

STATIC CONE PENETRATION TEST MACHINE

Static Cone Penetrometer, 100 kN (10,000 kgf.) Capacity, Engine Driven

The unit facilitates exploration to greater depths with smooth penetration at a constant penetration rate. The machine is driven by 4.8 hp diesel engine, suitable for loading up to 100 kN. and is mounted on a pneumatic tyred towable frame. The equipment comprises the following:-

- i) Driving mechanism consisting of an engine driven pumping unit and a hydraulic ram.
- ii) Driving head consisting of hydraulic cylinder and piston.
- iii) One pressure gauge 0 to 160 kg/cm² capacity.
- iv) One pressure gauge 0 to 600 kg/cm² capacity.
- v) Automatic cut-out without pressure gauge 1No.
- vi) Mantle tubes, of uniform dia meter ne meter long 30 Nos.
- vii) Sounding rods, one meter long 30 Nos.
- viii) Sounding cone, without friction jacket, 10 cm² base area 1 No.
- ix) Sounding cone with friction jacket, 10 cm² base area 1 No.
- x) Trusses: 2 No.
- xi) Screw Anchors with 45 cm blade complete 6Nos.
- xii) Screw Anchors, blade only, 30 cm dia 6 Nos.
- xiii) Screw Anchors blade only, 20 cm dia 6 Nos.
- xiiii) Handle for screw anchors 1 No.
- xv) Tool kit for machine 1 Set.
- xvi) Tarpoline cover

All components are mounted on a single axle steel trailer frame on pneumatic wheels with built in truss for anchoring it through number of ground anchors for reaction as required under field conditions. It is provided with telescopic legs with inbuilt provisions for leveling the unit before tests.

Technical specifications

Max. Pushing force	: 100 kN
Max. Pulling force	: 110 kN
Drive	: 4.8 HP Diesel Engine
Low	: 0-160 kg/cm ²
High	: 0-600 kg/cm ²
Penetration Speed	: 10-15 mm/sec as per ISI 4968 (Part III)



Experiment : To determine the low shear strength of cohesive soil in field.

Year of Purchase: 2002

Cost : 3.64 L