

AUTOMATIC VANE SHEAR TESTER TPAS-1

STANDARD: ASTM D4648

The automatic vane shear tester TPAS-1 is a laboratory geotechnical testing equipment used to determine the shear strength of soft soil or sensitive clay. It not only can determine the undrained strength of undisturbed soil taken at different depths, but also can perform tests under different consolidation pressures (this function is optional) and determine soil sensitivity.

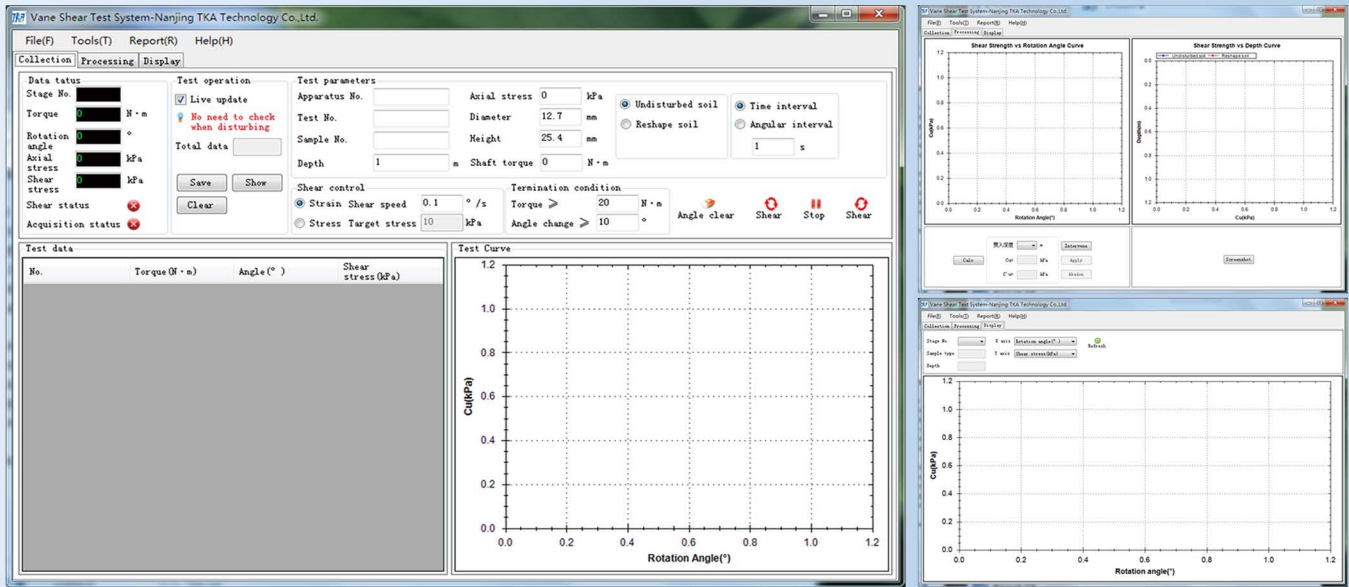
FEATURES

- It has overload protection function.
- Equipped with a high-speed USB 3.0 communication port for communication with computers, which is widely applicable, fast in transmission, and stable and reliable in communication.
- Data acquisition: by time interval (s) or by shear interval (°).
- Supports the latest Win10/11 operating system.



SOFTWARE

The software includes a consolidation module (optional) and can plot shear strength versus vertical load curves (optional), facilitating future instrument upgrades and expansions. It features fully automatic data acquisition and control, with the following functional modules: data acquisition module, data processing module, sensor calibration module, and report output module.



TECHNICAL SPECIFICATIONS

Vane	Made of 304 stainless steel, using integral wire cutting technology, with a thickness of not less than 2mm. Φ12.7mm×h25.4mm Φ25.4mm×h50.8mm Φ38.1mm×h76.2mm Other specifications can be customized
Specimen container	Φ100mm×h177mm
Shear rod	The maximum depth is not less than 220mm. Other sizes are optional, such as 1000mm for vacuum preloading. 0-5, 0-10, 0-20, 0-50, and 0-80 N.M selectable.
Torque sensor	Accuracy: +/-0.1% F.S Resolution: ≤0.1 N·m;
Shear rate	0.001~200°/min, continuously variable speed.

CONFIGURATION

Control box	Power switch, built-in data acquisition device, power socket, USB 3.0 port.
Container	Base plate, cylinder. Color galvanized, 304 stainless steel container optional.
Torque drive device	Frame, lifting parts, stepping motor, coupling, vane
Torque sensor	Measuring range is optional.
Acquisition controller	
Acquisition and processing software	
Other supporting accessories	