

SAMPLING AND EVALUATION

S050

Lightweight dynamic penetrometer

STANDARD: DIN 4094

Used to establish the thickness of different strata, when testing compaction works and to determine the relative density of fills and naturally deposited non-cohesive soils.

In general if the ground is not too compact, penetration tests can be carried out of about 8 to 12 metres.

The penetrometer set, housed in carrying case, consists of:

10 kg. drop rammer, 500 mm. fall and anvil

11 sounding rod \varnothing 22 mm. x 1 m. length complete with threaded collar and guiding rod

Grooved rod to extract samples

2 drive point 90° , 5 cm² and 10 cm² surface

Lifting device for sounding rod, accessories

Dimensions: 1080x360x220 mm. Weight: 72 kg



S050

S051

Dynamic cone penetrometer (DCP) Matest Made

TRL = TRANSPORT RESEARCH LABORATORY, UK.

STANDARD: ASTM D 6951-03

This portable hand operated equipment is designed to obtain a direct and rapid in-situ evaluation of the structural strength of road pavement layers constructed with unbound materials.

The DCP Penetrometer results can be compared with CBR (California Bearing Ratio) as per experimental Kleyn 1982 studies.

The test is performed with continuous penetrations at approx. 800 mm depth with max. depth of 2 m by using extension rods.

The equipment housed in carrying case, consists of:

- Drop sliding hammer 8 kg weight, falling height of 575 mm
- Impact anvil with driving rod
- Penetration rod with conical 60° point and 20 mm dia.
- Bar wrench, spanners, accessories.

Dimensions: 1210 x 340x190 mm. Weight: 29 kg

ACCESSORIES:

S051-10 Drop Sliding Hammer 4,6 kg weight.

SPARE PARTS:

S051-11 Penetration cone

S051-12 Extension rod, 400 mm long



S051

S057

Field inspection pocket vane tester

STANDARD: ASTM D 2573

Used to determine the shear strength of undrained (CU) cohesive soft soils, to firm non-fissured soils on site.

The instrument consists of a T-handle cylindrical body where a torsional spring is housed, and three interchangeable vanes of different sizes, used depending to the expected strength of the soil to be tested.

The vane is inserted into the soil for 60 mm approx., and the max. torque value is measured on a collar attached to the shaft.

Measuring range: 0 - 240 kPa

The unit, all stainless steel made, is supplied "calibrated with calibration certificate and conversion table" and complete with three vanes dimensions (dia. x height) 16x32, 20x40, 25,4x50,8 mm, extension rod 500 mm long, tools, carrying case.

Dimensions: 500 x 300 x 100 mm

Weight : 4 kg approx.

ACCESSORY / SPARE:

S057-01 Extension rod, 500 mm long



S057

