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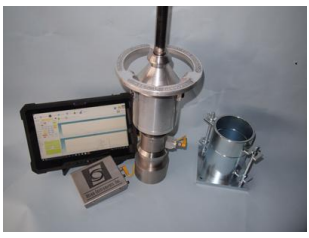
Olson's Light Weight Deflectometer (LWD) is a pioneering alternative to the Nuclear Density Gauge

The Maryland Department of Transportation, State Highway Administration, recently funded a study to compare Nuclear Density Gauge (NDG) testing of roadbase compaction to LWD test results from the University of Maryland. This study was performed on state highway construction projects, including seven granular aggregate base sites and three fill sites.

The results of the study indicated that the LWD modulus-based compaction QA approach can replace conventional NDG density-based measurements, with NDG percent compaction vs. comparison test results consistently confirming the validity of the LWD tests. LWD testing on Proctor Molds in the laboratory proved to be an easy-to-implement method to determine Young's modulus (E), which is used for QA of compaction for roadbase and subgrade fill.

Larry Olson introduced this innovative concept to the University of Maryland as a result of experiments with the Olson Instruments Light Weight Deflectometer in an effort to find an easier, cleaner, less expensive alternative to the Nuclear Density Gauge. As a result of this study, Olson Instruments has developed the LWD-LAB unit to be used for this purpose.

Link to Report



Olson's LWD-1 field unit is designed for quick and easy onsite testing with immediate results displayed in either english or metric units. Our LWD-1 measures the actual impulse force with an in-line load cell which reduces inherent error in the calculation of stiffness and modulus based on soil type.

For more information visit our website

Light Weight Deflectometer

call 303.423.1212
or email info@olsoninstruments.com

New Webinar Videos

Click on the image to the right to see new webinar videos at Olson Engineering's YouTube channel. Olson Engineering is Olson Instruments' sister company.

New Website

Olson Instruments' new website is up and running. We hope you'll check it out.

www.olsoninstruments.com

Upcoming Events

International Bridge Conference

Engineers' Society of Western Pennsylvania
October 19 - 23, 2020
All "Virtual" All Week Long