



UNIVERSE

PROCTOR NEEDLES (SPRING TYPE) AZA0868

The AZA0868 Precision Proctor Needles (Spring Type) is a portable field instrument designed for rapid estimation of soil compaction and moisture condition.

It provides a practical alternative to laboratory Proctor testing for preliminary assessment and on-site quality control, especially in cohesive and semi-cohesive soils such as those encountered in embankments, subgrades, and trench backfills.



Working Principle

The instrument operates using a calibrated spring-loaded plunger:

- Penetration resistance is measured directly (0–40 kg range)
- Interchangeable needle tips are selected based on soil condition
- Penetration depth is monitored using graduated stems
- Results provide an indication of soil compaction and moisture condition

This allows quick field evaluation without the need for full laboratory compaction testing.

Applications

- Field assessment of soil compaction
- Estimation of optimum moisture condition
- Subgrade and embankment inspection
- Trench backfill quality control
- Construction site verification checks
- Geotechnical field investigations
- Educational and training purposes



Key Features

- Calibrated Spring Mechanism

Direct reading of penetration resistance up to 40 kg

- Dual Graduated Stems

Long and short stems with 12.5 mm intervals for precise depth control

- Interchangeable Needle Tips

Seven tips for different soil densities and conditions

- Portable Design

Compact unit supplied with a protective carrying case

- Rugged Construction

Stainless steel / powder-coated body for field durability

TECHNICAL SPECIFICATION

Component	Specification
Model Number	AZA0868
Load Range	0 – 40 kg
Stem Graduations	12.5 mm intervals
Long Stem	For larger needle areas & deeper
Short Stem	For smaller needle tips & surface
Needle Tip Areas	0.25, 0.5, 1.0, 1.5, 2.0, 3.5, 6.0 cm ²
Body Material	Stainless steel / powder-coated
Carry Case	Wooden, foam-lined