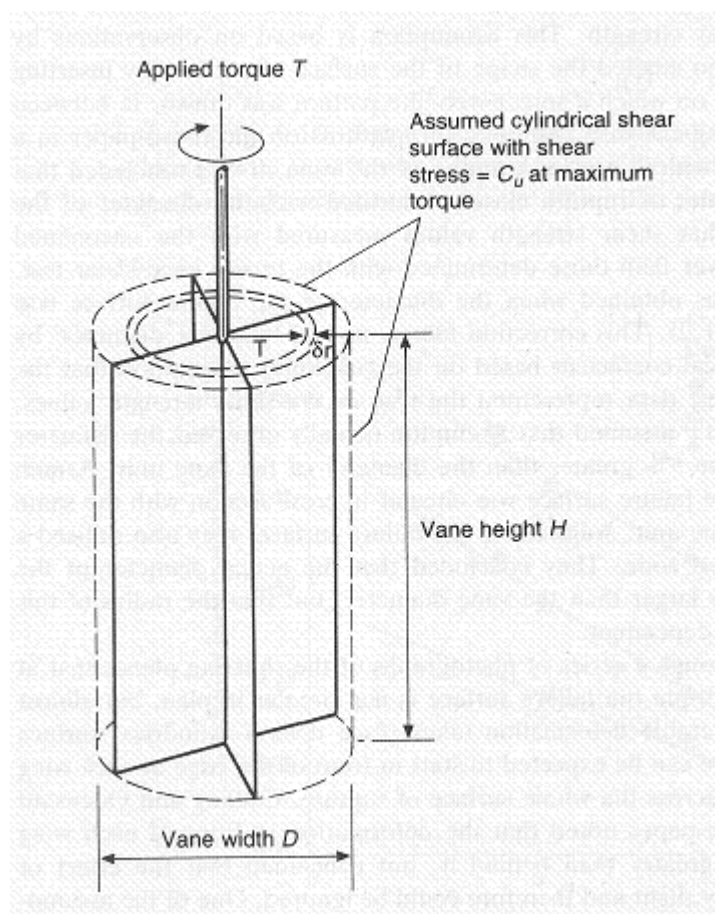


3.6 Field Vane Shear Test (FVT)

(1) General

- To determine undrained strength (+sensitivity) of cohesive soils
- Once the vane has been pushed into the ground, it is rotate at a slow rate (≤ 0.1 deg/s) with measurement of torsional shear force.



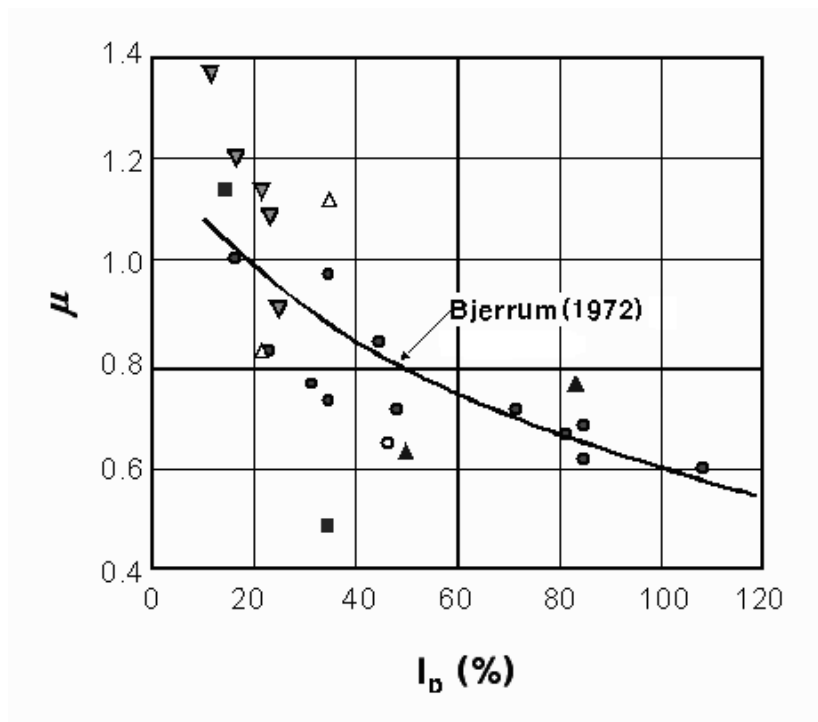
(2) Determination of S_u

$$s_u = \frac{M_{\max}}{\frac{\pi D^2 H}{2} + \frac{\pi D^3}{6}}$$

-For a vane blade with $H=2D$

$$s_u = \frac{T}{3.67D^3}$$

-Correction s_u with PI



$$s_u' = \mu \cdot S_{u0}$$