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LENGTH COMPARATOR AZA0795

The Length Comparator AZA0795 is a high-precision laboratory instrument designed to measure the length change in hardened cement, mortar, and concrete specimens. It is primarily used to evaluate drying shrinkage behavior, which is critical for assessing dimensional stability and crack potential in construction materials.

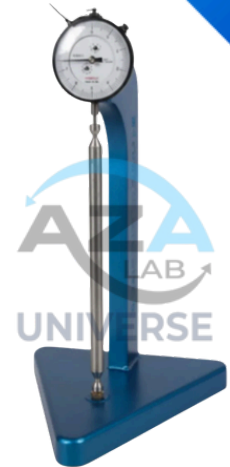
Engineered for accuracy and durability, this comparator is widely used in quality control laboratories, research institutions, and civil engineering applications.

Key Features

- High-precision dial gauge with ± 0.001 mm resolution
- Rigid and stable metallic frame construction
- Hardened steel reference anvil for accurate baseline measurement
- Precision contact points for consistent specimen positioning
- Compatible with standard shrinkage bar specimens
- Easy-to-use design for repeatable and reliable results

Applications

- Drying shrinkage testing of cement and mortar
- Concrete dimensional stability analysis
- Quality control in construction materials testing
- Research & development in cement and concrete technology
- Academic and laboratory testing





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Working Principle

The instrument measures linear dimensional changes in a specimen by comparing its length over time.

Procedure:

1. Prepare specimen using a shrinkage mould.
2. Place the specimen between the reference anvil and movable contact point.
3. Ensure proper seating of inserts with contact points.
4. Record initial dial gauge reading.
5. Take subsequent readings at specified intervals.
6. Calculate length change to determine shrinkage or expansion.

Standards & Compliance

- IS 4031 (Part 10) – Determination of Drying Shrinkage of Hydraulic Cement
- ASTM C490 – Measurement of Length Change of Hardened Cementitious Materials

Advantages

- Extremely high measurement accuracy
- Repeatable and reliable test results
- Robust construction for long-term use
- Compatible with standard IS/ASTM specimens
- Essential for durability and crack analysis



TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0795
Dial Gauge Accuracy	±0.001 mm
Measuring Range	0 – 10 mm
Compatible Specimen Size	25 mm × 25 mm × 285 mm
Frame Material	Cast Iron / Stainless Steel
Anvil Type	Hardened Steel
Compliance	IS 4031 (Part 10), ASTM C490

Standard Supply

- Comparator Frame with Stand
- Precision Dial Gauge
- Reference Anvil Set
- Contact Points Assembly