

3032 Light Weight Deflectometer



Compliance:

ASTM E2583-07 (2015)
CD 225 Design for new pavement foundations
NCHRP 10-84
TPF 5(285)
Italy UNI11531-1: 2014
BS 1924-2:2018
CEN/TS 17006:2016

Dynatest Light Weight Deflectometer 3032 (LWD)

Dynatest Light Weight Deflectometer (LWD) Model 3032 is a portable dynamic plate loading device designed for compaction quality assurance (QA) and determination of the modulus of unbound or partially bound material including thin asphalt layers, unbound granular aggregate base, partially stabilized base layers, subgrade soil and etc. The LWD is suitable for testing in difficult to access areas, e.g. trenches, narrow channels, etc. Dynatest LWD is designed to determine the “surface modulus” (often termed stiffness) — a response of the underlying structure, in terms of a transient deflection, to the dynamic stress applied through a circular bearing plate. Whereas the structure to test is composed by different layers, Dynatest LWD allows analysis for the estimation of each “layer modulus” using the Dual Plate System (DPS) and additional geophones. Transport cases available: single case for shipping fully assembled or multiple cases for easier handling.

Key benefits of the Dynatest Light Weight Deflectometer:

- One Person operation.
- Rapid test allows close test point spacing ensuring homogeneity of the test section.
- Surface Modulus output at time of test.
- The LWD App, available for both iOS and Android smartphone, gives a clear overview of the collected measurements.
- Assessment of both the stiffness and compaction of material with the same unit.
- Quality control of the subbase layers and subgrade before an overlay is applied.
- Testing of trench restorations to reduce the chance of settlement over time.



With the trolley it is easy to bring the Dynatest Light Weight Deflectometer with you

The Light Weight Deflectometer (LWD) meets the ASTM 2583, the CD225 (UK) standard, and other international standards for determining the modulus and compaction of the material.

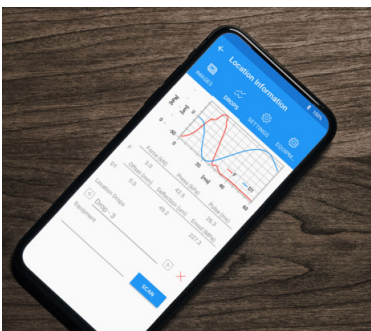


A closer look at the smart Features of Dynatest Light Weight Deflectometer 3032 (LWD)

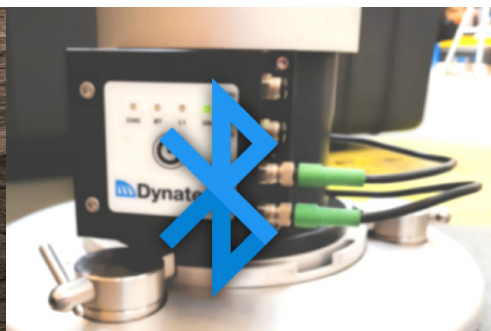
Being the number one choice among our customers remains the number one priority for Dynatest and the vital driver of our Research and Development (R&D) efforts. The Dynatest Light Weight Deflectometer (LWD) Model 3032 has more key customer features than any other LWD on the market - let's have a closer look.

Key Operational Features:

- Precision load cell to measure the impact load-time history and peak magnitude.
- 22 lbs (10 kg) standard weight or optional 11 lbs (5 kg), 33 lbs (15 kg) or 44 lbs (20 kg) drop weight setups applying up to 3,300 lbf (15 kN) impact force.
- Center seismic transducer (geophone) to measure the deflection time history (by single integration of velocity) and peak value on materials.
- Sensor locking plug feature optionally allows center geophone to measure plate deflection.
- Dual Plate System (DPS) for quick and easy switching between the 11.8 in (300 mm) and 5.9 in (150 mm) loading plate diameter.
- A 3.9 in (100 mm) plate diameter is included, and an optional 7.8 in (200 mm) plate is available.
- Lever to ensure that the geophone is centered and seated correctly.
- Movable release handle and laser engraved scale on the weight guide shaft for easy setting of the desired drop height/stress level.
- Enhanced Bluetooth module with high stability and extended range, allows data collection with your phone using the cross-platform LWD Mobile app on: Android, iOS (Apple), and Windows.
- Up to 50 hours idle time per charge.
- Ability to perform tests while charging.
- Dust and splash proof (IP56) electronics for safe outdoor use.
- Lightweight with total basic configuration weight of 48 lbs (22 kg).
- GPS capability through phone.



Easy data collection with the Dynatest LWD Mobile App.



Micro-USB port for easy connect of your electronic devices and smart phone.



Using the latest energy-efficient technologies increases the idle and working time of your Dynatest LWD.

During your road formation and foundation, it is key to conduct a proper quality control and assurance testing including stiffness and density measurement. The modulus of the layers will affect the bearing capacity, and if the construction is not properly done, the spread of the load to the layers beneath could be critical. It is essential that stresses and strains in every structural layer are within the defined range. The same quality assessment is of course as important when strengthening and maintaining of an old road.

The Falling Weight Deflectometer is the perfect measuring equipment to identify local spots or poor performance and the Light Weight Deflectometer from Dynatest will offer you a portable and cost-effective solution for your quality control.



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