

Shear Vane

Geotechnics Vane/Geovane Product Guide

Important product safety and warranty information

The use and care of your Geovane Shear Vane

WARNING: Do not attempt to take apart, open, repair, service, or modify the Geovane shear vane. Doing so could damage your shear vane and/or void your Warranty and calibration.

- The vane head and blade(s) carry identical serial numbers to enable them to be matched with the correct calibration certification. If more than one blade of the same size is included, it will be distinguished by a letter appended to the serial number.
- To help prevent a 'snap-back' style torsion release, which can damage or break external parts in the Geovane vane head, take the following actions:
 - Always insert the vane blade(s) into the soil to a minimum depth of approximately 7cm.
 - If the soil fails to shear before exceeding the scale on the vane head, slowly release the torsion before withdrawing from the soil.
- To avoid damaging the Geovane vane head, secure the spindle grip located on the bottom of the vane head when unscrewing attachments.
- Clean the outside of the Geovane vane head with a wet cloth or nylon brush – do not use abrasive pads, scouring powders, or solvents (e.g. alcohol, petrol, paint thinner, or benzene).
- Clean the vane blade(s) with a steel brush after every shear test.
- Do not immerse the shear vane in water. While the shear vane is water-resistant, immersion will allow water to ingress, carrying foreign material inside which can damage the internal spring through corrosion.
- Avoid dropping the vane head and blade(s).

Workspace

Before work

- Ensure you have obtained service clearance for the immediate area under test.
- Ensure you have enough space to move freely.
- Look in all directions for hazards (right, left, forward, backward, down, and up) and where possible remove hazards or relocate into a safe zone.
- Keep a safe distance from windows, walls, etc. If necessary, move objects and ask other workers or bystanders to move out of the workspace.
- When using multiple extension rods, take care of any overhead hazards, such as power lines or other structures.

During work

- The distance from objects, other workers or bystanders may vary between tests – stay alert to your surroundings during work.
- Ensure you always have good footing.
- Prevent the shear vane from falling. If the Geovane vane head falls and hits someone, it could cause injury. Therefore be aware of your surroundings and where possible, do not lift the vane head higher than eye-level when attached to an extension rod(s)

One year Warranty

Geotechnics warrants your Geovane shear vane against malfunction under normal use conditions for 1 year from the date of purchase. The warranty excludes any wear and tear, or damage caused by accident or misuse.

Calibration

A shear vane calibration is a specialist procedure that determines the correlation between the scale on the shear vane and the actual soil shear strength. Statistical uncertainty of the correlation predominantly arises from two sources – the internal spring in the vane head, and the vane blade. Therefore, the uncertainty expressed within the initial calibration certification is only valid for the vane head and blade(s) when used as a set.

To maintain accuracy and quality of performance of the Geovane, it is strongly recommended that the shear vane be serviced and recalibrated by an accredited calibration laboratory on an annual basis.