

Geonor Field Vane Test (VST)

Gregg Drilling & Testing, Inc. uses a Geonor H-10 vane to measure the in-place undrained shear strength (s_{uv}) of soft to stiff clays & silts. An appropriate sized vane is selected based on the anticipated peak undrained shear strength for the soils encountered at the site. A small vane is typically used for stiff soils, whereas the large vane is required in softer soils. Gregg's Geonor field vane test can be operated with either a 55mm or a 65mm diameter vane.

The vane is advanced to the test depth by pushing on small diameter vane rods. Once the vane rods and the vane reach the test depth the torque recording head is placed over the push rods and locked to the vane rod string. The vane rods are then loaded using the torque recording head until yielding of the surrounding soil occurs. Once yielding occurs, rotation of the vane is continued in order to characterize the soil's post yielding shear resistance, *Figure VST*. The vane is then released from the recording head and is rotated clockwise twenty times to completely remold the soil. Once the soil is remolded, the torque recorder is again locked onto the vane rods. The vane is then rotated to record the remolded strength of the soil. Measurements can be taken with both a manual read-out and a digital read-out for increased accuracy.

For further information refer to Mayne, 2002 and Greig et al. 1987.

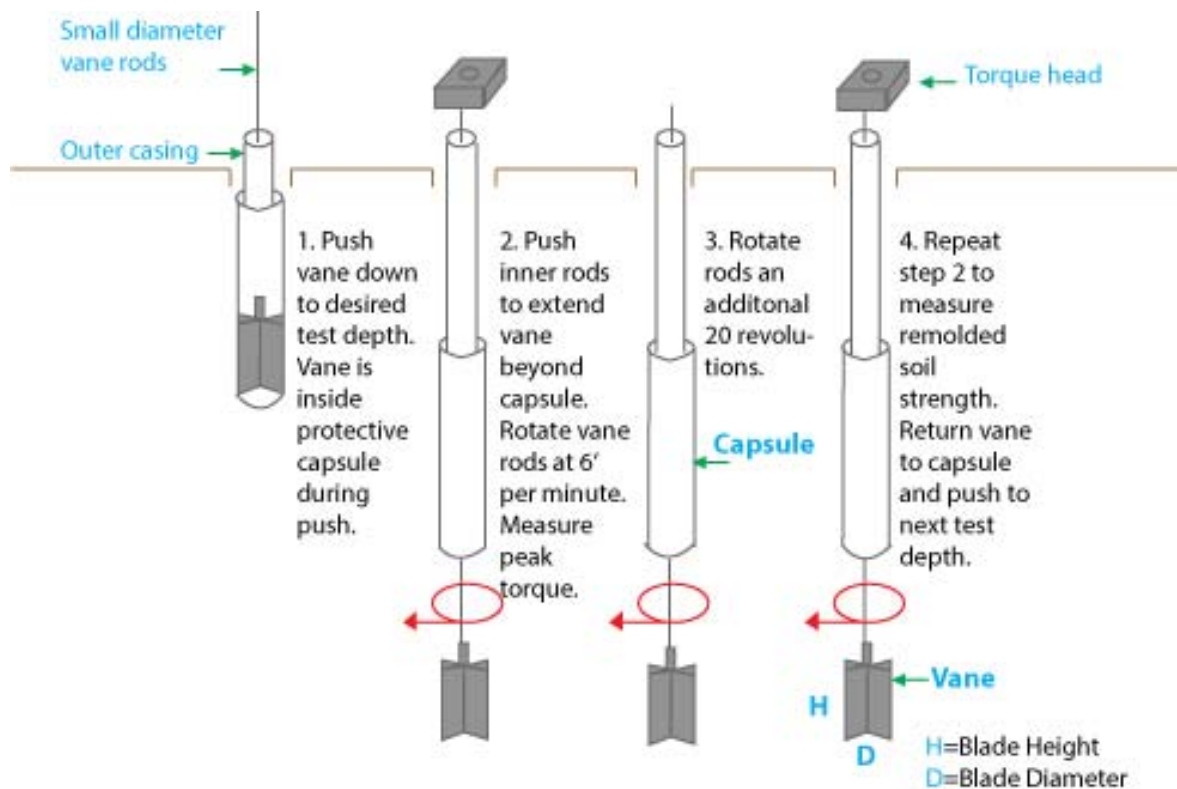


Figure FVT