



Lightweight Deflectometer with printer and software

Code: [SPL00125](#)

Product Group: [N/A](#)

The light drop-weight tester is used to determine the soil bearing capacity and compaction or consolidation of soils and non-cohesive sub bases, as well as for soil improvement applications. The test method is suited for coarse-grain and mixed-grain soils having maximum grain size of 63mm.

This model includes a thermal printer with charger. It is a small (90 x 105 x 45mm), quick printer with light-resistant paper. The charging state of the printer (and the settlement meter) is displayed on the settlement meter. The printer works automatically. The charger can be connected to a 100-240V/50-60Hz mains supply or, by means of an adapter cable, to a 12-24V car battery.

Consisting of:

- Loading unit with bubble level
- Load plate with acceleration transducer
- Electronic settlement meter with display of date and time in carrying case
- Additional interface for printer
- Storage capacity for 200 tests
- Additional interface for printer and PC
- Thermal printer
- Software for printout on PC (on CD)
- Required: - WINDOWS, Serial interface: COM port

Applications:

- Road construction
- Testing of pavement bedding
- Quality assurance in canal and sewer construction
- Compaction tests in ducts and trenches
- Backfill of foundations
- Railway construction

Features

- Allows testing in locations not readily accessible
- Low tester weight
- Easy to handle
- Time-saving
- Immediate evaluation of measurements
- No vehicle required

Preparation:

- 1) Place the load plate on plain ground so that full-area support is ensured.
- 2) Position the loading mechanism on the load plate.
- 3) Connect the settlement meter and the load plate with the measuring cable.
- 4) Disengage the shipping and handling lock.
- 5) Pre-compact plain ground.

Measurement:

- 1) Switch on the settlement meter.
- 2) Arrange device in vertical position.
- 3) Perform three impacts in succession.
- 4) The settlement amplitudes S1, S2 and S3 are displayed on the screen.
- 5) After the third measurement the mean settlement S and the computed E value are displayed.
- 6) In addition, the device determines the path-to-speed ratio and settlement curve.

Evaluation - using thermal printer

Printing of measured data for documentation purposes.

The series of measured data comprises:

- Date
- Time
- Settlement s
- Settling speed v
- Path-to-speed ratio s/v
- Dynamic modulus of deformation E_{vd}
- Settlement curve