SOIL > ATTERBERG LIMITS

LIQUID LIMIT DEVICE (Digital, Cone Penetrometer Method)

Code : T090



- The Liquid Limit Device conforming to the Cone Penetrometer Method is used to determine the moisture content at which fine-grained soils transition from a plastic to a liquid state. This parameter is essential for soil classification and assessing the behavior of soils under varying moisture conditions.
- The apparatus operates by allowing a standardized cone to penetrate a soil sample under controlled conditions. The depth of penetration over a specified time correlates with the soil's liquid limit, providing a precise and repeatable measurement.
- Available in both manual and semi-automatic models, the device caters to diverse laboratory requirements. The manual model features a digital penetration gauge and requires a stopwatch for timing, while the semi-automatic model includes an electronic timer and an automatic release mechanism, enhancing consistency and efficiency in testing.
- The cone penetrometer method is recognized for its objectivity and reproducibility, often preferred over the Casagrande method in various international standards. It is particularly suitable for soils where the

Casagrande method may yield less reliable results.

- When used alongside the Plastic Limit Test, this device facilitates the determination of the Plasticity Index, a critical factor in evaluating soil plasticity and workability.

STANDARDS

EN ISO 17892-12 • EN ISO 17892-6 • BS 1377-2

TECHNICAL SPECIFICATIONS

- Operation: Manual or semi-automatic
- Penetration measurement: Digital gauge
- Release mechanism: Manual (digital model) / Electronic (semi-automatic model)
- Timer: Electronic programmable (semi-automatic model)
- Sample cup dimensions: Ø 55 mm x 35 mm

EQUIPPED WITH

- Digital penetration measurement gauge
- Release mechanism:
    - Manual (digital model)
    - Electronic (semi-automatic model)
- Electronic programmable timer (semi-automatic model)

SUPPLIED WITH

- Penetration Cone (30° x 80 g - EN standard)
- Sample Cup (Ø 55 mm x 35 mm)

ORDERING INFORMATION

Item Name	Item Code
DIGITAL CONE PENETROMETER	T090H00XB
SPARE DIGITAL INDICATOR for PENETROMETER	T090P001H
PENETRATION CONE - 30° x 80 g - BS	T090P002H
PENETRATION CONE - 60° x 60 g - EN	T090P003H
PENETRATION CONE - 30° x 80 g - EN	T090P004H
PENETRATION CONE - 30° x 100 g - EN	T090P005H
PENETRATION CONE - 30° x 400 g - EN	T090P006H
CONE TEST GAUGE - 30°	T090P007H
CONE TEST GAUGE - 60°	T090P008H
SLIDING ROD for T090	T090P009H
SOLENOID VALVE for T090 and A090	T090P010H
SEMI-AUTOMATIC DIGITAL CONE PENETROMETER	T090S00XU

OTHER PHOTOS

