



# Light Weight Deflectometer TERRATEST 7000 STREAM **CABLE**

According to ASTM E2835-11 and German Standard TP BF-StB B8.3



 **MADE IN GERMANY**



Device is talking

# DO-IT-YOURSELF compaction test

Never wait for a test  
laboratory again

Test yourself, save money





Avoid construction damages

No stillstand on your  
construction site

Check subcontractors

Test natural soil before  
construction starts

## INTERNATIONAL STANDARDS

-  ASTM E2835-11, USA
-  TP BF-StB Part B8.3, 2012, GERMANY
-  TP Gestein-StB Part 8.2.1, GERMANY
-  UNE 103 807-2, SPAIN
-  TB 10102-2010, J338-2004, CHINA
-  RIL 836 Deutsche Bahn AG (NGT 39),  
Railway Construction, GERMANY
-  RVS 08.03.04., AUSTRIA
-  Test Method Q258A 2021, AUSTRALIA
-  VSS 70 313 (July 2019), SWITZERLAND
-  CSN 736192 - 1996, CZECH REPUBLIC
-  SB 250 versie 4.1, 4.16.2, BELGIUM

## ALL INCLUSIVE PACKAGE LIGHT WEIGHT DEFLECTOMETER TERRATEST 7000 **STREAM**

- Transport box MILANO with rolls
- TRETMINNE free standing magnetic foot
- 5 paper rolls for thermal mini printer



# Never wait for a TEST LABORATORY AGAIN!

- ✓ SELF EXPLAINING, spoken instructions
- ✓ 1 person only 2 minutes
- ✓ Perfect for Earthworks, Road Construction, Civil Engineering, Industrial Pavement, Broadband Expansion, Track Construction, Pipeline Construction, Test Laboratories



## High-Precision- Acceleration Meter



Extremely accurate equipment designed for applications under permanent shocks.

## Inclined Bearing Plate Handles

Ergonomic handling in construction site using mobile measuring system ,CARRELLO'.





## Active Transport-Fix-System

Push-Pull weight fixing ensures safe transport of drop weight.



## Easy-to-handle catching ring

Hexagonal ergonomic handgrip, makes catching and carrying of the load weight comfortable



## Construction site printout

Print your test report directly on the construction site.

## Electroless Nickel Dispersion Coatings

This type of coating, known from fuel pumps, is perfectly suited for construction sites.



## Smartphone APP

With TERRATEST 7000 STREAM, you can wirelessly transfer measurements to your smartphone.



# FULLY EQUIPPED

## Perfect for construction site



### Shockproof test computer

Test computer remains closed and protected during test mode, service by external pushbutton.



### Integrated Printer

Print out your test data directly in construction site.



### Wi-Fi for App Use

Transfer test results to your iPhone or Android device and create and send reports directly from the construction site.



### GPS System

Allows legally effective identification of test position.



### Rechargeable Power-Battery ,EVERfull'

Power Battery with short charging time and long lifetime power for 2.000 tests/600 printouts.



### Voice Navigation

Follow spoken instructions, that's all.



### Easy-fixx Plug Connection

Extremely construction-site-friendly sockets and plugs for durable contact under tough construction conditions.



### Backlit Grafic Display

Clear visualization of results, intuitive menu structure.



### One-Touch External Button

One touch operation when cover is closed. No need to open the case in dusty environment.



WEATHERPROOF. INDESTRUCTABLE.  
ONLY ONE BUTTON.

## Weatherproof Electronics Box

Operate the weatherproof, indestructible electronic box on the construction site with the external button. In this way, the measuring computer remains permanently protected against rain, dust and sand.



*The measuring computer disposes of protection class IP 43, preventing penetration of dust and water.*



Device is talking

Mercedes-Benz Arena



# DO-IT-YOURSELF compaction test

Never wait for a test laboratory again!

Avoid construction damages

Do-it-Yourself compaction test

Test natural soil before construction starts

Check subcontractors



**Furnish the compaction proof in an efficient and safe manner.  
The measuring principle of the light weight deflectometer  
TERRATEST 7000 STREAM represents an easier method: Quick and sure!**

Voice-navigation and one-button operation considerably simplify service on construction sites.



Voice Navigation

## SAVING TIME and MONEY

Investment for TERRATEST® instruments is amortized within a couple of months, as it assists users saving money every day. Expensive external soil expertise is no more needed; the compaction proof is furnished at once.

Voice navigation guides the user by spoken instructions clearly and unequivocally through measuring procedures. A test can be performed also by personnel disposing only of normal formation. The test is quickly documented by means of the professional TERRATEST®.



# MINIMUM REQUIREMENTS



## Recognized PROOF OF SOIL COMPACTING

Benchmarks according to ZTV E-StB 2009 and ZTV A-StB 2012

### Quote from the ZTV E-StB 2009:

„..... 4.5.2 Requirements for deflection modulus

The requirements detailed below are based on the 10% minimum quantile. When constructing roads corresponding to Construction Classes SV, or I to IV on frost-free subsoil or substructure, it is necessary to obtain a deflection modulus of at least  $E_{v2} = 120 \text{ MN/m}^2$  or alternatively  $E_{vd} = 65 \text{ MN/m}^2$  on the subgrade. For Construction Classes V and VI a deflection modulus of at least  $E_{v2} = 100 \text{ MN/m}^2$  or alternatively  $E_{vd} = 50 \text{ MN/m}^2$  must be obtained. The deflection modulus  $E_{v2}$  is to be verified through the static plate load test, as defined in DIN 18134, and the deflection modulus  $E_{vd}$  through the dynamic plate load test, as defined in TP BF-StB Part B 8.3.

**Table:** Benchmarks for the allocation of the static deflection modulus  $E_{v2}$  or the dynamic deflection modulus  $E_{vd}$  to degree of compaction  $D_{pr}$  on coarse-grained soil types

	Required compaction in different depths (ZTV T-StB 95*) (ZTV E-StB 94)	Based on benchmarks for the allocation to $D_{pr}$ (ZTV E-StB 09)	Proposal for the allocation of $E_{vd}$ to $E_{v2}$ (acc. ZTV E-StB 09)
Soil Types DIN 18 196	Degree of compaction $D_{pr}$ in %	Deflection modulus $E_{v2}$ in $\text{MN/m}^2$	Deflection modulus $E_{vd}$ in $\text{MN/m}^2$
Gravels and sands with $\leq 7\%$ by weight $< 0,063 \text{ mm}$ (gravels with wide or intermittent grain size distribution, gravel-clay and gravel-peat mixtures)	$D_{pr} \geq 103$ $\geq 100$ $\geq 98$ $\geq 97$	$E_{v2} \geq 120$ $\geq 100$ $\geq 80$ $\geq 70$	$E_{vd} \geq 65$ $\geq 50$ $\geq 40$ $\geq 35$
Gravels and sands with narrow grain size distribution, sands with wide or intermittent grain size distribution	$\geq 100$ $\geq 98$ $\geq 97$	$\geq 80$ $\geq 70$ $\geq 60$	$\geq 40$ $\geq 35$ $\geq 32$
Mixed gravels and sands with 7-15% by weight $< 0,063 \text{ mm}$ (gravel-silt and gravel-clay mixtures, sand-silt and sand-clay mixtures)	<b>Proctor</b> $\geq 100$ $\geq 97$	<b>Static</b> $\geq 70$ $\geq 45$	<b>Dynamic</b> $\geq 35$ $\geq 25$

ZTV E-StB 09  
ZTV A-StB 12

1) In accordance with ZTV E-StB 09 §14.2.5 and ZTV E-StB 12 client and contractor may agree upon these reference values as benchmarks for verification of the achieved compaction.

To be on the safe side always perform a correlation measurement with the static plate load test in accordance with DIN 18134.

The test must be performed and evaluated according to German standard TP BF StB Part B 8.3.

For general information only! All details are subject to change.



# ONLINE SOFTWARE ,TEOLO'

## Create test reports yourself

The device price already includes the web-based online software ,TEOLO' for evaluating test results on a PC. With just a few clicks, a professional documentation of the test results is created.

Using the smartphone app, a complete test report can even be created and sent directly from the construction site to anywhere you want. This allows you to provide compaction proofs yourself without the need for a soil expert. All requirements for self-monitoring according to testing regulations are quickly met.

With the web-based ,TEOLO' software, it's child's play. It doesn't get more legally secure than this!



Online  
SOFTWARE ,TEOLO'

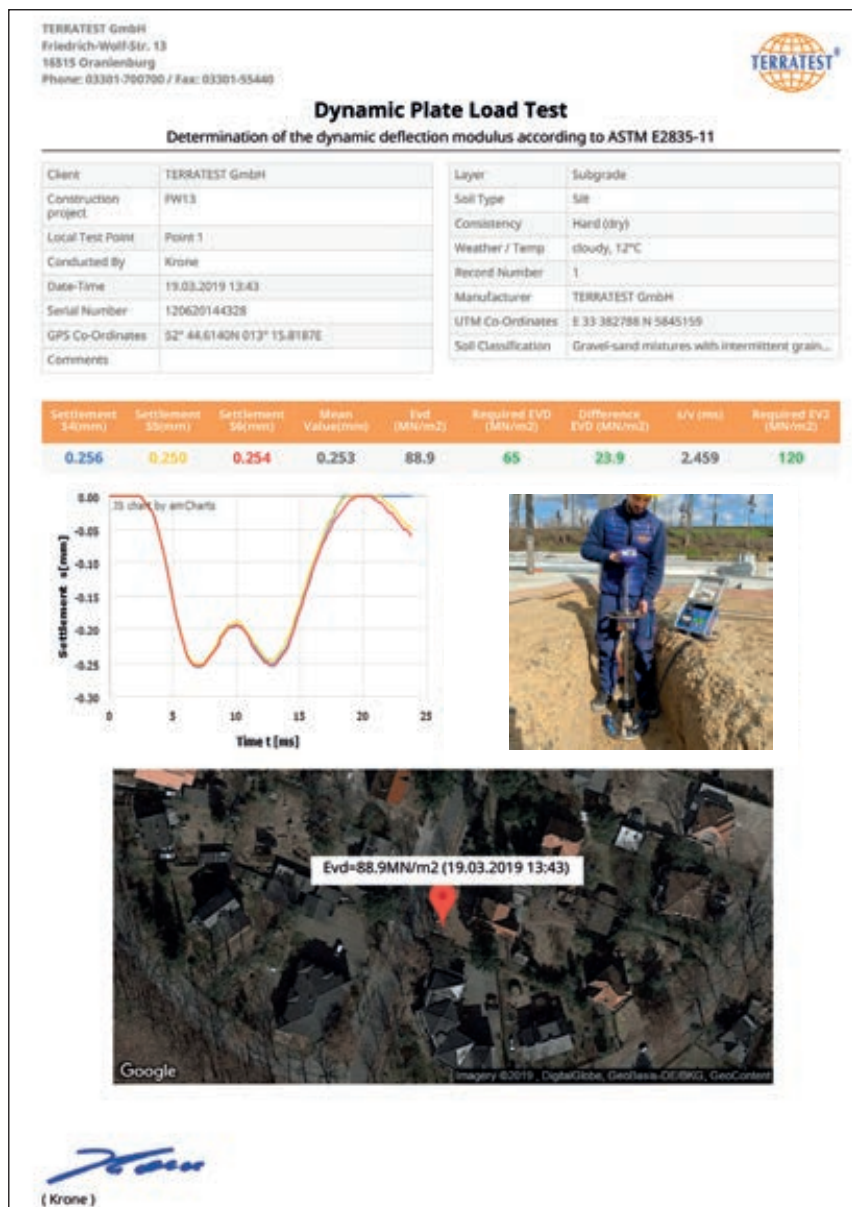
## Professional Compaction Proofs

Transfer your test results via USB stick or smartphone to your PC and create professional test reports. Your results are automatically evaluated, documented, and archived.

The GPS system simultaneously records the coordinates of each test position (when GPS is activated). Each test is later automatically displayed on the PC as an individual report, including the measurement value, date, time, and a Google® Maps satellite photo. The GPS location ensures that every measurement is precisely assigned and legally secured.

With ,TEOLO', you can effortlessly meet the requirements for self-monitoring compaction proofs according to **ASTM E2835-11 and other national standards.**

The ,TEOLO' PC software is particularly user-friendly and clearly structured. Create compaction proofs yourself with just a few clicks.



The ,TEOLO' PC software is particularly user-friendly and clearly designed. Create compaction proofs yourself with just a few clicks.



# DO-IT-YOURSELF compaction test

- ✓ Worldwide accepted (ASTM E2835-11)
- ✓ SELF EXPLAINING
- ✓ 1 person only 2 minutes
- ✓ Perfect for self monitoring
- ✓ Test soil before you start
- ✓ Test homogeneity quickly
- ✓ Test subbase layers before overlay
- ✓ Test highly compacted layers
- ✓ Avoid damages after trenching
- ✓ Not nuclear, no counterweight



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