FLOW TABLE AZA0791

The AZA0791 Flow Table is a standardized laboratory apparatus used to determine the workability and flow characteristics of fresh cement mortar and concrete mixes. It evaluates the consistency of material by measuring the spread of a sample subjected to controlled table drops.

This test is essential for ensuring proper placement, compaction, and performance of cementitious materials in construction applications.

Key Features

- Standardized table for accurate flow measurement
- Manual cam-operated drop mechanism
- Controlled drop height for repeatable results
- Smooth, polished surface for uniform spreading
- Robust construction for laboratory and field use
- Portable and easy to operate (no power required)
- Corrosion-resistant and durable design

Applications

- Cement and concrete testing laboratories
- Construction site quality control
- Precast and concrete product manufacturing
- Admixture and mix design evaluation
- Civil engineering research and education

Working Principle

The flow table determines workability by measuring the spread of a mortar or concrete sample:

- A sample is placed in a standard mould at the center of the table
- The mould is lifted vertically
- The table is dropped repeatedly using a lever mechanism
- The spread diameter of the sample is measured

The increase in spread indicates the flowability and consistency of the mix.

Test Procedure Summary

1. Place flow mould at the center of the table
2. Fill with fresh mortar/concrete in layers
3. Lift the mould vertically
4. Drop the table typically 25 times
5. Measure the final spread diameter

Standards & Compliance

- IS 1199:1959 – Methods of sampling and analysis of concrete
- ASTM C230/C230M – Flow table for hydraulic cement tests

Performance & Benefits

- Quick Assessment: Rapid evaluation of workability
- Repeatability: Consistent and standardized results
- Non-destructive: Sample can be reused for further testing
- Field-Friendly: No electrical power required
- Versatility: Suitable for mortar and flowable concrete mixes

Safety & Handling

- Stable base ensures safe operation during repeated drops
- Smooth mechanical action reduces operator strain
- Easy cleaning after each test
- Corrosion-resistant surface for long service life

Operating Capability

- Suitable for self-compacting and high-flow mixes
- Enables comparison of different mix designs
- Supports evaluation of admixture performance
- Ideal for both laboratory and on-site testing

TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0791
Table Diameter	762 mm (30 inches)
Table Material	Brass / Stainless Steel / Mild Steel
Drop Height	12.5 mm – 25 mm
Operating Mechanism	Manual lever-operated cam
Number of Drops	Typically 25 per test cycle
Mould Dimensions	100 mm height × 100 mm top × 200 mm bottom
Mould Material	Cast aluminum / steel
Surface Finish	Polished, rust-resistant
Standards Compliance	IS 1199:1959, ASTM C230/C230M