



UNIVERSE

RELATIVE DENSITY TEST AZA0886

The AZA0886 Relative Density Test Apparatus is a precision-engineered geotechnical testing system designed for determining the relative density (density index) of cohesionless, free-draining soils such as sands and gravels.

Relative density is a critical parameter for assessing soil compactness, load-bearing capacity, and liquefaction potential in geotechnical engineering applications.

Unlike cohesive soils, granular soils do not respond effectively to impact compaction. The AZA0886 utilizes a controlled vibratory table mechanism to accurately determine both maximum and minimum index densities, enabling precise and repeatable calculation of relative density in full compliance with international standards.

Key Features & Benefits

- High-frequency vibratory table simulates real field compaction conditions
- Adjustable amplitude control for different soil gradations
- Dual mould system for flexible testing of varying particle sizes
- Standardized surcharge mechanism ensures consistent loading
- High-precision dial gauge for accurate deformation measurement
- Robust construction suitable for continuous laboratory use

Standard Compliance

- IS 2720 (Part XIV)
- ASTM D4253 – Maximum Index Density
- ASTM D4254 – Minimum Index Density & Relative Density





UNIVERSE TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0886
Test Type	Relative Density Test
Soil Type	Cohesionless, free-draining soils
Vibratory Table Size	Approx. 750 × 750 mm
Vibration Frequency	~3600 vibrations/min (under standard load)
Amplitude Range	0.05 mm – 0.65 mm (step adjustable)
Mould Capacities	3000 ml & 15000 ml
Dial Gauge	0.01 mm resolution, 50 mm travel
Power Supply	415 V, 3 Phase (others on request)
Construction	Heavy-duty steel, corrosion-resistant finish