

SOIL > SOIL CLASSIFICATION

HAND VANE SHEAR APPARATUS

Code: T175



- The Hand Vane Shear Apparatus is used for rapid in-situ determination of the undrained shear strength of cohesive soils. This portable device is essential for geotechnical engineers conducting field investigations, particularly in shallow excavations and boreholes.
- The apparatus operates by inserting a vane into the soil and applying torque until shear failure occurs.

 The resistance to rotation is measured, providing a direct assessment of the soil's shear strength without the need for sample extraction.
- Equipped with interchangeable vane adaptors, the device accommodates a range of soil strengths, from very soft to stiff clays. This versatility ensures accurate measurements across diverse site conditions.
- The compact and lightweight design facilitates ease of transport and operation, making it suitable for both field and laboratory settings. Its straightforward mechanism allows for quick deployment and reliable results.
- When used in conjunction with other soil classification tests, the Hand Vane Shear Apparatus contributes to a comprehensive understanding of soil behavior, informing design decisions for foundations, slopes, and earthworks.



TECHNICAL SPECIFICATIONS

• Measuring range:

Sensitive: 0-2 N/cm² (0-20 kPa)

o Standard: 0–10 N/cm² (0–100 kPa)

• High Capacity: 0–25 N/cm² (0–250 kPa)

• Torque measurement: Direct reading scale with maximum reading indicator

SUPPLIED WITH

• Vane adaptor (Sensitive: 0-2 N/cm²)

• Vane adaptor (Standard: 0–10 N/cm²)

• Vane adaptor (High Capacity: 0–25 N/cm²)

ORDERING INFORMATION

| Item | Code |
|---|-----------|
| HAND-VANE SHEAR APPARATUS | T175X00XH |
| VANE ADAPTOR for T175 (0 - 2 N/cm²) | T175P001H |
| VANE ADAPTOR for T175 (0 - 10 N/cm ²) | T175P002H |
| VANE ADAPTOR for T175 (0 - 25 N/cm²) | T175P003H |