CONSOLIDATION APPARATUS(ELECTRONIC BENCH MODEL) AZA0899

The AZA0899 Electronic Bench Model Consolidation Apparatus is a precision-engineered geotechnical instrument designed for conducting one-dimensional consolidation (oedometer) tests with high accuracy and automated data acquisition. It is used to evaluate the rate and magnitude of soil compression under controlled loading, enabling reliable prediction of long-term settlement in foundations, embankments, and civil engineering structures.

Its compact bench-mounted design makes it ideal for laboratories with limited space, while its electronic measurement system ensures superior accuracy, continuous monitoring, and enhanced testing efficiency.

Key Features & Benefits

- Electronic LVDT measurement for high precision and continuous monitoring
- Automated data acquisition system with digital display
- PC connectivity for real-time data logging and analysis
- Compact bench model design for space-efficient laboratories
- Reduced manual intervention and elimination of reading errors
- Suitable for undisturbed and remoulded soil samples

Standards Compliance

- ASTM D2435 – One-Dimensional Consolidation Test
- BS 1377 (Part 5) – Compressibility & Swelling Tests
- Compatible with IS 2720 Series

TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0899
Test Type	One-Dimensional Consolidation (Oedometer)
Configuration	Bench-mounted, compact design
Loading System	Dead weights with lever arm
Optional Loading	Motorized controlled loading system
Consolidation Cell Sizes	50 mm, 63.5 mm, 75 mm diameter
Displacement Measurement	Electronic LVDT
Data Acquisition	Digital data logger with PC interface
Connectivity	USB / RS-232
Software	Graph plotting & parameter analysis
Maximum Load Capacity	Up to ~1000 kPa (model dependent)

TECHNICAL SPECIFICATION

Parameter	Specification
Power Supply	230 V AC, 50 Hz
Construction	Heavy-duty steel, corrosion-resistant
Compliance	ASTM D2435, BS 1377

Typical Components Supplied

- Three gang loading frame
- Three consolidation (oedometer) cells
- Dead weights with lever arms (per station)
- Three dial gauges with mounting brackets

Optional Accessories:

- LVDTs with digital display
- Data acquisition and logging system
- Additional consolidation cells
- Calibration weights