



## UNIVERSE PLUNGER PENETRATION APPARATUS AZA0808

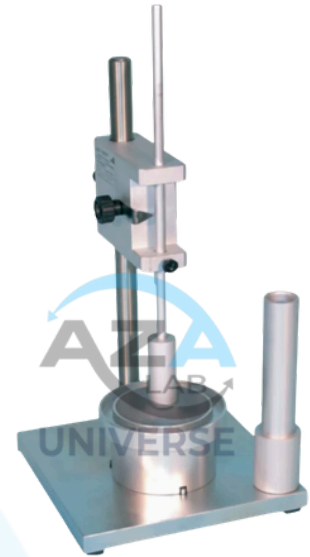
The AZA0808 Plunger Penetration Apparatus is a precision laboratory instrument designed to determine the consistency and workability of cement mortar under standardized testing conditions.

Engineered for accurate and repeatable penetration measurements, the apparatus plays a critical role in evaluating fresh mortar behavior, ensuring proper water-cement ratio and mix quality. It is widely used in cement plants, construction material testing laboratories, R&D centers, and academic institutions.

Its robust construction, smooth plunger operation, and clear measurement system make it ideal for both routine quality control and advanced research applications.

### Key Features

- Determination of mortar consistency
- Workability assessment of fresh cement mortar
- Quality control in cement manufacturing
- Mix design optimization and validation
- Research and development studies
- Laboratory testing in construction material facilities
- Academic training and demonstration





## **Standards & Compliance**

- IS 4031 (Part 6)
- ASTM C230

## **Product Features & Benefits**

- High Measurement Accuracy

Hardened steel plunger ensures consistent and repeatable penetration results.

- Smooth Vertical Movement

Precision-guided mechanism enables controlled and friction-free operation.

- Clear Measurement System

Graduated scale with 1 mm least count ensures easy and accurate readings.

- Optional Dial Gauge

Enhances precision for advanced laboratory applications.

- Robust Construction

Powder-coated steel frame ensures durability and corrosion resistance.

- Compact Bench-Top Design

Ideal for laboratories with limited workspace.

- User-Friendly Operation

Simple locking and release mechanism for efficient testing.

- Low Maintenance

Minimal moving parts ensure long service life with reduced upkeep.



## TECHNICAL SPECIFICATION

Parameter	Details
Model	AZA0808
Equipment Type	Plunger Penetration Apparatus
Plunger Diameter	10 mm (Hardened Steel)
Measuring Range	Up to 50 mm
Least Count	1 mm
Measurement System	Graduated Scale (Dial Gauge Optional)
Frame Material	Powder-Coated Steel
Operation	Manual Vertical Penetration
Standards Compliance	IS 4031 (Part 6), ASTM C230
Weight	Approx. 15 kg

The AZA0808 consists of a rigid steel frame supporting a vertically movable hardened steel plunger. The plunger is carefully guided to ensure true vertical penetration, eliminating lateral deviation.

A graduated scale (or optional dial gauge) measures penetration depth accurately, allowing precise evaluation of mortar consistency. The locking mechanism ensures controlled testing conditions for repeatable results.