

LARGE SHEARTRAC III

The ShearTrac III is a fully automated system designed for shear testing on a large sample size. It performs the consolidation and shear phases under automatic control for samples up to 305 x 305 x 205 mm (12 x 12 x 8 in) of soil/aggregate, or geosynthetics (geo-membrane, geotextile, GCL, geogrid, etc.) for direct/residual shear, up to 305 mm (12 in) diameter for direct simple shear, or up to 152 mm (6 in) diameter for rock shear. It can also be used for determining the interface frictional properties of soil, rock, and geosynthetics, as well as internal friction of GCLs. With its high load capacity, broad range of testing flexibility, and overall ease of use, the ShearTrac III is the preferred large shear machine on the market.

Technical Specifications

LOAD CAPACITY

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

VERTICAL/HORIZONTAL MOTORS

Micro-stepper system with built-in controls for vertical load

CONTROL

Stress (load)

Strain (displacement)

RATE OF DISPLACEMENT

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

VERTICAL/HORIZONTAL TRAVEL

+/- 100 mm (4 in)

DIMENSIONS/WEIGHT

610 x 1194 x 1168 mm (24 x 47 x 46 in) / 311 kg (685 lbs)

INCLUDED

- GeoNet-U USB 2.0 network adapter and cable to link to PC/laptop
- Associated 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

WARRANTY

12 month warranty; extended warranties available

TESTING CAPABILITIES

- Direct shear on soil and aggregates
- · Interface frictional properties of soil & geosynthetics
- Internal friction of GCL
- Direct simple shear
- Rock shear
- 1-D incremental consolidation up to 32 steps
- Constant volume swellConstant stress swell (free swell)



Large ShearTrac III System

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