SOIL > SOIL CLASSIFICATION

DYNAMIC CONE PENETROMETER (DCP, TRL)

Code : T300



- The Dynamic Cone Penetrometer (DCP), TRL (T300) is a portable, manually operated device used to assess the in-situ strength of undisturbed soils and compacted materials. It can be utilized in estimating the in-situ California Bearing Ratio (CBR), identifying strata thickness, evaluating shear strength of strata, and determining other material characteristics. It is widely used for rapid assessment of the structural properties of road pavements with unbound materials, embankments, and subgrade layers.
- Utilizing an 8 kg hammer dropping from a height of 575 mm, the DCP drives a 60° cone into the soil, measuring penetration resistance per blow. This data correlates with soil strength parameters such as CBR and allows for quick identification of weak zones or inconsistencies in compaction.
- The apparatus includes a driving rod with a replaceable or disposable cone tip, coupling assemblies, and extension rods, facilitating penetration depths up to approximately 850 mm, or up to 2 m with extensions, depending on soil conditions.
- Constructed with durable materials and designed for ease of assembly and transport, the DCP is suitable for both field and laboratory settings, providing reliable and repeatable measurements essential for quality control and assurance in civil engineering projects.

STANDARDS

ASTM D6951

TECHNICAL SPECIFICATIONS

- Hammer mass: 8 kg
- Drop height: 575 mm
- Cone angle: 60°
- Cone diameter: 20 mm

SUPPLIED WITH

- 8 kg sliding hammer
- Driving rod (16 mm diameter)
- Anvil with guiding rod
- Replaceable cone tip – 60°, Ø 20 mm
- Extension rod – 400 mm length
- Steel ruler (1 m)
- Carrying case

ORDERING INFORMATION

Item Name	Item Code
REPLACEABLE CONE TIP - 60° for T300	T300P001H
DISPOSABLE CONE TIP - 60° for T300	T300P002H
ADAPTOR for DISPOSABLE CONE TIP	T300P003H

EXTENSION ROD - 400 mm	T300P004H
HAMMER (8 kg)	T300P005H
ANVIL with GUIDING ROD for T300	T300P006H
HAMMER (4.6 kg)	T300P007H
DYNAMIC CONE PENETROMETER SET (DCP), TRL	T300X00AH