

SOIL > SOIL CLASSIFICATION

# AUTOMATIC VANE SHEAR TESTING MACHINE

Code: T575



- Determines undrained shear strength of soft to medium cohesive soils on undisturbed, remoulded, or reconstituted specimens using a motorized vane with constant rotation rate and automatic peak capture.
- Fully automatic drive provides standard-compliant rotation control, ensuring repeatable shearing and accurate peak/remoulded strength evaluation with minimal operator influence.
- Integrated software manages test staging (pre-shear, shear, optional remould/second shear), logs torque-angle data in real time, and outputs results and charts suitable for technical reports.
- Interchangeable vane sets and sample-holding fixtures support moulds, jars, and tube samples, enabling rapid testing without extensive re-trimming.
- Ideal for routine laboratory strength profiling and sensitivity assessment as a fast, economical complement to triaxial and unconfined compression programs.

#### **STANDARDS**

ASTM D4648 • BS 1377-7



## **TECHNICAL SPECIFICATIONS**

- Rotation Control: Constant-rate motorized drive with ASTM/BS preset ranges
- Measurement: High-resolution torque and angular displacement with live torque-angle plot
- Vane Sets: Assorted vane sizes compliant with ASTM/BS requirements
- Sample Holding: Base plate for moulds/containers; tube-sample clamp (up to standard lab diameters)
- Outputs: Peak strength, remoulded strength, sensitivity (St), vane geometry, rate, correction factors
- Compliance Features: Rotation-rate verification/logging; operator prompts for vane and specimen dimensions
- Software: Test setup templates, real-time charts, tabular results export
- Optional ALFA Cloud integration for secure, real-time data upload, centralized storage, and web access to results.

## **EQUIPPED WITH**

- Motorized vane shear head with constant-rate controller
- Interchangeable vane set
- Base plate for moulds/containers and tube-sample holding attachment
- Digital torque and angular displacement module with connection cable
- PC software for control, visualization, and report output

#### **SUPPLIED WITH**

- Assorted vane blades (standard kit)
- Torque verification accessories (as applicable to model)



• Essential clamps, fixtures, and fittings for moulds and tube samples