Table
1	0	Force	0	0	0	Time
2	0	Displacement	0	0	0	Time
3	0	Displacement	0	0	0	Time
4	0	Displacement	0	0	0	Time
5	0	Displacement	0	0	0	Time
6	0	Displacement	0	0	0	Time
7	0	Displacement	0	0	0	Time
8	0	Displacement	0	0	0	Time
9	0	Displacement	0	0	0	Time
10	0	Displacement	0	0	0	Time

## Typical Test Output (example)



Project: ABC Landfill	Location: USA	Project No.: ABC-11
Boring No.: 2A	Tested By: ts	Checked By: aw
Sample No.: XYZ1	Test Date: 02/20/2018	Depth: 10 ft
Test No.: DS-1	Sample Type: remolded	Elevation: N/A
Description: Moist, brown sand		
Remarks: Target Compaction: 90% of max dry density (110.0 pcf) at optimum moisture (13%) + 3%, 24 hr saturation.		

## Typical Test Output (example)



Project: ABC123	Location: USA	Project No.: RES123
Boring No.: SGH-2	Tested By: gv	Checked By: mm
Sample No.: ST-1	Test Date: 02/22/2018	Depth: 5 ft
Test No.: RS-7	Sample Type: tube	Elevation: N/A
Description: Moist, dark reddish brown clay		
Remarks:		

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