

## PLATE LOAD TEST KIT

**Complete system for determining the bearing capacity of the soil in compliance with the reference standards**



Plate Load test is usually used for the verification of the bearing capacity of the land of the substrate, of the foundation layer and the base layer of the flooring, although it is not uncommon to its use to investigate the bearing capacity of the soil surface or to the state compaction of granular materials and road surfaces.

The test consists in transmitting to the soil to be tested and the subsequent increasing load increments, detecting simultaneously the sagging and therefore allows to directly determine a form of deformation or compressibility of the soil. The load transmission takes place via the application of a force by means of a hydraulic system of thrust, of a circular plate. The subsidence induced by the ground plate are simultaneously detected by centesimal or digital data acquisition systems, integral with a frame of reference outside the area of influence of the applied load.

Of fundamental importance, in any case, is the use of the proper contrast medium whose mass is a function of the expected load.

These tests are generally conducted with metal plates of standard diameter  $D=300/750$  millimeters, could be carried out from ground level and inside the wells whose depth is limited only by the size of the jack and related extensions.

*Standards: CNR BU 146, SN 670 317 and 670317th, the LCPC method CT2.*

### TECHNICAL FEATURES

- No.1 Single stage lever pump, working pressure 0-700bar, 1.4 cc / pumped, useful tank 0.5 liters (\*);
- N.1 NVT02B high precision digital pressure gauge 0-700bar with indication of min/max pressure peak, storage of selectable values and measurement units (psi, MPa, kPa, bar, mbar), accuracy 0,20% F.S. (\*);
- No.1 Adapter for 1/2" G pressure gauge for connection to a pressure socket;
- No.1 Hollow piston cylinder, spring return, 10ton pushing force, 50mm stroke (\*\*);
- [It is possible to configure the system with jacks of different capacity and stroke]
- No.1 plate  $\varnothing$  300mm, th. 25mm with adjustable dial gauge support points;
- [Plates of different diameters and thicknesses available on request. Standard dimensions: 760mm th.25mm, 600mm th.25mm, 450mm th.25mm]
- No.1 Articulated head equipped with spherical hinge to center the load;
- No.2 Extensions L=200mm;

- No.1 Extension L=100mm;
- No.2 Extensions L=50mm;
- No.3 Centesimal analog dial indicator 30mm stroke;
- No.3 Dial gauge holders (n.3 L = 600mm + n.3 L = 300mm);
- No.1 Support beam for dial gauge supports L=3000mm composed of two disassemblable blocks L=1500mm each. and equipped with two height-adjustable supports.

(\*) Compatible for Flat Jack Kit, STD Pull-Out Kit, Pull-Off 500 Kit;

(\*\*) Compatible for STD Pull-Out Kit, Pull-Off 500 Kit.

## ACCESSORIES

### Standard

- No.1 Single-stage manual pump with 0,5Lt tank (\*)
- No.1 NVT02B high precision digital pressure gauge 0-700bar with peak pressure indication, complete with calibration report (Accredia ref.) (\*)
- No.1 Hollow piston cylinder, spring return, 10ton pushing force, 50mm stroke complete with force/pressure diagram (\*\*)
- No.1 plate Ø 300mm, 25mm thk;
- No.1 head with spherical hinge to center the load;
- No.2 Extensions L=200mm;
- No.1 Extension L=100mm;
- No.2 Extensions L=50mm;
- No.3 centesimal dial gauges, 30mm stroke;
- No.3 Dial gauge holders;
- No.1 Support beam for dial gauge supports with adjustable supports.

### Optionals

- Plate Ø 760mm, 25mm thk;
- Plate Ø 600mm, 25mm thk;
- Plate Ø 450mm, 25mm thk;
- Flight case for protection and transport.

(\*) compatible for Flat Jack Kit, STD Pull-Out Kit, 500 Pull-Off Kit

(\*\*) compatible for STD Pull-Out Kit and 500 Pull-Off kit