Dynatest

3032 Light Weight Deflectometer (LWD)

The Light Weight Deflectometer (LWD) is your go-to powerhouse for fast, on-the-spot soil and granular material testing. Portable and built for action, it delivers precise deformation measurements without breaking a sweat—or the ground.

From assessing load-bearing capacity to pinpointing stiffness, the LWD equips you with critical data to keep your pavement management and construction projects on the fast track to success.





Who We Are

Dynatest is a pioneer in non-destructive pavement testing solutions, delivering Danish-engineered, high-precision equipment designed to assess road quality and longevity with acccuray through innovation.

Our commitment to innovation means that every piece of Dynatest equipment—from our Falling Weight Deflectometers to our specialized software—is crafted to provide reliable, actionable insights.

With over four decades of expertise, we help engineers, airports, and road agencies worldwide make data-driven decisions that improve pavement performance, optimize maintenance budgets, and extend infrastructure life.

Dynatest solutions empower clients to proactively manage their pavements, ensuring safer, longer-lasting roads and runways for the future.







Light Weight Deflectometer (LWD)

The Dynatest Light Weight Deflectometer (LWD) Model 3032 is a compact, dynamic plate loading device built to tackle compaction quality assurance (QA) with precision and ease. It delivers reliable measurements of the modulus of unbound and partially bound materials—including thin asphalt layers, granular bases, stabilized layers, and subgrade soils.

Engineered for tough-to-reach areas like trenches and narrow channels, the LWD measures the "surface modulus" (or stiffness) of underlying structures by capturing their deflection response to dynamic stress applied via a circular bearing plate. For structures with multiple layers, the Dual Plate System (DPS) and additional geophones enable advanced analysis to estimate individual "layer modulus" values with unmatched accuracy.

Dynatest offers flexible transport options: a single case for shipping fully assembled (excluding additional geophones) or multiple cases for streamlined handling. This is the ultimate tool for precise, portable, and efficient testing in the field.

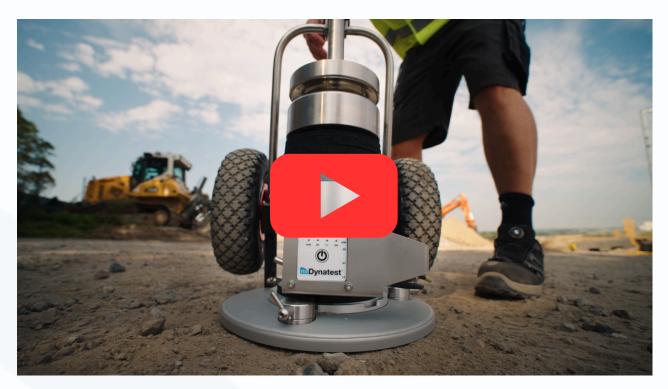
Key benefits of the Light Weight Deflectometer

- · 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.

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.

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







Seeing is Believing.

Scan the QR code and see how the LWD delivers fast, reliable pavement testing —no assumptions, just real data.

LWD Training Courses

Our training courses are designed to provide you with in-depth knowledge ensuring effective use of our Dynatest LWD and software. These courses are tailored to meet the needs of beginners and experienced professionals.

Training Courses:

- LWD Software training online 3 hours
- LWD online equipment training 3 hours
- LWD Equipment & Software Training on-line, 6 hours
- LWD Equipment & Software Training, *on-site, 6 hours

^{*}Please note that we will add costs for travel time, flight and accommodation etc. for training on-site at your location.



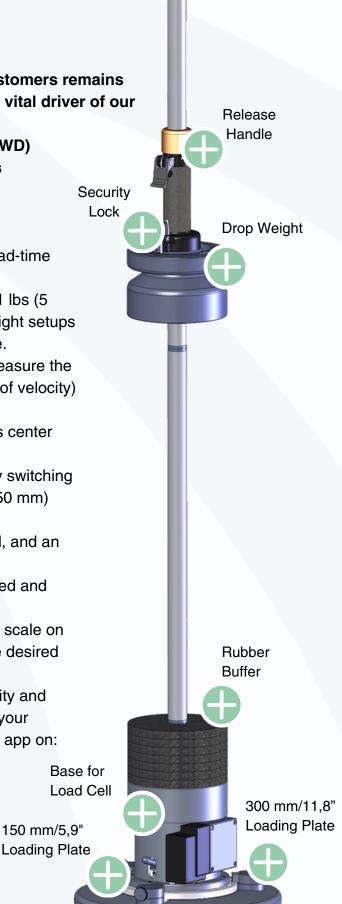
Key Operational Features

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.

- 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 and iOS (Apple).
- Up to 50 hours idle time per charge.
- · Ability to perform tests while charging.
- Dust and splash proof (IP56) electronics for safe outdoor
- Lightweight with total basic configuration weight of 48 lbs (22 kg).
- · GPS capability through phone.



Comprehensive accessory program to customize your Dynatest LWD for your needs

The Dynatest Light Weight Deflectometer is ready to be used in all standard measurement assignments and is delivered with our user friendly manual in order to get your pavement testing started as quickly as possible.

If requested, a personalized training regarding the use of the equipment, the mobile app and the software, can be offered by Dynatest: both online training and on-site training are possible options, carried out by a qualified Dynatest engineer. We offer a comprehensive program of accessories and software in order for you to customize the LWD after your needs.





When you purchase a Dynatest Light Weight Deflectometer (LWD), you will receive the LWD Connect package free of charge.

LWD App – Data collection

The LWD App is a data collection application for the Dynatest Light Weight Deflectometer 3032 The LWD App organizes collected data into projects, which separate data into different database files.

The LWD App only works on one project at a time.

Each project has several data collection sessions which organize the locations where measurements are taken.

Images can also be attached to locations and each location can have multiple drop measurements, which store both calculated and raw data.

The LWD App is available for iPhones, iPads, and Android devices and is free of charge.



Data at Any Point!

The Dynatest software LWDmod offers advanced features for data organization, analysis, and reporting.

The Dynatest LWDmod software comes free of charge when you purchase a Dynatest LWD.

Package



Experience first-hand why LWDmod is the ideal software tool for pavement analysis.

The LWDmod determines the moduli of two layers allowing for the identification of the weak layer and giving the engineer the information required to assess and evaluate potential solutions.



Maintenance, Service & Calibration

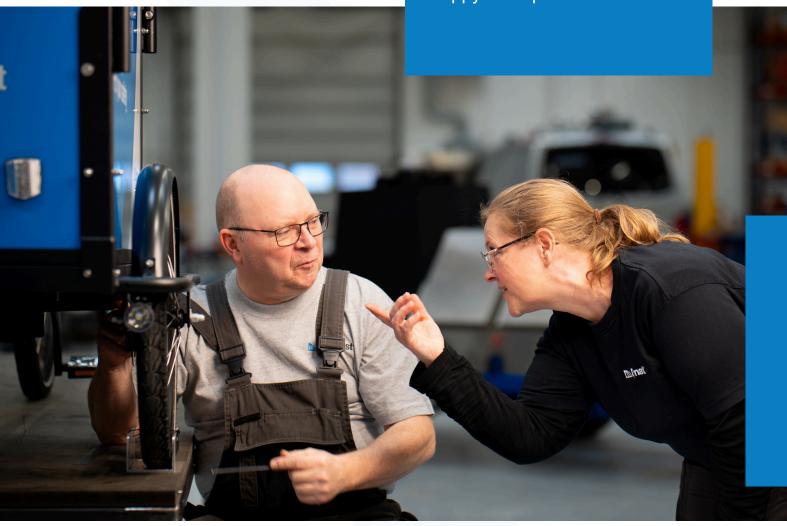
Our team of highly trained service technicians is always ready to assist you when it comes to planning your equipment service and maintenance needs.

Let us reduce your workload so you can focus on performing pavement measurements and collecting precise data.

Do you need assistance?

You are always welcome to contact us if you want to know more about how we can help your company.

If you want a non-committal talk or need more information about Dynatest, we are also happy to help.



Your Dynatest equipment is a sophisticated piece of technology and a significant investment in your business.

Taking good care of your Dynatest equipment is essential to ensure both optimal performance and longevity of the equipment – all of which add to your return on investment.

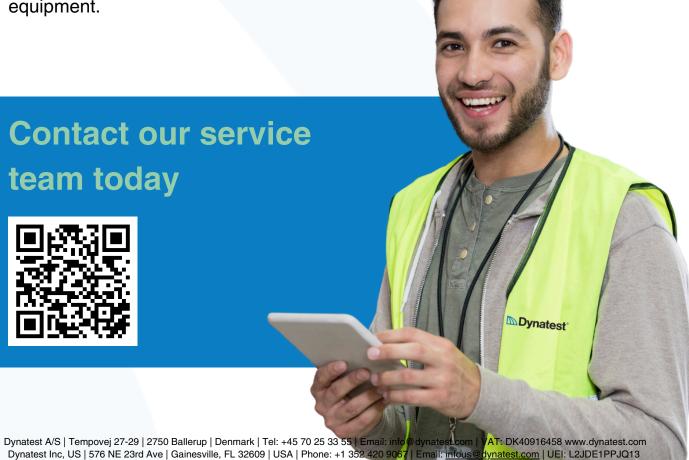
Neglecting to service and maintain your equipment can lead to costly repairs and uncertain test data and down time.

Eliminate the risks of downtime and defects through regular service, maintenance and calibration of your Dynatest pavement testing equipment.

Service and calibration can be carried out by our team of skilled technicians at our production facilities in Denmark (Ballerup) or Florida (Gainesville) or at your own location.

Our service team will work with you to plan the correct level of service and maintenance for your operational needs and the realities of your budgets and also for your operational timetable.

Regular maintenance, calibration, and service will also contribute to an increased overall lifespan of your equipment.



www.dynatest.com

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