

HD-4139.3F Static Plate Load Tester



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Supports the following standards: DIN 18134, BS1377

Static Plate Load Tests can be utilized in earthworks and foundation engineering, as well as road construction to determine load settlement lines and evaluate the deformability and the load capacity of the soil. When using the static load tester to evaluate a soil layer, the circular load plate is repeatedly loaded and relieved by means of a load device, a hydraulic pump and a pneumatic cylinder. This load is applied to the plate in 6 to 8 equal loading steps. Settlement of the plate is measured by the tester consisting of a carrier frame with a sensing arm and dial gauge. As a counterbalance, a heavy-weight vehicle is used.

The indentation of the load plate into the soil, generated with every load step, is indicated via the dial gauge. The settlement of every load step and the corresponding mean normal stress below the load plate appear as test values. After the last load step the relief and a second loading similar to the first loading takes place. For the test evaluation these values are shown in a corresponding diagram as load settlement lines.

The modulus of deformation E_v is determined from the load settlement line of the first load (E_{v1}) and the second load (E_{v2}). By comparing the initial deformation from E_{v1} and the subsequent deformation of E_{v2} provides an indication of the compaction attained. The test results and the load settlement lines can be read with the HD-4139.3F Plate Load tester directly on the display and can be printed out immediately at the site via a thermal printer or be revised later in the office on a PC.

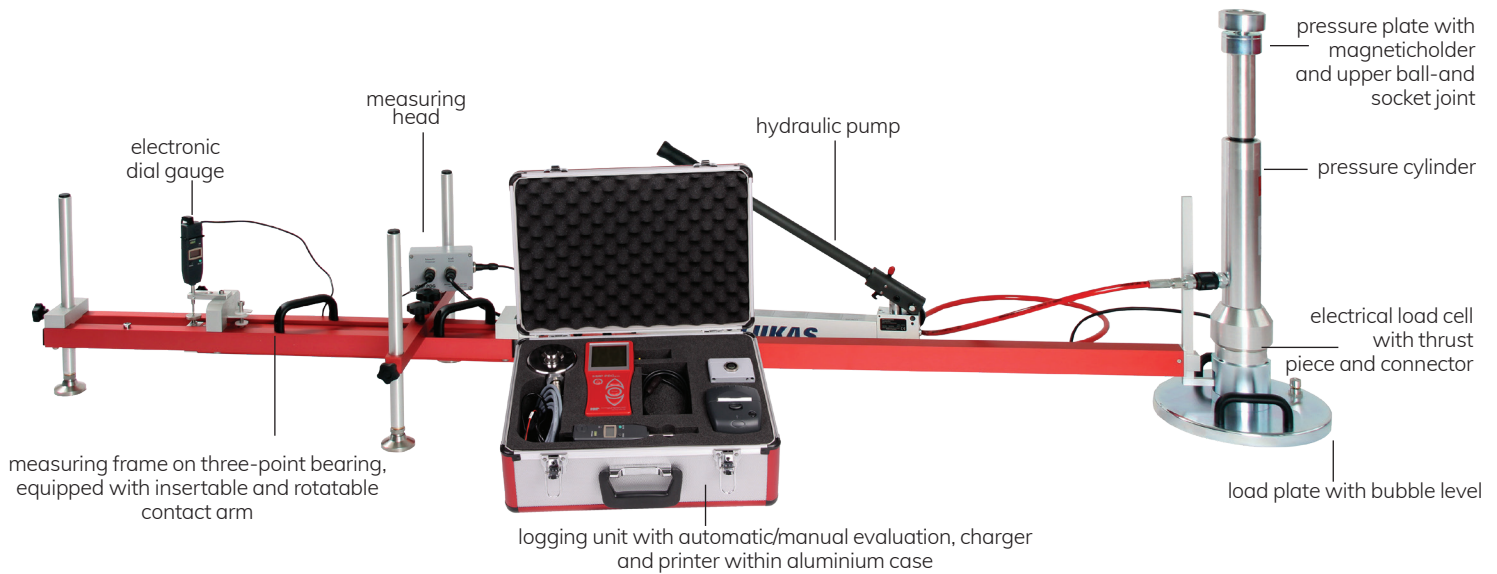
Unit Includes:

- Hydraulic pump with 100 kN cylinder and 150 mm lift with a high-pressure hose of 2 m in length
- 1 set of hydraulic cylinder extension pieces, plug-type connection (one each of 40mm, 90mm, 120mm, 160mm in length; two of 60mm in length)
- 1 pressure plate with magnetic holder and upper ball-and-socket joint load plate
- Load plate with handles and adjustable bubble level

Features:

- Large colourful graphic display 3.5"
- Backlight- guarantees optimum readability at all weathers!
- Intuitive menu navigation in many languages
- Interface for USB, integrated GPS, Bluetooth
- Efficient, fast 32-bit processor
- Internal memory for 200 tests
- High-performance rechargeable lithium-polymer battery-guarantees constant readiness for use
- PC software with comprehensive search and editing options to create professional test protocols
- Comprehensive language selection and individual setting options in the menu and the software for smooth communication at international assignments
- Logging and displaying of stress, resolution 0,0001 MN/m² and settlement, resolution 0,01mm
- Robust, splash-proof, connection cable with high-quality binder plugs
- Dimensions: 210 x 100 x 31 mm

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Advantages:

Bright red measuring frame:

- Fast set up and safe position
- User friendly in design and functionality

Automatic evaluation unit:

- Latest, high-precision measuring technology, safely packed, splash-proof and ready for use even in adverse weather conditions
- Intuitive menu navigation
- Stored table of nominal values
- Automatic logging and evaluation of force and path
- Comprehensive language selection and individual adjustment options
- USB for comfortable data transfer
- GPS for localization of measuring point
- Interface for printer and PC

Reliable and precise:

- Manufactured according to the latest technical standards
- Precise, robust, long-lasting
- Calibrated on certified calibration point
- Worldwide in use for 20 years thousand fold

Start display:

- The start display shows the charging status of logging unit + printer and also the GPS + Bluetooth activity.
- Warnings will additionally inform you about critical values, so that your testing device is always optimally ready for operation.

Comfortable menu navigation:

- The menu navigation of the HMP PDGpro is particularly user-friendly. In order to perform the test, just follow the instructions on the display.
- Nominal values according to DIN 18134 are stored. Individual nominal value tables can be added.

Settings:

- Adjust the display and device configurations to your requirements. Regarding menu navigation just choose one of the various languages and use nationally usual measuring units.

Results:

- After reaching the last loading stage, the Ev1, Ev2 and the ratio Ev2 / Ev1 are calculated and displayed immediately. Scrolling will take you to the corresponding load settlement lines and to the GPS coordinates of the measuring point.
- The measurement and its curve- and GPS data can be printed out directly or transferred onto a USB stick or via cable directly to the PC for later processing.

