



UNIVERSE RING MOULD AZA0789

The AZA0789 Ring Mould is a precision-manufactured laboratory accessory used for forming standardized cement and mortar specimens for expansion, soundness, consistency, and setting time tests.

It is an essential component in cement testing procedures, particularly in Le Chatelier soundness testing, ensuring accurate and repeatable sample preparation in compliance with international standards.



Key Features

- Precision cylindrical mould for uniform specimen formation
- Available in solid or split-ring design for different test requirements
- Manufactured from brass or gunmetal for durability and corrosion resistance
- Smooth, polished inner surface for easy demoulding
- High dimensional accuracy for repeatable results
- Compatible with Le Chatelier apparatus
- Reusable with long service life

Applications

- Le Chatelier soundness testing
- Autoclave expansion testing
- Cement setting time evaluation
- Consistency and flow behavior studies
- Civil engineering laboratory testing and education



Working Principle

The ring mould is used to shape cement paste or mortar into a controlled geometry. In soundness testing:

- The mould is filled with cement paste of standard consistency
- It is placed within a testing setup (e.g., Le Chatelier apparatus)
- After curing and exposure to heat (boiling/autoclave), expansion is measured

This helps determine volume stability and detect undesirable compounds such as free lime or magnesia

Performance & Benefits

- **Accurate Specimen Formation:** Ensures uniform geometry for reliable testing
- **High Durability:** Resistant to corrosion and repeated thermal cycles
- **Repeatability:** Maintains dimensional stability across multiple uses
- **Versatility:** Suitable for various cement and mortar test methods

Standards & Compliance

- IS 4031 (Part 3):1988 – Determination of soundness of hydraulic cement
- ASTM C151 – Autoclave expansion of hydraulic cement

Compatibility

- Fully compatible with Le Chatelier apparatus
- Can be used in autoclave expansion test setups
- Suitable for standard laboratory workflows



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TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0789
Inner Diameter	30 mm – 33 mm
Height	30 mm – 33 mm
Material	Brass / Gunmetal
Type	Solid ring / Split ring
Finish	Machined and polished
Standards Compliance	IS 4031 (Part 3), ASTM C151
Reusability	Yes
Application	Soundness, expansion, and setting tests

Safety & Handling

- Easy to clean and maintain after use
- Non-reactive material prevents contamination
- Lightweight for convenient handling