UNCONFINED COMPRESSION TESTER (MOTORISED) AZA0902

The AZA0902 Motorised Unconfined Compression Tester is a precision geotechnical testing instrument designed for the accurate determination of unconfined compressive strength (q_u) of cohesive soils. This parameter is essential for evaluating the undrained shear strength of clays and silts, making it a key input for foundation design, slope stability analysis, and preliminary soil investigations.

Equipped with a motorised loading system, the AZA0902 ensures a constant and controlled rate of strain, eliminating operator variability and improving the reliability and repeatability of test results. The system is designed in compliance with major international standards.

Key Features & Benefits

- Motorised constant strain rate for accurate and repeatable testing
- Eliminates operator-dependent errors
- Smooth gear-driven loading mechanism
- Compatible with mechanical and digital measurement systems
- Suitable for routine, academic, and advanced laboratory use
- Robust construction for long-term reliability

Standards Compliance

- ASTM D2166 – Unconfined Compressive Strength of Cohesive Soil
- IS 2720 (Part 10) – Determination of UCS

TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0902
Test Type	Unconfined Compression Test
Operation	Motorised, Constant Rate of Strain
Loading Mechanism	Gear-driven Screw Jack
Load Capacity	50 / 100 / 200 kg (configurable)
Rate of Strain	~1.25 mm/min (as per standards)
Sample Size	38 mm / 50 mm diameter (standard)
Load Measurement	Proving Ring / Electronic Load Cell
Deformation Measurement	Dial Gauge (0.01 mm) / LVDT
Power Supply	230 V AC, 50 Hz
Construction	Heavy-duty steel frame
Mounting	Benchtop design
Compliance	ASTM D2166, IS 2720 (Part 10)