

Load test kit

System of hydraulic cylinders, extensions and crossbars for the application of point loads tests

The Oleodynamic pressure system is used to perform static load tests with concentrated loads on floors. The load test procedure uses hydraulic jacks positioned in strategic points to induce internal forces equivalent to those resulting from the distributed loads.



This method offers many advantages in terms of safety as it allows a better control of the applied load. Compared to traditional methods, the Oleodynamic thrust system appears to be **more rapid, economical and safe.**

The system with concentrated loads is also used in cases where the use of the distributed loads is mainly applicable for logistical reasons.

The system consists of a series of extension cords of various lengths and two supporting cross members (lower and upper), a hydraulic jack (simple or double effect) and by a hydraulic pressure boosting unit (manual or automatic). The system is **realized with selected materials** in order to provide high mechanical properties combined with lightness and manageability. The hydraulic pump is supplied in various configurations depending on the number of cylinders to manage.

Applications:

Checks and tests on beams and slabs of any kind, covers, truss metal structures, wooden trusses, roads, railways, viaducts, prefabricated panels.

Technical features:

The kit for load tests with concentrated loads, in its standard configuration, consists of:

- 2 Boost set;
- 1 Pressurizing unit.

Composition of the individual kit:

- 1 Hydraulic cylinder, s/effect, spring return, 10ton capacity, stroke 250mm;
- 2 Aluminium extensions for each size (100cm, 50cm, 25cm, 12.5cm);
- 1 Lower support (reinforced version);
- 1 Top support;

Composition of Pressurization Unit:

- 1 Manual Lever pump, max working pressure 700bar (adaptable depending on the number and the type of screw jacks to handle);
- 1 Unidirectional flow control valve with end regulation;
- 1 High-precision digital manometer 0-700 bar;

- 1 Flexible hose High Strength L=5mt;
- 1 Manifold 3 way (1 input / 2 outputs);
- Quick-release couplings screw 3/8 "NPT with protective caps.

NB: The system can be customized and adapted to the test specifications required by the customer.

Accessories:

The kit for load tests with concentrated loads, in its standard composition (2 loading points), is provided as follows:

- No.2 Hydraulic cylinders 10ton, 250mm;
- No. Extension h=100cm;
- No.4 Extension h=50cm;
- No.4 Extension h=25cm;
- No.4 Extensions h=12.5cm;
- No.2 Top support;
- No.2 Lower support;
- No.1 Manual pump with lever;
- No.1 Unidirectional flow control valve with end regulation;
- No.1 Digital manometer 0-700bar;
- No.1 Manifold 3 way (1 input / 2 outputs);
- No.2 Hoses with quick couplings 3/8 "NPT and protective caps.

Possibility of inclusion of load cells with a digital display for analysis, reading and direct recording of the applied force values.