



ADVANCED SUPERPAVE GYRATORY COMPACTOR (ASGC)

Standard: ASTM D6925, AASHTO T312, EN 12697-10, EN 12697-31

Our new **NL PavePro Advanced Gyratory Compactor (ASGC)** is a high-precision system designed to replicate real-world field compaction by applying simultaneous vertical pressure and tilting shear force to asphalt mixtures. This process ensures the internal aggregate structure of laboratory specimens matches actual road conditions, providing a reliable foundation for Superpave and SMA mix designs. By utilizing a clean, electric loading system, the unit achieves superior repeatability and precise control over compaction height and cycles without the need for noisy external air compressor.

Built for versatility, the compactor features a high-rigidity yet lightweight frame that is ideal for both stationary and mobile laboratories. An integrated 7-inch industrial touchscreen provides real-time visualization of compaction curves and streamlined data management via USB. Fully compliant with international standards, this system offers a robust, user-friendly solution for advanced asphalt quality control and research.

Main Features:-

- **Rigid & Portable Construction:** Features a high-stiffness steel frame for stability and deformation resistance, with a lightweight design optimized for mobile labs or compact workspaces.
- **Advanced Electric Loading:** Employs a high-performance electric actuator to apply vertical pressure and shear forces, accurately replicating field compaction for Superpave and SMA mixtures.
- **High-Precision Pressure Control:** Integrated with a coaxial pressure sensor ($\pm 0.1\%$ FS) to ensure consistent and accurate vertical force application throughout the test.
- **Adjustable Rotation Angle:** Supports continuous internal angle adjustments from 0° to 2° , allowing compliance with various international testing standards.
- **Dual Termination Modes:** Offers precision stroke control, allowing operators to stop testing based on either a specific specimen height or a pre-set number of gyrations.
- **Exceptional Result Repeatability:** Combines robust structural engineering with precision controls to ensure reliable, repeatable data across high-volume sample batches.
- **Quiet, Compressor-Free Operation:** Uses a standard single-phase power supply and electric drive, eliminating noisy external air compressors to improve the laboratory environment.
- **Safe & Efficient Access:** Features a transparent sliding glass door for safe process observation and an optional independent extractor to simplify specimen removal.
- **Real-Time Data Visualization:** Equipped with a 7-inch industrial touchscreen that displays dynamic "Pressure-Gyrations" and "Height-Gyrations" curves during operation.
- **Digital Data Management:** Automatically records comprehensive test data, which can be exported via USB for further analysis and quality control.

Technical Specifications :

Model Number	NL PV / P1A
Max. Loading Capacity	13 kN
Load Sensor Range	0 to 30 kN
Load Accuracy	± 0.1% FS
Specimen Sizes	Ø100 mm & Ø 150 mm
Gyration Speed	30 rpm
Gyratory Angle	Adjustable from 0.7° to 1.4°
Number of Gyration	999
Product Dimensions	560 (W) x 830 (D) x 1800 (H) mm
Approx. Weight	200 kg
Power	220~240 VAC, 1200 W, 1 Ph, 50/60 Hz

*1 Copy of Manual Instruction

Unit Consists Of :

Model Number	Parts Description	Qty
NL PV / P1A – P1	Ø150 mm Mould	1no.
NL PV / P1A – P2	Ø150 mm Ram Head & Base	1set
NL PV / P1A – P3	Ø150 mm Mould Top & Bottom Discs	1set
NL PV / P1A – P6	Ø150 mm Mould Base Plate	1no.
NL PV / P1A – P4	Ø150 mm x 150 mm Calibration Block	1no.
NL PV / P1A – P5	Ø150 mm x 50 mm Calibration Block	1no.



Ø150 mm Mould

Optional Accessories :

Model Number	Accessories Description
NL PV / P1A – A1	Ø100 mm Mould
NL PV / P1A – A2	Ø100 mm Ram Head & Base
NL PV / P1A – A3	Ø100 mm Mould Top & Bottom Discs
NL PV / P1A – A6	Ø100 mm Mould Base Plate
NL PV / P1A – A4	Ø100 mm x 150 mm Calibration Block
NL PV / P1A – A5	Ø100 mm x 50 mm Calibration Block



Ø100 mm Mould



Calibration Block



Mould Top & Bottom Discs



Ram Head & Base



Mould Base Plate