

RingSHEAR Testing System

Related Standards: BS1377-7 : 1990; ASTM D6467-13;

The VJ Tech RingSHEAR is a torsional shear device, which produces accurate and repeatable test results to determine the residual shear strength of cohesive soils, which is particularly important when assessing slope stability.

The RingSHEAR features a digital display and control panel and can be computer controlled through the USB port. It is supplied on a floor mounted frame for stability. A consolidation load is applied to the annular ring sample through a lever arm. Rotational shear displacement is applied to the sample by a microprocessor controlled stepper motor, through a fixed ratio gearbox, and measured by a pair of load rings.

The rotational shearing action is applied continuously until a constant residual strength value is achieved. The advantages of a ring shear machine are that there is no change in the area of the cross section of the shear plane as the test proceeds, and the sample can be sheared through an uninterrupted displacement of any magnitude, making it very suitable for determining the residual strength of clays.

Features

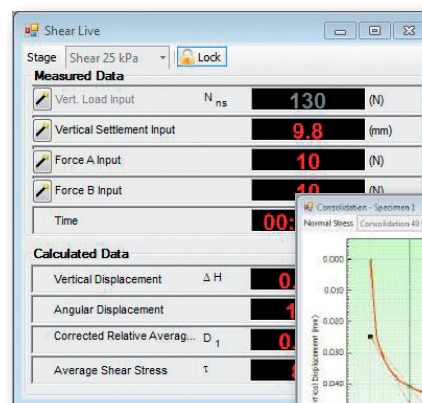
- Digital display and control panel
- Lever loading actuation of normal stress via dead weights
- Partial or complete test automation using Clisp Studio Ringshear software

Clisp Studio – csRingShear Software

- Easy Test configuration using the built in wizard
- Transducer Configuration and Calibration
- Live views of transducer readings & calculated parameters
- Live graphs and tabulated data
- User configurable views tables and graphs
- Data export to Excel & test script export and import
- Data storage in an SQL database
- Configurable Test automation
- Live Test status and notification

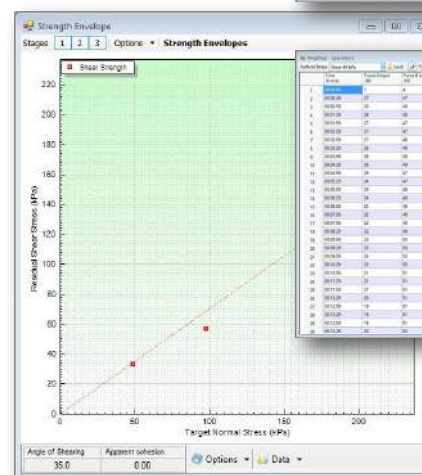
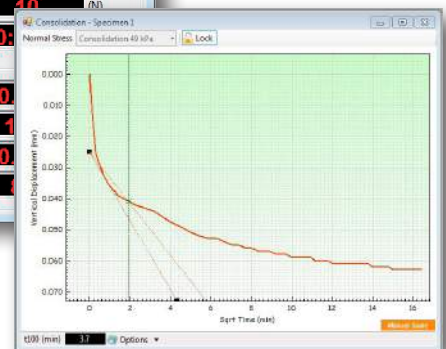


VJT9530 - Ringshear Testing System



Example Shear Live Data

Consolidation Graph
T100 Calculation



Shear Summary Graph

Shear Results Table

RingSHEAR Testing System

Ordering Information

VJT9530	Ringshear Testing System
VJT5600A	RingSHEAR Apparatus with Stand and Data Acquisition
VJT5600-INT	Ringshear Interface Top Cap Assembly (please contact VJ Tech for details)
2 x VJT0200-MIT	0.5 kN Load Ring with Digital Dial Gauge
2 x VJT0201-MIT	1 kN Load Ring with Digital Dial Gauge
VJT0105-MIT	Digital Dial Gauge (Vertical Displacement)
VJT3000-4D-MIT	Junction Box
VJT0650-50W	Set of weights (50 kg)
VJT-csRING	Clisp Studio Ring Shear Software

Specification

Sample Size	100 mm outside diameter x 70 mm inside diameter x 5 mm thick
Speed Range	0.0001 degrees/min to 900 degrees/min
Maximum Shear Stress	1000 kPa
Maximum Normal Stress	1000 kPa
Dimensions (W x D x H)	1335 mm x 380 mm x 1400 mm
Weight	105 kg
Electrical Requirement	90-240 Volts, 50/60Hz, single Phase

RingSHEAR Setup

