

Loading Trolley (Plate Load Test)



Year of Purchase: 1962

Cost: Rs.189.00

Description

The plate load test is a field test, which is performed to determine the ultimate bearing capacity of the soil and the probable settlement under a given load. This test is very popular for the selection and design of the shallow foundation.

For performing this test, the plate is placed at the desired depth, then the load is applied gradually and the settlement for each increment of the load is recorded. At one point a settlement occurs at a rapid rate, the total load up to that point is calculated and divided by the area of the plate to determine the **ultimate bearing capacity** of soil at that depth. The ultimate bearing capacity is then divided by a safety factor (typically 2.5~3) to determine the **safe bearing capacity**.

The following plate load test apparatus is necessary for performing the test.

1. Test plate
2. Hydraulic jack & pump
3. Reaction beam or reaction truss
4. Dial gauges
5. Pressure gauge
6. Loading columns
7. Necessary equipment for the loading platform.
8. Tripod, Plumb bob, spirit level, etc.