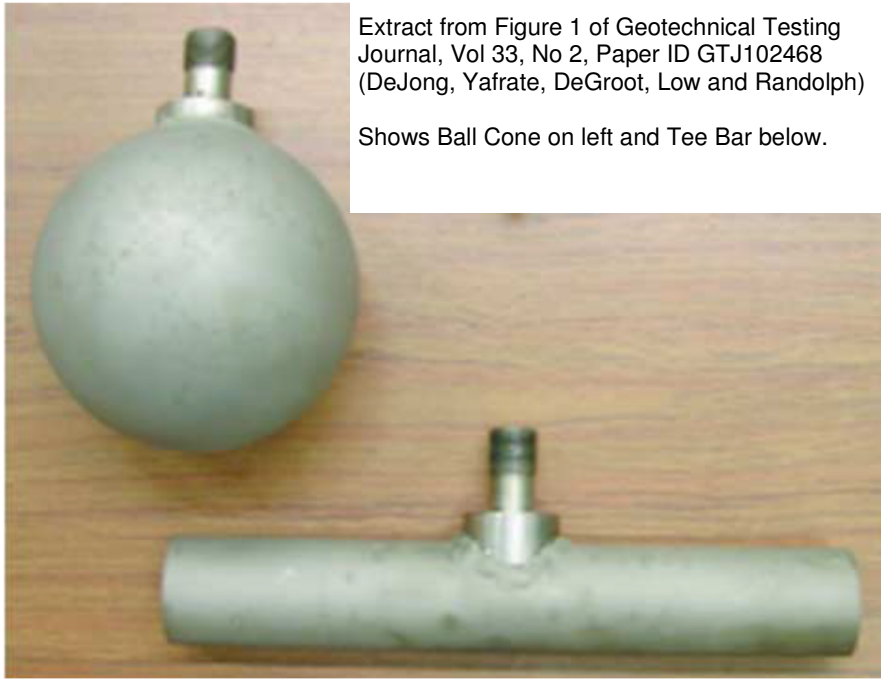




EXPLANATION SHEET

FULL FLOW PENETROMETERS Ball Cone and Tee Bar 4 March 2021



Extract from Figure 1 of Geotechnical Testing Journal, Vol 33, No 2, Paper ID GTJ102468 (DeJong, Yafraite, DeGroot, Low and Randolph)

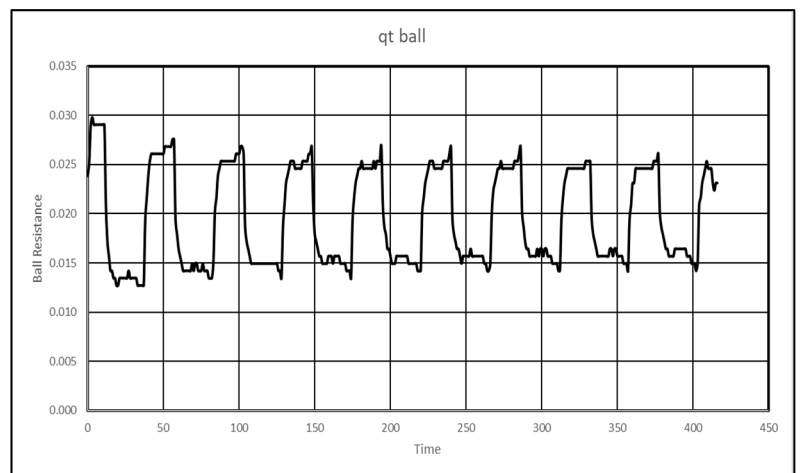
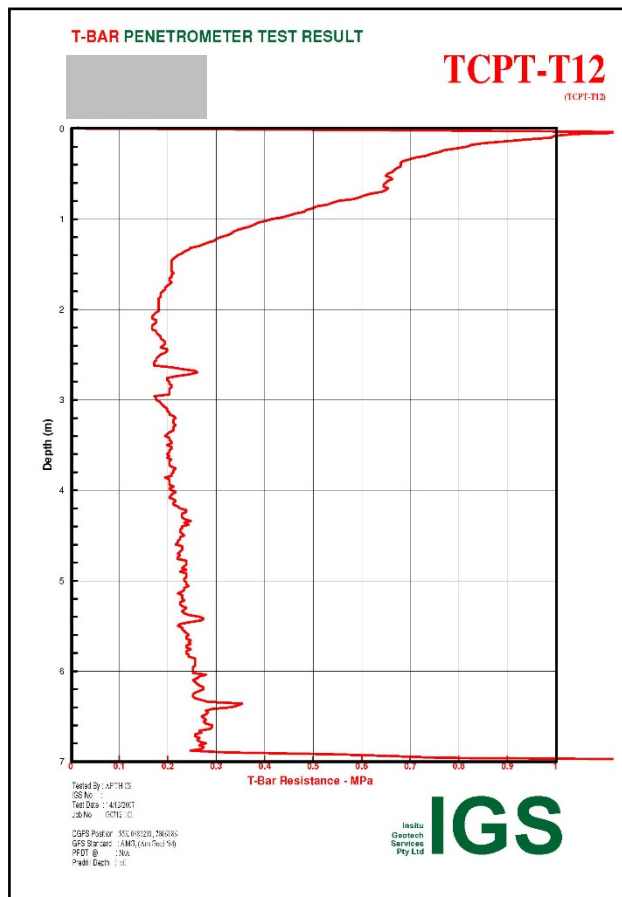
Shows Ball Cone on left and Tee Bar below.

IGS provides both Ball Cone and Tee bar testing.

These tests are conducted in a similar fashion to CPT and are able to provide data for clients to estimate the undrained strength and the remoulded strength of soft and very soft cohesive soils and sediments.

Remoulded Strength data is obtained by cyclic testing, cycling a penetration over a defined depth zone, measuring resistance both up and down during each cycle.

Note that Ball Cone has become more popular than Tee bar as it is not subjected to bending forces due to non-symmetric loads.



Cyclic Ball Cone plot of resistance vs cycles.

Typical IGS full flow penetrometer test plot.
Here using Tee Bar.