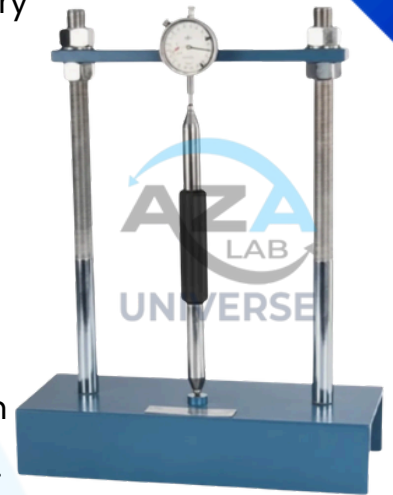




VOLUME CHANGE APPARATUS AZA0796

The Volume Change Apparatus AZA0796 is a precision laboratory instrument designed to measure the volume change of soil specimens during triaxial shear testing. It plays a critical role in evaluating soil behavior under controlled stress and drainage conditions.

This apparatus is essential for determining compressibility, permeability, and pore water pressure characteristics in geotechnical engineering applications. It is suitable for research laboratories, quality control facilities, and academic institutions.



Key Features

- High-precision volume measurement system (manual burette or optional digital)
- Robust construction using stainless steel and acrylic
- Compatible with standard triaxial testing setups
- Suitable for CD (Consolidated Drained) and CU (Consolidated Undrained) tests
- Compact bench-top design for laboratory use
- Calibrated for accurate and repeatable results

Applications

- Geotechnical engineering laboratories
- Soil mechanics research
- Construction and infrastructure testing
- Academic and teaching laboratories
- Quality control in civil engineering projects



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Working Principle

The apparatus measures volume changes in soil specimens by monitoring the movement of water into or out of the sample during testing.

Procedure:

1. Connect the apparatus to the triaxial test setup.
2. Subject the soil specimen to controlled stress conditions.
3. Monitor water displacement using the burette or digital system.
4. Record volume change corresponding to applied stress.
5. Analyze results to determine soil behavior parameters.

Standards & Compliance

- ASTM D4767 – Consolidated Undrained Triaxial Compression Test for Cohesive Soils
- IS 2720 (Part 12) – Determination of Shear Strength Parameters of Soils

Advantages

- High accuracy and sensitivity in volume measurement
- Reliable and repeatable test results
- Compatible with standard triaxial systems
- Durable and corrosion-resistant construction
- Suitable for both research and routine testing



TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0796
Measurement Range	0 – 50 ml (manual)
Resolution	0.01 ml (manual) / 0.001 ml (digital)
Material	Stainless Steel + Acrylic
Compatible Tests	CD & CU Triaxial Tests
Standards Compliance	ASTM D4767, IS 2720 (Part 12)
Mount Type	Bench-top
Dimensions	300 × 200 × 450 mm
Weight	Approx. 5 kg

Standard Supply

- Volume Change Apparatus Unit
- Calibration Burette
- Connecting Tubes & Fittings
- Sample Chamber Interface
- User Manual