

MODEL TO-217

Unconfined Compression Tester for Rocks



This equipment is used for determining unconfined compressive strength of intact rock core specimens. The



rock sample is cut to length and the ends are machined flat. The specimen is placed in a loading frame and, if required, heated to the desired test temperature. Axial load is continuously increased on the specimen until peak load and failure are obtained.

The load frame is extremely versatile and designed to conduct Triaxial Unconfined test and Unconfined compression test on rock specimens with diameters from 38-100mm and AX, BX, NX specimens.

The instrument consists of a cabinet that houses the gear system and motor with sturdy angle iron frame. Loading is done through the bottom loading platen, which is carried on a lead screw that advances upwards. The top load bracket, which

slides over two upright pillars, can be positioned at any desired height and locked. It carries a screw adaptor for standard proving rings or load cells.

The loading part of the unit is detachable from the main unit for ease of transport and to avoid damage to the tension rods.

- Rates of strain: 12 fixed speeds between 1.25 and 0.0064mm/min.
- Suitable for operation on 230V, 50Hz, single phase, AC supply.

Key features

- Two-pillar type.
- Enclosed motor and gear system.
- Jewel lamps indicating direction of motion.
- Operational ease.

APPLICABLE STANDARDS

- ASTM 2938, D7012

STANDARD FEATURES

- **TO-065** Load frame, 200kN capacity 12-speed
- **TO-21701** Loading platen as per ASTM standard
- **TO-21704** Electronic conversion kit with 200kN load cell and 25mm LVDT with data acquisition

ORDERING INFORMATION

- **TO-217-S2-SP2-03** Unconfined compression tester 200kN with 200kN load cell and 25mm LVDT with data acquisition

DAQ – Specifications

- Keypad for data logger configuration.
- Inbuilt RTC for the real time in standalone mode.
- Standalone and real-time data acquisition.
- LCD display of four lines, 20 characters, with back light.
- Operating temperature range of -45-70°C.
- Live channel data
- Peak hold facility
- Inbuilt battery for real-time clock
- Input as analog voltage
- Analog inputs: maximum four channels
- Maximum input voltage: 0-5V, +/-5V
- Accuracy
- Memory communication: internal storage minimum capacity should be 128MB or store on a PC that is configurable.
- Should be compatible with USB/RS232.
- Communication interfaces: Ethernet, RS232, USB, web server, Modbus server (slave)

