SLAKING VESSEL AZA0810

The AZA0810 Slaking Vessel is a specialized laboratory apparatus designed for evaluating the reactivity of quicklime (CaO) by measuring the temperature rise during the slaking (hydration) process.

This exothermic reaction is critical in determining the quality, reactivity rate, and performance of lime, particularly for applications in cement production, soil stabilization, water treatment, and chemical processing.

Constructed with corrosion-resistant materials and an insulated chamber design, the AZA0810 ensures accurate and repeatable temperature measurements by minimizing external thermal influence.

Key Features

- Quicklime reactivity testing in cement and lime industries
- Quality control in lime manufacturing plants
- Soil stabilization material evaluation
- Chemical and metallurgical process testing
- Research and development laboratories
- Academic and teaching applications
- Comparative analysis of lime grades and sources

Standards & Compliance

- ASTM C110

Product Features & Benefits

- ASTM-Compliant Design

Fully conforms to ASTM C110 requirements for quicklime testing.

- Thermally Insulated Chamber

Minimizes heat loss and external influence for accurate temperature measurement.

- Precision Thermometer Port

Centrally aligned port ensures correct placement of thermometer or thermocouple.

- Corrosion-Resistant Construction

Made from stainless steel or anodized aluminum to withstand caustic reactions.

- Smooth Internal Finish

Prevents residue buildup and simplifies cleaning.

- Durable & Long-Lasting

Designed for repeated use in demanding laboratory environments.

- Flexible Instrument Compatibility

Supports thermometers, thermocouples, and digital probes/data loggers.

TECHNICAL SPECIFICATION

Parameter	Details
Model	AZA0810
Equipment Type	Slaking Vessel
Vessel Material	Stainless Steel / Anodized Aluminum
Capacity	1.5 – 2 Litres
Wall Construction	Single or Double-Walled (Insulated)
Thermometer Port	Central, with secure sealing
Sample Size	Approx. 150 g (Typical)
Water Volume	Approx. 600 mL (Typical)
Measurement Method	Temperature Rise During Slaking
Standards Compliance	ASTM C110
Applications	Lime Reactivity Testing

Interpretation Guidance

- Rapid temperature rise (high peak in short time) → Highly reactive quicklime
- Slow temperature rise → Low reactivity or impurities
- Excessively rapid/violent reaction → Potential handling concerns