

MODEL TO-157



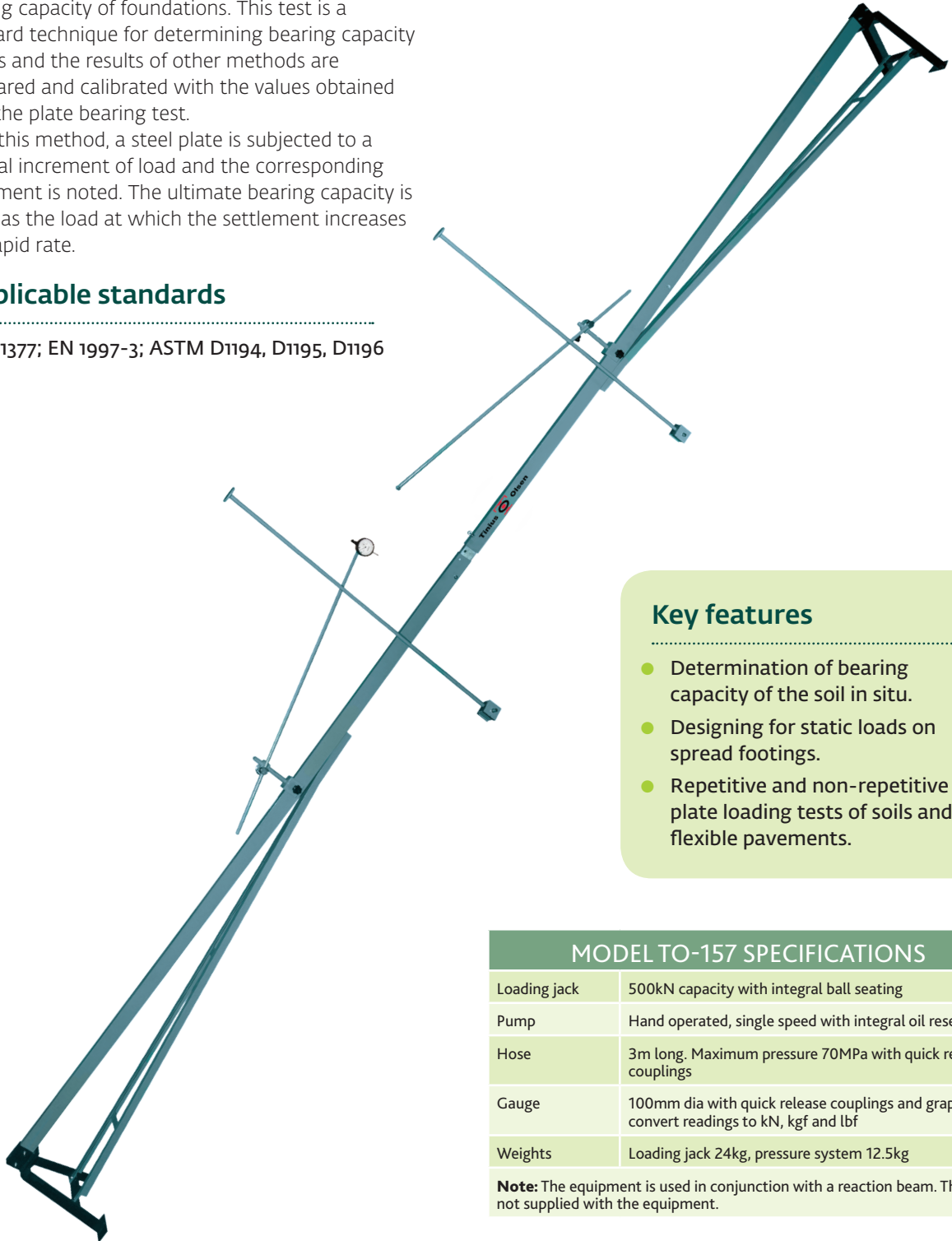
Plate Bearing Test Apparatus

The Plate Bearing Test is essentially a model test of foundations. It gives the load deformation characteristics for determining the ultimate bearing capacity of foundations. This test is a standard technique for determining bearing capacity of soils and the results of other methods are compared and calibrated with the values obtained from the plate bearing test.

In this method, a steel plate is subjected to a gradual increment of load and the corresponding settlement is noted. The ultimate bearing capacity is taken as the load at which the settlement increases at a rapid rate.

Applicable standards

- BS1377; EN 1997-3; ASTM D1194, D1195, D1196



Key features

- Determination of bearing capacity of the soil in situ.
- Designing for static loads on spread footings.
- Repetitive and non-repetitive plate loading tests of soils and flexible pavements.

MODEL TO-157 SPECIFICATIONS

Loading jack	500kN capacity with integral ball seating
Pump	Hand operated, single speed with integral oil reservoir
Hose	3m long. Maximum pressure 70MPa with quick release couplings
Gauge	100mm dia with quick release couplings and graphs to convert readings to kN, kgf and lbf
Weights	Loading jack 24kg, pressure system 12.5kg

Note: The equipment is used in conjunction with a reaction beam. This is not supplied with the equipment.



SUPPLIED AS STANDARD

- **TO-15715** Grooved M.S. Plate, 30cm x 30cm square x 25mm thick
- **TO-15716** Grooved M.S. Plate, 45cm x 45cm dia square x 25mm thick
- **TO-15717** Grooved M.S. Plate, 60cm x 60cm dia square x 25mm thick
- **TO-15718** Grooved M.S. Plate, 75cm x 75cm dia square x 25mm thick
- **TO-15721** Plane M.S. Plate, 30cm x 30cm dia square x 25mm thick
- **TO-15722** Plane M.S. Plate, 45cm x 45cm dia square x 25mm thick
- **TO-15723** Plane M.S. Plate, 60cm x 60cm dia square x 25mm thick
- **TO-15724** Plane M.S. Plate 75cm x 75cm dia square x 25mm thick

OPTIONAL ACCESSORIES

- **TO-46801** Hand operated hydraulic jack, capacity 500 kN (50,000 kgf)
- **TO-475** Hydraulic hand operated pump with 200mm dia load gage capacity 500kN (50,000kgf)
- **TO-47503** High pressure flexible metallic pipe 5m long

- **TO-15702** Ball and socket arrangement consisting of two steel plates, with one steel ball in-between the plates
- **TO-15703** Extension rod long, 12mm dia x 25cm for taking dial gage readings (16 sets)
- **TO-15704** Magnetic base with female thread on top, for holding extension rod (four sets)
- **TO-15705** Top end plate 50mm dia with male thread, for fitting onto the extension rods and positioning the dial gage plunger (four sets)
- **TO-15706** Column 15cm dia x 25cm long, with flanges, complete with four bolts and nuts (two sets)
- **TO-15707** Column 15cm dia x 50cm long, with flanges, complete with four bolts and nuts
- **TO-15708** Datum bar lightweight, portable, total span 5m height approximately 30cm, mounted on two removable legs. It is made in two parts. Provision exists for datum bar of 2.5m span to be used. A spare leg is provided for the purpose. Complete with two quick release clamps for positioning and holding the dial gage brackets (two sets)
- **TO-15709** Anchor spikes (set of 10)
- **TO-15711** Quick release clamp for positioning dial gage bracket (set of four)
- **TO-072** Dial gage 0-25 x 0.01mm (set of four)

ORDERING INFORMATION

- **TO-157** Plate bearing test apparatus