

Product Name :
Cyclic Triaxial Testing System

Product Code :
TEST5020RFQLAB-0002



Description :

Cyclic Triaxial Testing System for Testing Lab Equipment Tender Suppliers India

Technical Specification :

The cyclic triaxial testing system is a highly advanced combination of hydraulic and pneumatic technology where s_1 is applied through hydraulic system in dynamic tests and s_2 & s_3 are applied through pneumatic system. It is totally based on Close Loop principle. The processing of the pre-programmed signal and machine response signal in the P.I.D. Controller is at the speed of 10 KHz. This keeps the machine working within the limits of $\pm 1\%$ of the programmed signal. Confining pressure & Back pressure are also controlled through computer and operates on close loop control mechanism.

The system is capable of performing following tests as per relevant standard ASTM/BS/AASHTO/IS etc.: Saturation, consolidation, UU, CU, CUBar, CD Triaxial tests with pore pressure and Volume change measurement, Isotropic and Anisotropic tests, Stress & Strain Path control tests, Liquefaction test, Stress Controlled Cyclic Triaxial strength of soils, Strain Controlled Cyclic Triaxial strength of soils, determination of modulus and damping properties of soils, Resilient Modulus of soils etc. (Optional- K_0 consolidation tests & Bender Element tests)

Salient Features

Based on SERVO CONTROLLED HYDRAULIC CLOSED LOOP FEEDBACK mechanism

Conforming to stringent requirement as per the International norms (ASTM 3999 & ASTM 5311)

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

Advanced Analysis Software as per ASTM 3999 & 5311 for Cyclic testing and Routine Static Triaxial testing

We are a leading manufacturers of Cyclic Triaxial Testing System testing equipment for a range of industries, including materials science testing lab. We offer full range of Cyclic Triaxial Testing System testing equipment, including Cyclic Triaxial Testing System testing kit, Cyclic Triaxial Testing System testing machine, Cyclic Triaxial Testing System testing tools, Cyclic Triaxial Testing System test equipment, Cyclic Triaxial Testing System test machines, Cyclic Triaxial Testing System for Lab Testing Instruments. We are suppliers of materials testing tools and equipment for the construction industry. Our mission is to provide reliable, accurate, and easy-to-use Cyclic Triaxial Testing System testing equipment that helps customers build better, safer, and more sustainable infrastructure.



Testing lab instruments India