

INDEX PROPERTIES OF SOILS

LIQUID LIMIT

The test is performed as per IS:2720 (part V) gives the moisture content at which a soil passes from the plastic to the liquid state. The apparatus required for conducting the test is manufactured as per IS: 9259.

●● HS10.05

Liquid Limit Device, Hand operated

The apparatus consists of a brass cup, a crank and cam mechanism, mounted on a rubber base of a specified hardness. A brass pin having a knurled end for easy removal holds the brass cup. The height of fall of the cup can be adjusted by a horizontal lead screw. Supplied complete with: Grooving Tool Type 'A' and Gauging Block as per IS:9259, IS:2720 (Part-V).

●● HS10.10

Liquid Limit Device, Hand operated with counter

The device is similar to HS10.05 but fitted with a drop counter to automatically record number of drops of the cup.

Supplied complete with:

Grooving Tool Type 'A' and Gauging Block as per IS:9259 IS:2720 (Part-V).



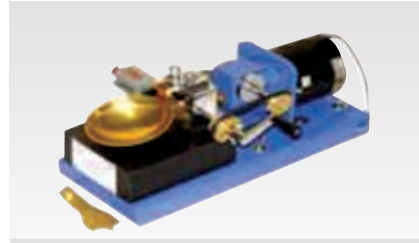
HS10.10

●● HS10.15

Liquid Limit Device, Motorised

The device is identical to HS10.10 but is fitted with a F.H.P. motor to drive the operat-

ing mechanism of cup at 120 rpm ensuring uniformity in performing test. Operates on 220 V, 50 Hz, single Phase, and is supplied with Grooving Tool Type 'A' and gauge block as per IS :9259, IS:2720 (Part-V).



HS10.15

COMMON ACCESSORIES:

HS10.05.1 Grooving Tool type 'A' as per IS :9259

HS10.05.2 Grooving Tool type 'B' as per IS :9259

HS10.05.3 Grooving Tool type 'C' as per IS :9259

HS10.05.4 Gauge block as per IS : 9259

HS10.05.5 Brass Cup

HS10.05.6 Rubber Base

HS10.05.7 Spatula

●● HS10.20

Liquid Limit Cone Penetrometer

The unit meets the requirements of IS:11196, IS:2720 (Part V) for liquid limit test using penetration method. It consists of :-

- i) A stainless steel cone with half angle of $15^{\circ}30'$ and 30.5 mm coned length, having smooth polished surface, fitted to a bearing rod moving against a graduated scale.
- ii) Penetration trough of 50 mm dia and 50 mm deep made of brass.

●● HS10.21

Liquid Limit Cone Penetrometer, Automatic

The unit meets the requirements of IS:11196, IS:2720 (Part V). This penetrometer is similar to HS10.20 Liquid Limit Cone Penetrometer except that the time of penetration of the cone is automatically controlled using a timing head and an Automatic Electronic Timer. The timer supplies 220 V smoothed D.C. output to the timing head precisely for 5 seconds to allow the cone to freely penetrate the soil in the trough. At the end of 5 seconds, the timer automatically de-energizes the releasing electromagnet and then relocks the cone. The reading is taken from the scale. This eliminates individual errors and gives constance results. Suitable for operation on 220V, 50 Hz, single phase supply.



HS10.21

Common Accessories for above models:

HS10.20.1 Penetration Cone Assembly

HS10.20.2 Penetration Trough.