GEO-CON PRODUCTS PTY LTD
Testing Equipment for the Construction Industry

DATA SHEET

CONTROLS GROUP

Standard triaxial system with analogue measurement

BS 1377:7 | ASTM D2850 | ASTM D4767 | BS 1377:8 | ASTM D5084 | BS 1377:6 | ASTM D7181

MAIN FEATURES

- **Fully analogue data measurement** using dial gauge, load ring, double burette and pore pressure transducer;
- **Pore pressure measuring with dedicated readout unit**, ensuring a negligible change in volume of the circuit of the pore pressure, **as required by the Standards**;
- Pressure system using **air/water interface** and triaxial panel with air pressure regulators;
- Easily extended with dedicated accessories to perform a**dditional tests such as permeability, unconfined, CBR, etc.;**
- Easily **upgradable to digital measurement** system.

GENERAL DESCRIPTION

Standard triaxial System with analogue measurement is the ideal basic solution for performing standard triaxial tests such as effective and total stress laboratories that don't require digital measurement. All the data acquisition and test management are made in manual mode

Power supply is only required for air compressor and for triaxial load frame during failure stage.

A typical Standard triaxial system with analogue measurements includes:

Load frame:

- *TRIAX* specifically designed for triaxial applications is ideal for commercial laboratories that need a versatile machine capable of performing a wide range of tests. (Max sample sizes: 70 mm)
- *TRITECH 50 kN or 100 kN*: TRITECH original high-performance load frames for triaxial tests, ideal solution for advanced and research laboratories that perform high quality tests at high productivity levels.

Triaxial cell with accessories: standard triaxial cell with dedicated accessories for performing and preparing samples from 35 mm to 100 mm diameter.

Analogue measuring system: in a standard triaxial system

Pressure system: Air/water interface with air compressor and air filter, generally used for effective stress (two pressure lines are required for cell and back pressure)

Oil/water interface is also available, suggested when only total stress test (UU) is required.

Template for data processing and reporting: generally used in system with automatic data acquisition, but thanks to the high flexibility they can be used with manual input of data also in standard triaxial systems with analogue measurement.

TECHNICAL SPECIFICATIONS

Capacity: 50 kN and 100 kN

Speed range:

- 0.00001 – 99.99999 mm/min (TRITECH)
- 0.00001 – 50.8 mm/min (TRIAX)

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Working pressures:
- 1000 kPa (AIR/WATER INTERFACE and TRIAXIAL PANEL)
- 3500 kPa (OIL/WATER APPARATUS)

Specimen range: 35,38,50,70,100 mm diameter with STANDARD TRIAXIAL CELL
Sampling rate: manual with stopwatch

ORDERING INFO

LOAD FRAME
Triaxial load frame TRIAX
Triaxial load frame TRITECH

TRIAXIAL CELL (Standard)
Standard triaxial cells and accessories

MEASURING SYSTEM
Load
Load measuring rings for triaxial test
Displacement
Axial strain dial indicators
Pore pressure
Pore water pressure measurement
Volume change
Double burette volume change apparatus

PRESSURE SYSTEM
Air/Water pressure system and controls panels
Oil and water constant pressure system
Note: Oil/water pressure system is suggested for UU test where only one pressure line is required.

DE-AIRING WATER SYSTEM
Complete de-airing water system

Standard triaxial system with analogue measurement