



GEONOR

GEONOR H-10 FIELD SHEAR VANE BORER

Key Features & Capabilities

- **Detailed Investigation:** Conduct a detailed field analysis of undrained shear strength and sensitivity in soft to medium stiff clays.
- **Powerful Penetration:** Achieve depths of 0 to 30 meters with a hand jack, pushing through layers of clay, sand, or silt.
- **Flexible Measurement:** Get the range you need with two vane sizes, covering 0 to 60 kPa and 0 to 100 kPa.
- **Design-Ready Data:** Deliver top-level accuracy results you can confidently use for the design of earth fill foundations and embankments.

In-Situ Accuracy Without the High Cost

The field vane shear test (FVST) is the most widely used method for in situ measurement of the undrained shear strength and sensitivity of soft clays. It is more economical than CPT, as it does not require a drilling rig or highly qualified personnel.

Standard equipment often falls short for professional, detailed investigations. Common problems include inaccuracies due to rod-clay friction and vanes bending on stones or hard layers.

The Geonor H-10 directly targets these issues. This fully protected, pressure push-in field vane instrument delivers high-level accuracy, even in difficult conditions.





Solve Your Biggest Field Challenges

The H-10 addresses key field challenges with targeted solutions:

INACCURATE READINGS DUE TO FRICTION.

- ◎ **H-10 Solution:** Tube-protected rods prevent rod-soil friction, ensuring your data stays accurate.

VANE DAMAGE AND TIME-CONSUMING CLEANING.

- ◎ **H-10 Solution:** The H-10's unique protection shoe protects the vane from bending and helps keep it clean and ready for the next measurement. Cleaning needs are minimal, and when needed, cleaning is quick and simple, even between tests. This minimizes clay buildup on the vane and helps maintain accurate readings.

The robust design makes the H-10 ideal for testing in stratified, sandy, stony, or marine sediment clays.

Technical Characteristics:

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Installation:

Pressure push-in, no hammering. By hand with the Geonor ground-anchored jacking system or with a hydraulic drilling rig.

Instrument:

Gear driven, accuracy of torque reading: + - 0,5% of range.

Measurement range:

From 0-60 kPa (0-6 T/m²) and 0-100 kPa (0-10 T/m²).

LOWER PART:

Total length with the vane extended:	1430 mm
Max outer diameter:	77 mm
Weight:	22 kg
Two different sizes of vanes:	55 mm x 110 mm and 65 mm x 130 mm

INSTRUMENT:

Max outer diameter:	320 mm
Weight including instrument box:	24 kg

VANE BORER H-10 COMPLETE FOR 30 M DEPTH, CONSISTS MAINLY OF:

- ⊙ Readout instrument complete
- ⊙ Vane borer lower part with vanes
- ⊙ Set of spare vanes and protection tube
- ⊙ 30 extension tubes and rods
- ⊙ Preboring equipment complete
- ⊙ Complete insertion/extraction with rack jack, ball cone clamp, anchoring screws etc.
- ⊙ Steel transport cases