

Product Name :
Cyclic Triaxial and Resilient Modulus Testing Apparatus

Product Code :
LIM-CAT-L0044-00030



Description :

Cyclic Triaxial and Resilient Modulus Testing Apparatus

Technical Specification :

Cyclic Triaxial and Resilient Modulus Testing Apparatus

Salient Features:

Based on servo controlled hydraulic closed loop feedback mechanism

Fully Computer Controlled operation to control Axial Loading, Cell Pressure & Back pressure with User friendly Software

Stress / Strain Controlled Cycling from 0.01 Hz to 10 Hz with 128 data sets per second

Dynamic Loading Range $\pm 50\text{N}$ to $\pm 9\text{kN}$ (Higher loads on request)

Suitable for Controlled Axial Loading in Stress/ Strain basis in Static Triaxial testing to conduct UC, UU, CU, CUBar, CD tests

Facility to study Liquefaction behavior of soil

Digitally controlled Pressure Controllers for applying Confining and Back Pressure Range 10kPa – 1000kPa (Standard)

Suitable Triaxial cell to accommodate Sample Sizes up to 100mm diameter x 200mm height and a Cell pressure of 1000kPa (Standard)

Online Plotting of Graphs (Load v/s Displacement, Load v/s Time, Displacement v/s Time) with real time display of data

The Scope of Supply include :

Load Frame with Hydraulic Actuator Hydraulic Power Supply

Triaxial Cell with accessories

Automatic Pressure system with Compressor and De-airing system

PC based Control system and Application Software
Signal Conditioning and Controlling Unit with Transducers
Computer for Controlling and Data acquisition
Control & Analysis software.

Load Frame

Loading Frame is free standing two pillar type unit. It has a base and a cross head with fitted actuator along with servo valve. Cross head carrying the Hydraulic Actuator for conducting dynamic tests is movable on threaded columns to adjust the height of the sample. Arrangement is also provided for locking of the crosshead at any desired position.

An electromechanical system consisting of highly precise servo motor is provided for conducting routine static tests. Static and dynamic loading would be fully computer controlled. It can accommodate Triaxial cell for sample sizes up to 100mm diameter & 200mm height.

Technical Specifications:

Triaxial Cell Accomodate: Up to 100mm diameter & 200mm

Height Horizontal Clearance: 350 mm

Vertical Clearance: 900 mm

Platen Diameter: 150mm or more

Static Test Speed: 0.00001-9.9999 mm/min.

Capacity: 50kN.



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