

TRIAXIAL CELLS

BE 11

The triaxial shear strength test is a widely used method to determine the mechanical properties of soil and rock samples. This test applies stress in different directions, allowing for the measurement of properties such as shear resistance, cohesion, and dilatancy stress. It involves subjecting a cylindrical core specimen to confining pressures on all sides to evaluate its shear strength.

STANDARD FOLLOWING

IS 2720 (Part 11) and (Part 12)

Triaxial Cell for Soil Testing (38mm and 50mm Diameter Specimens)

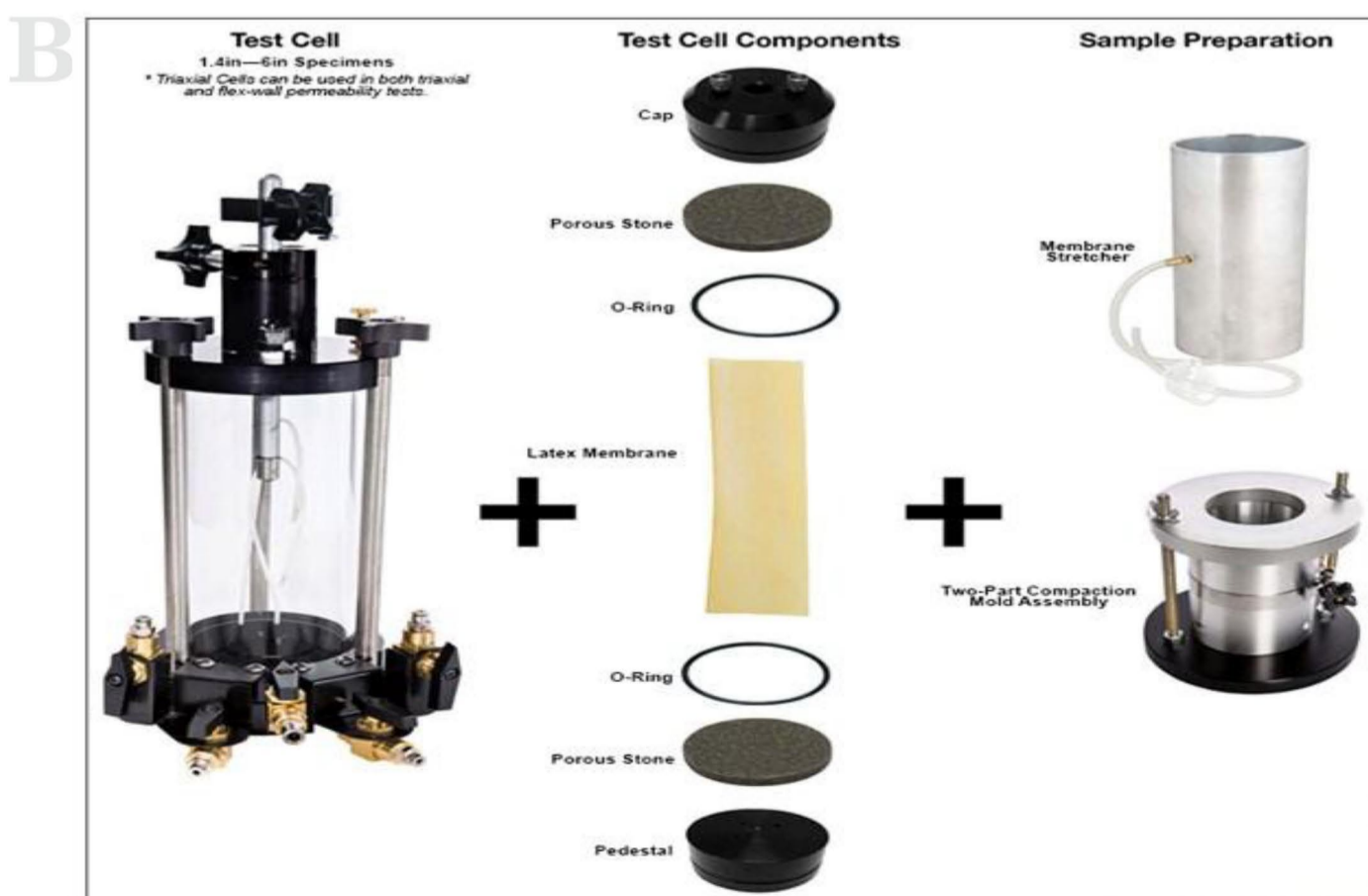
Specimen Sizes: Designed for cylindrical soil specimens of 38 mm diameter × 76 mm length (aspect ratio 1:2) and 50 mm diameter × 100 mm length (aspect ratio 1:2), compliant with standards like IS:2720 (Part XII).

Chamber Construction: Made from Perspex (acrylic plastic) for transparency, allowing visual observation during testing. Includes an anvil (base pedestal) and a loading plunger (top cap) for applying axial load

Design Features:

Easily disassembled by releasing four tie rods for quick specimen access.

Leak proof sealing up to 10 bar (approximately 10 kg/cm² or 145 psi) fluid pressure, ensuring reliable confining pressure application.



DESCRIPTION

BE 11-01	Manual type Load frame
BE 11-02	Digital type with Software
BE 11-03	Perspex loading pads (38 mm and 50 mm dia.)
BE 11-04	Pair of plain Perspex discs (38 mm and 50 mm dia. × 6 mm thick)
BE 11-05	Porous stones (38 mm and 50 mm dia. × 6 mm thick) for drainage
BE 11-06	Split sand former and sheath stretcher for sample preparation (38 mm and 50 mm)
BE 11-07	Pore Pressure Apparatus: Includes a null indicator, mercury manometer, and volume change burette
BE 11-08	Proving Ring 50 kn
BE 11-09	Dial Gauge 25 mm
BE 11-10	Load Cell 50 kn
BE 11-11	LVDT 25 mm
BE 11-12	Constant Pressure System: Air or oil-based for maintaining confining pressure (up to 10 bar)
BE 11-13	Foot Pump
BE 11-14	Water Tank Assembly



BE 11-02

This Equipment same as a BE 11-01 Only Change is Load Cell, LVDT and Digital Indicator.



BE 11-01



BE 11-12

Constant Pressure System: Air or oil-based for maintaining confining pressure (up to 10 bar)

