

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 insitu 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	Code
DYNAMIC CONE PENETROMETER SET (DCP), TRL	T300X00AH
REPLACEABLE CONE TIP - 60° for T300	T300P001H
EXTENSION ROD - 400 mm	T300P004H



## **T300 DATASHEET**

HAMMER (8 kg)	T300P005H
ANVIL with GUIDING ROD for T300	Т300Р006Н
HAMMER (4.6 kg)	Т300Р007Н
STEEL RULER - 100 cm	G710X100H
DISPOSABLE CONE TIP - 60° for T300	Т300Р002Н
ADAPTOR for DISPOSABLE CONE TIP	Т300Р003Н