

Electrical field vane  
instrument:

**GEOTECH EVT 2000**



GEOTECH



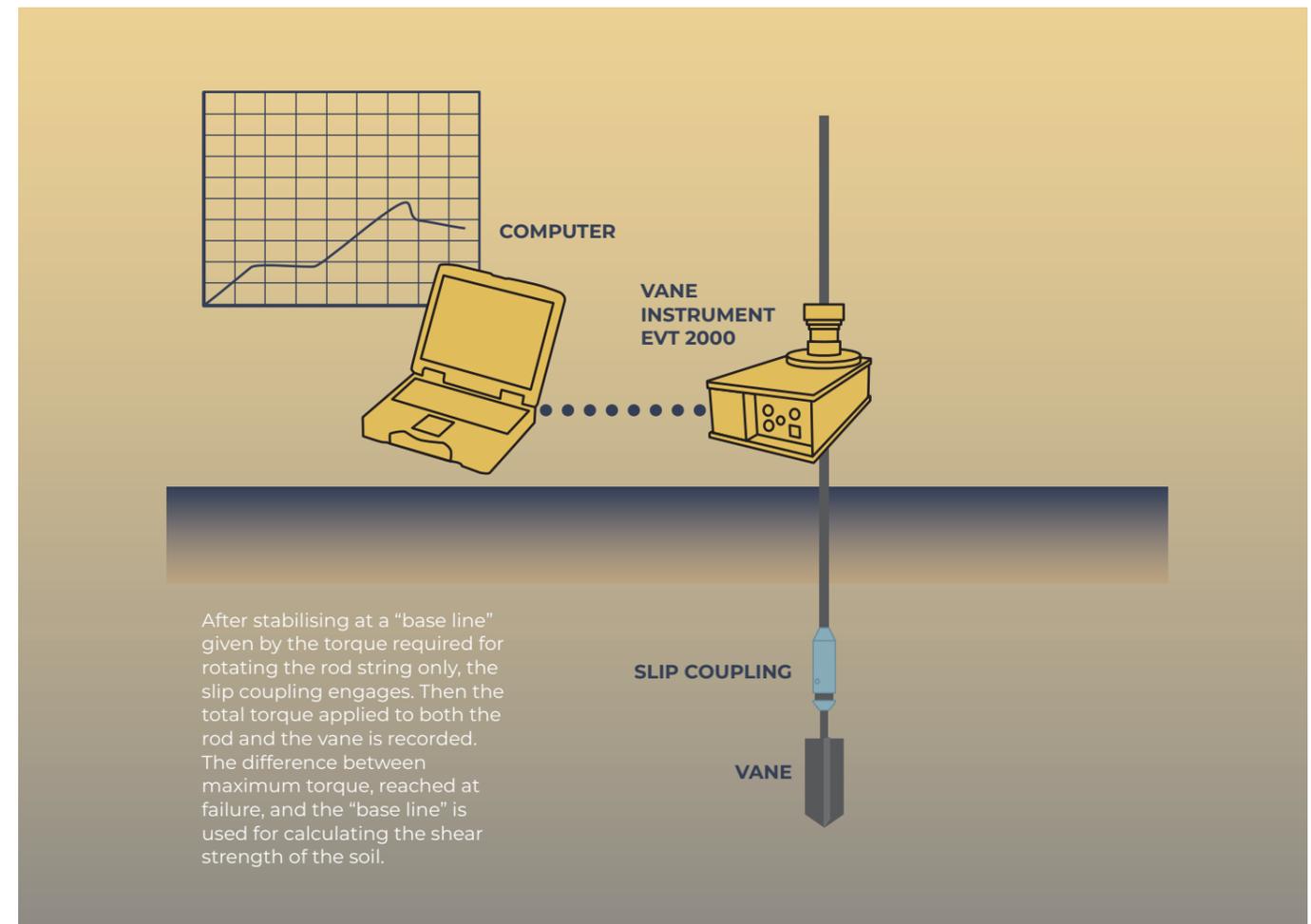
## Electrical field vane instrument

Field vane shear test is one of the most widely used methods for measuring the undrained shear strength and sensitivity of cohesive soils. The tests have been performed with the Geotech or Nilcon vane apparatus for more than 50 years all over the world under various soil conditions and climates.

The down-hole equipment is available in two versions, with vane protection and protection tubes, or without protection. Both versions can be used with the same electrical instrument for rotating the rod string and recording the torque. A slip-coupling between vane and rod makes it possible to eliminate influence from rod friction.

Push the vane to the desired depth and engage the chuck of the instrument. The instrument will now rotate the rod string, at the same time recording the torque and showing it real time on your computer screen.

After stabilising at a "base line" given by the torque required for rotating the rod string only, the slip coupling engages. Then the total torque applied to both the rod and the vane is recorded. The difference between maximum torque, reached at failure, and the "base line" is used for calculating the shear strength of the soil. When the test is finished, you disengage the chuck. You may then push your down-hole equipment to the next testing level or retract it. The rod segments can be fed through the recording instrument. This facilitates the work on the field as the instrument head does not need to be removed between tests.



### Specifications

#### Electrical vane instrument, Geotech EVT 2000

Dimensions:	450 x 210 x 110 (plus chuck, height 140 mm)
Measurement range:	100 Nm (0-50, 0-100 or 0-200 kPa, depending on vane size)
Measurement accuracy:	< 1 % FS
Weight:	16 kg

#### Down-hole equipment

Standard model (without protection):		With protection casing	
Vane (Ø x h, range):	50 x 110 mm, 200 kPa 65 x 130 mm, 100 kPa 80 x 172 mm, 50 kPa (tapered)	Vane (Ø x h, range):	65 x 130 mm, 200 kPa (rectangular)
Extension rods:	Ø22 x 1000 mm	Inner rods: Protection tube: Vane protection shoe:	Ø22 x 1000 mm Ø42 x 1000 mm Ø75 x 820 mm
Slip coupling:	15° clockwise	Slip coupling:	15° clockwise

Specifications are subject to change without notice.

Ingenjörfirman Geotech AB is a leading innovator and manufacturer of geotechnical field investigation equipment, providing the latest geotechnical solutions and applications for clients around the World.



SPECIALISTS IN GEOTECHNICAL FIELD EQUIPMENT

© 2022 Ingenjörfirman Geotech AB  
Datavägen 53 · SE-436 32 Askim · SWEDEN  
[www.geotech.eu](http://www.geotech.eu) · [info@geotech.se](mailto:info@geotech.se)  
Phone +4631289920