



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 | 25 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 top & bottom plate | 1set |
| NL PV / P1A – P4 | Ø150 mm x 150 mm calibration block | 1no. |
| NL PV / P1A – P5 | Ø150 mm x 50 mm calibration block | 1no. |

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 top & bottom plate |
| NL PV / P1A – A4 | Ø100 mm x 150 mm calibration block |
| NL PV / P1A – A5 | Ø150 mm x 50 mm calibration block |



Ø100 mm mould



Ø150 mm mould



Calibration Block



Top & Bottom Plate



Ram Head & Base