

Density

Plate Loading Test Set

UTS-1200 & UTS-1201

This test method has been designed to measure the bearing capacity of a soil under field loading conditions for a specific loading plate and depth of embedment. It is also used for load tests of soil and flexible pavement components for use in evaluation and design of airport and highway pavements.

Data logging versions of the test equipment are available with:

- Pressure transducer
- 4 channel static unilogger data acquisition unit
- 2.4 m long datum bar
- 3 pcs. 25 mm x 0.001 mm linear potentiometric displacement transducers and their supports
- Converter DC 12 V to DC 24 V and UTEST software

All test sets supplied complete with 1.5 m long flexible hose



System Components

- UTS-1200 Plate Loading Test Set includes a 200 kN capacity piston assembly and hydraulic hand pump, pressure transducer, LPI battery operated digital readout unit, 2.4 m long datum bar, 3 pcs. 25 mm travel x 0.01 mm digital dial gauges with dial supports and 300 mm and 450 mm dia. loading plates
- UTS-1201 is a 500 kN capacity system similar to UTS-1200 with 600 mm and 760 mm dia. loading plates

Standards

- NTTM 211.1
- ASTM D1194
- D1195
- D1196
- BS 1377:9



Density

Balloon Density Apparatus

UTS-0990

The 1600 ml Balloon Density Apparatus is used for the on-site determination of the density of well bonded soil.

UTS-0990 comprises of a graduated cylinder of 1596 ml capacity housed inside an aluminium guard, a reversible rubber aspirator pump, a density plate 9 inches square, and 12 rubber balloons. The principle of operation is comparable to the sand replacement but the hole is filled by a rubber balloon into which water is pumped. The graduation of the cylinder is an indicator of the amount of water in the balloon.

Standards:

- RMS T125
- ASTM D2167



System Components

- Balloon Densometer
- Rubber balloons, 12 pcs. /pack
- Density Plate

About PCTE

PCTE have over 30 years' experience in the measurement and testing of construction materials. PCTE can provide more than just the equipment, they can provide expert training. PCTE have a service centre in Sydney in which they can provide calibration, repairs and warranty repairs.

Other Equipment

PCTE supply three main ranges: NDT, Lab and Geotech Instrumentation.

NDT includes: Rebound Hammers, Covermeters, Ultrasonics, GPR, Corrosion Testing, Coating Testing and Foundation Testing

Lab includes equipment for: Concrete, Cement, Aggregate, Soil, Asphalt and Metal

Geotech Instrumentation includes: Strain Gauges, Piezometers, Inclometers, Extensometers, Tiltmeters, Load Cells and Dataloggers