

## ROCK SHEAR

### SHEARTRAC III

The ShearTrac III system is capable of performing the consolidation and shearing phases of a rock core up to 152 mm (6 in) diameter. The same system can also perform a direct or residual shear test on a 305 x 305 x 205 mm (12 x 12 x 8 in) soil/aggregate specimen, as well as other tests such as interface shear or direct simple shear. 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 Rock Shear System

# ROCK SHEAR SHEARTRAC III



## TECHNICAL SPECIFICATIONS

### LOAD CAPACITY

Up to 90 kN (20 klbf) vertical  
Up to 90 kN (20 klbf) 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

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

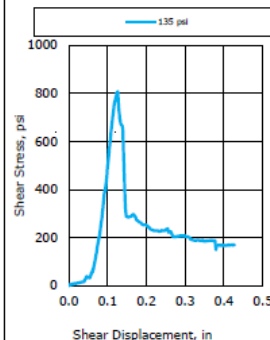
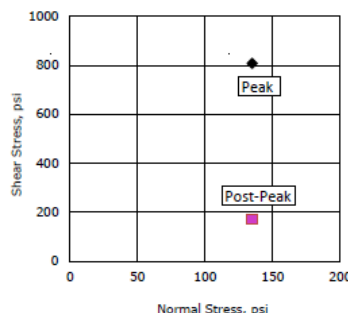
### WARRANTY

12 month warranty; extended warranties available

## Date Export and Custom Reporting (example)

	Client:	ABC Company
	Project Name:	Rock Shear
	Project Location:	Anywhere, USA
	GTX #:	123456
	Start Date:	8/1/2023
	End Date:	8/1/2023
Tested By:	JCP	
Checked By:	TLV	
Boring ID:	ABC-123	
Sample ID:	A-1	
Depth, ft:	120.80-121.09	
Visual Description:	Granite	

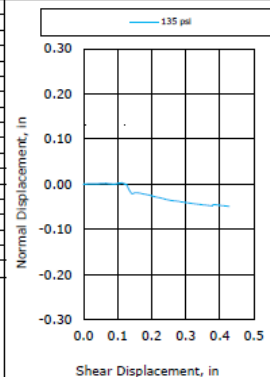
### Direct Shear Test of Rock by ASTM D5607



Test No.:	317097-DS-2
Specimen Diameter, in:	3.26
Specimen Length, in:	3.20
Specimen Mass, grams:	1051
Specimen Area, in <sup>2</sup> :	8.33
Specimen Bulk Density, pcf:	150
Shear Plane Area, in <sup>2</sup> :	8.33
Normal Stress, psi:	135
Peak Shear Stress, psi:	808
Post Peak Shear Stress, psi:	171
Horiz. Displacement Rate, mm/min:	0.2

Peak Friction Angle:	---
Peak Cohesive Intercept, psi:	---
Post-Peak Friction Angle:	---
Post-Peak Cohesive Intercept, psi:	---
JRC Roughness	10-12

**Notes:** Specimen cut to length using diamond tipped saw blade. Tested at as-received moisture content and density. "Hydro-Stone Super X" encapsulating compound used to mount specimen in test rings. Actual strength parameters may vary and should be determined by an engineer for site-specific conditions.



## User-Friendly Interface

