DynaWare24

KEY FEATURES

- GIS incorporation
- Maintemance module
- Route planning
- Automated fault detection
- Enhanced security
- Intelligent geophones
- Optional accelerometer readings
- Support for cloud connectivity
- In-depth system logs.
- Supports over-the-air updates

KEY BENEFITS

- Elevates collaboration between engineers and operators.
- Can be used for evaluation of thinner pavements.
- Faster and easier calibration of the system.

Product Highlights

The latest iteration of Dynatest FastFWD equipment, integrated with DynaWare24, embodies modern machine design principles with embedded intelligence in critical components. At its core, DynaWare24 integrates GIS aspects, ushering in advanced georeferencing capabilities for your collected data. Notably, the deflection transducers now feature redundant seismic sensors at each measurement location, significantly elevating the precision of pavement analysis and overall equipment reliability.

DynaWare24 introduces more than 20 new features!

Intelligent Geophones

The integration of intelligence into the geophones has yielded notable advantages, including:

a.   A shared fieldbus is now employed for communication with the geophones, resulting in a substantial reduction in wiring requirements. This enhancement not only simplifies the calibrations and servicing but also significantly diminishes the time dedicated to these processes.

b.   The geophones have gained the capability to directly interface with the DynaCal calibration system. This direct interaction facilities the calibration process while simplifying the configuration of deflection transducers within the equipment's software.

c.   The geophones can now be configured to function as either 80mil or 100mil geophones directly through the equipment's software, providing increased flexibility in adapting to specific operational requirements.

Advanced AI-based fault detection   *Patent-pending*

Incorporated with patent-pending artificial intelligence (AI) fault detection methods, FastFWD with DynaWare24 ensures continual operational readiness of your equipment. This feature facilitates the identification of potential errors within the machinery and offers timely indications for required servicing of the FastFWD.

The Dynatest Equipment and Software Ecosystem

The Dynatest ecosystem offers unique possibilities for its users, e.g., (i) you can interact with the machine using any computer or a tablet, (ii) you can now directly upload data to a supported cloud provider, remote connect to the equipment or perform simple monitoring, (iii) you will be able to receive automatic updates for the software and firmware running on the equipment.

Dynatest®

Technical Specifications

General characteristics	
Drop heights	50mm to 390mm
Typical 3-drop time duration	<15 s
Load peak range	4-120 kN
Interfaces	1x Ethernet, 4G LTE
Min. on-board storage	128 GB
Compliance	ASTM D-4694, ASTM D-4695 , ISA-TR88.00.02

Deflection transducer characteristics	
Max. transducers	127
Resolution	typ. 0.1524 µm
Min. absolute accuracy	2%±2µm
Typ. relative accuracy	1%±1µm

Load cell characteristics	
Resolution	typ. 122.1 N / 0.05 kPa
Min. accuracy	2%±0.3 kN

Towing vehicle	
Min. rated towing weight	1300 kg
Trailer hitch diameter	50 mm
Trailer hitch height above ground	480-500 mm @ 100 kg loading

Optional modules	
Order code	**Description**
#0	**Offline simulation module** offering the ability to ■ Setup test configurations, trailer configurations and other settings from the office. ■ Simulating the configurations. ■ Uploading the validated test and trailer configurations to the FastFWD.
#1	**Dynatest GIS Module** offering the ability to ■ Preplan routes the operator should collect data on. ■ Display routes where data has already been collected. ■ Display georeferenced test results. ■ Display the progress of the planned survey
#2	**Full API Access** offering the ability to ■ Integrate the FastFWD with your other software systems. ■ Develop custom software systems for supporting the FastFWD.
#3	**ELMOD 6 license** offering the ability to, e.g., ■ Postprocess your FWD data for pavement analysis and design.
#4	**4G LTE module** offering the ability to ■ Remote connect to the FastFWD (Troubleshooting). ■ Monitoring the FastFWD usage. ■ Directly pushing data to a supported cloud provider.