

PLATE BEARING TEST

The test is performed for the determination of bearing capacity of soils for allowable settlement under static loads at shallow foundation as per IS : 1888.

The test is conducted at the bottom of a pit excavated to the pre-determined foundation level or at any other surface leveled for this purpose. Load is applied to a bearing plate of appropriate size through a hydraulic jack, in successive five or more increments, until the load intensity on the plate is approximately 3 times the designed bearing pressure of the prototype foundation. The plate bearing pressure of the soil is interpreted as per IS from the load settlement curves obtained from two or three tests conducted with bearing plates of different sizes.

●● HS34.150

Plate Load Test Apparatus

The apparatus consists of :-

- 1 Hydraulic jack - 500 kN (50,000 kgf.) supplied complete with hand operated pumping unit having 150 mm dia pressure gauge and one 5 meter long metal or flexible connecting pipe with adopters - 1 set.
- 2 Ball and socket assembly - 1 set
- 3 Set of chequered MS plates

- a. 600 mm x 600 mm x 25 mm - 1 No.
- b. 450 mm x 450 mm x 25 mm - 1 No.
- c. 300 mm x 300 mm x 25 mm - 1 No.
- 4 'L' Bracket for Dial Gauge - 4 Nos.
- 5 Connecting pipe set consisting of one 60 cm long & two 30 cm long extensions with nuts and bolts.

ACCESSORIES:

HS34.150.1 Bridge support (datum bar) of welded steel angle, 5 meter span, for positioning and fitting of the dial gauges. (Two are required for test)

HS34.150.2 Chequered MS Plate 750 mm x 750 mm x 25 mm thick.



PLATE BEARING

HS34.150.3 Chequered MS Plate 500 mm x 500 mm x 25 mm thick.



HS34.150

Note :

- 1 Plain square or circular plates of any specified dimensions can be supplied on special request

●● HS34.155

Load Truss 200 kN (20 Tonne) Capacity

The load truss provides necessary reaction for loading bearing plates. The truss is of fabricated R.S.J. construction in two halves which can be easily assembled together at site.

The equipment consists of :-

- 1 Truss in two parts.
- 2 Two joists.
- 3 Eight anchors.
- 4 Eight anchor straps with sixteen bolts.
- 5 Six guy wires with turn buckles.
- 6 Ninety anchor spikes.



- 7 Eight joining bolts with nuts.
- 8 Set of tools for assembly and set up.

●● HS34.160

Load Truss 300 kN (30 tonne) Capacity

Similar to HS34.155 but designed for higher reaction loading of 300 kN or 30 tonnes. Supplied with twelve anchorages and 130 spikes.

●● HS34.165

Load truss 500 kN (50 tonne) Capacity

Similar to HS34.155 but designed for a reaction loading of 500kN or 50 tonnes. Supplied with sixteen anchorages and 170 spikes.