IN-SITU VANE SHEAR TEST AZA0922

The AZA0922 In-Situ Vane Shear Test Apparatus from Azalab is a precision field instrument designed for the direct determination of undrained shear strength (c_u) of soft to medium cohesive soils in their natural, undisturbed state.

This apparatus enables highly reliable in-situ strength measurement, eliminating errors associated with sample disturbance during extraction and transport. It is particularly effective for soft, sensitive clays and silts, where accurate shear strength data is critical for foundation design, embankment stability, and earthwork analysis.

Key Features

- Torque Applicator Assembly

Heavy-duty, base-mounted system

Geared crank mechanism for smooth and controlled torque application

- Torque Measurement System

Calibrated split proving ring with high-precision dial gauge

Supplied with conversion chart for direct shear strength calculation

- Cruciform Vanes

Manufactured from high-grade steel

Standard H/D ratio = 2:1 ensuring compliance and uniform shear surface

- Extension & Dummy Rods

Square-section rods with secure couplings

Dummy rods provided for friction correction

- Low-Friction Mechanism

Thrust bearings/collars minimize rod friction errors

Ensures true torque measurement

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TECHNICAL SPECIFICATION

Parameter	Specification
Model	AZA0922
Product Type	In-Situ Vane Shear Test Apparatus
Test Method	Field vane shear
Application	Undrained shear strength (c_u) & sensitivity
Soil Type	Soft to medium cohesive soils
Torque Capacity	Up to 2000 kgf·cm (~200 N·m)
Torque Measurement	Split proving ring with dial gauge
Vane Sizes	37.5 × 75 mm, 50 × 100 mm
Vane Material	High-grade steel
Rod Type	Square section with extensions
Friction Control	Bearings / thrust collars + dummy rods
Stand	Detachable heavy-duty
Carry Case	Included
Standards	IS 4434, ASTM D2573, ISO 22476-9