

Light Weight Deflectometer

ASTM E2835-11; TP-BF-StB part 8.3; ZTV E-StB 09; ZTV T-StB 95; ZTV A- StB 97; RVS 8; RIL 836

DESCRIPTION:

The dynamic plate load test performed with the Lightweight deflectometer is used to determine the soil bearing capacity and compaction quality of soils and non-cohesive subbases, as well as for soil improvement applications.

Built-in soil layers can easily be tested without load abutment, facilitating quick assessments of test lots even under limited space conditions. The test method is suited to coarse-grain and mixed grain soils with a maximum grain size of 63mm and can be used to determine the dynamic modulus of deformation of soil in the range $E_{vd} = 15$ to 70 MN/m^2 .

Applications

- Road and railway construction, earthmoving
- Quality assurance in canal construction
- Compaction monitoring in pipe trenches and cable ducts
- Testing of pavement bedding
- Testing of foundation backfill
- Quality inspection in boreholes
- Testing of modulus of deformation in line with soil exploration

TECHNICAL SPECIFICATIONS:

Loading mechanism

Total weight	15 kg
Drop weight	10 kg
Maximum impact force	7.07 kN
Duration of impact	17 ms
Material	zinc coated/hard-chrome plated steel

Load plate

Total weight	300 x 20 mm
Diameter	15 kg
Material	zinc coated steel

Electronic settlement measuring instrument

Interfaces	USB, Thermal-Printer, GPS, PC software included
Power supply	4 x R6 batteries
Dimensions	210 x 100 x 45 mm
Settlement measuring range	0.1 to 2.0 mm \pm 0.02 mm
Measuring range	$E_{vd} < 225 \text{ MN/m}^2$
Temperature range	0 to 40°C
Storage capacity of measured data	500 series

MAIN FEATURES:

- Fast and cost-saving: maximum 2 minutes per measuring point
- No vehicle required
- Immediate on-site evaluation of test results
- It can be easily operated and carried by one person only
- Testing can be achieved in difficult to reach locations

ORDERING:

SL 0114

Lightweight deflectometer used to determine the bearing capacity and compaction quality of soils and non-cohesive subbases. Printer & PC-Software

ACCESSORIES:

SL 0114-1

Transport cart for easier on-site transport of the Lightweight deflectometer between the measuring points

SL 0114-2

Magnetic base plate for proper positioning of loading unit

SL 0114-3

Carrying case for secure transport of the Lightweight deflectometer

