SOIL > SOIL CLASSIFICATION

LIGHTWEIGHT DYNAMIC PENETROMETER

Code : T301



- The Lightweight Dynamic Penetrometer (T301) is a manually operated device used for in-situ assessment of soil compaction and bearing capacity. It is particularly effective for evaluating the relative density of subgrade layers and engineered fills in road construction, foundation assessments, and geotechnical investigations.
- Utilizing a 10 kg drop hammer falling from a height of 500 mm, the T301 drives a cone into the soil, measuring penetration resistance per blow. This data correlates with soil strength parameters such as California Bearing Ratio (CBR) and allows for quick identification of weak zones or inconsistencies in compaction.
- The apparatus includes interchangeable drive points with cross-sectional areas of 500 mm^2 and 1000 mm^2, accommodating a range of soil conditions. Sounding rods and a lifting device facilitate penetration depending on soil stiffness.
- Constructed with durable materials and designed for ease of assembly and transport, the T301 is suitable for both field and laboratory settings, providing reliable and repeatable measurements essential for quality control and assurance in civil engineering projects.

STANDARDS

DIN 4094

SET

- Hammer mass: 10 kg
- Drop height: 500 mm
- Cone angles: 90°
- Cone cross-sectional areas:
  - 500 mm^2 (Ø 24.2 mm)
  - 1000 mm^2 (Ø 35.6 mm)
- Sounding rods: 1 m length, Ø 22 mm
- Maximum penetration depth: up to 11 m (soil-dependent)

SUPPLIED WITH

- Drive point – 90°, 500 mm^2
- Drive point – 90°, 1000 mm^2
- Sounding rods – 1 m x 11
- Grooved rod for sample extraction
- Lifting device for sounding rods
- 10 kg hammer
- Anvil with guiding rod
- Carrying case

ORDERING INFORMATION

Item Name	Item Code
DRIVE POINT - 90° x 500 mm, x Ø 24.2 mm	T301P001H
DRIVE POINT - 90° x 1000 mm, x Ø 35.6 mm	T301P002H
SOUNDING ROD - 1 m	T301P003H
LIFTING DEVICE for SOUNDING BAR	T301P004H
GROOVED ROD for SAMPLE EXTRACTION	T301P005H
HAMMER (10 kg) for T301	T301P006H
ANVIL with GUIDING ROD for T301	T301P007H
LIGHTWEIGHT DYNAMIC PENETROMETER SET	T301X00XH