

Shear Strength

TL-201

Triaxial Shear Test Apparatus

Triaxial shear strength

IS 2720-11 IS 2720-12

Triaxial set for 38 mm soil specimens with three-speed load frame, load cell, LVDT, pore pressure sensor and Bishop pore pressure apparatus.

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Description

A complete triaxial set for 38 mm diameter soil specimens. The load frame has three speeds (1.25, 1.5 and 2.5 mm per minute) and a 500 kg load cell measures the axial load. An LVDT measures displacement and a pressure sensor reads pore water pressure.

The triaxial cell takes 38 mm specimens, comes with all its accessories and is rated to 10 kg/cm². Cell pressure is applied with a foot pump and lateral pressure assembly, also rated to 10 kg/cm².

The hand-operated Bishop pore pressure apparatus is a wall-mounted panel with a 200 mm pressure gauge reading 1.0 to 10 kg/cm² in steps of 0.1 kg/cm². A glass U-tube manometer measures low positive and negative pore pressures and checks the gauge zero. It has a mercury trap and a clear Perspex null indicator with a cursor to mark the mercury level (mercury costs extra). A 50 ml burette measures volume change in the specimen.

The pressure pump has four sleeve-packed valves and is worked by a hand wheel on a threaded piston rod, which gives smooth, fine pressure adjustment. It comes with a copper coil and water reservoir. Every unit is leak-tested to 10 kg/cm².

Supplied ready for use with operating manual and test certificate. Contact us for configuration options, accessories and calibration services.

Technical specifications

Specimen size	38 mm dia
Load frame speeds	1.25 / 1.5 / 2.5 mm/min
Load cell	500 kg
Displacement	LVDT
Pore pressure	Pressure sensor + Bishop apparatus

Cell pressure	Up to 10 kg/cm², foot pump
Bishop gauge	200 mm dia, 1.0–10 kg/cm² × 0.1 kg/cm²
Volume change	50 ml burette