CONTROLS

ADVANCED
PAVEMENTS
TESTING

GYROCOMP EmS

QC Electromechanical Gyratory Compactor



www.controls-group.com

GYROCOMP EmS

Standards **EN 12697-10 | EN 12697-31 | ASTM D6925 | AASHTO T312/TP4 | SHRP M002**

Gyratory Compactors enable engineers to reproduce real-world compaction conditions during road paving operations, allowing them to ascertain the compaction qualities of an asphalt mixture.

Light and portable

GYROCOMP EmS is the ideal solution for Quality Control (QC) that can even be easily installed in mobile laboratories.

Advanced with new electromechanical technology

The new electromechanical actuator makes it a 100% stand-alone machine, as it only requires single-phase power supply and no external air compressor which reduces the amount of maintenance and makes it easier to install.

The new EmS electromechanical actuator makes it now 100% stand-alone and electromechanical, without the need of external air compressors or hydraulic pumps.

Automatic application of the vertical load, controlled by a high-precision coaxial load cell, for accurate application of vertical loads even for non-standard tests

User interface via large 7" touchscreen panel color display, with possibility to modify, save and recall a large range of testing procedure for fast test performance

Possibility to control GYROCOMP EmS by integrated touchscreen display (typically for on-field use) or by remote control from optional PC software, for advanced use of GYROCOMP EmS, such as Mix Design or multiple mix comparison.



Small and lightweight, it can be perfectly installed both in fixed and mobile laboratories. A single-phase power supply is only needed to perform a test.

A large range of accessories are available, including an integrated electromechanical extruder, making it suitable for use with any type of asphalt mix, such as hot-mix asphalt, porous asphalt, foamed asphalt or cold mix.

Technical Specifications

Sample size: 150 and 100 mm dia	**Number of gyrations:** up to 9999
Sample height: 80 to 200 mm (150 mm), 50 to 200 mm (100 mm)	**Test termination:** Number of gyrations, Specimen height, Specimen density
Consolidation pressure: 80 to 900 kPa (150 mm), 160 to 1,500 kPa (100 mm)	**Communication with PC:** Ethernet for PC connection, USB for data storage on USB stick
Load measurement: load cell, 25kN capacity, 1N resolution	**Power rating:** 1000 W
Internal angle of gyration: user adjustable between 0.70 to 1.40°	**Dimensions with extruder:** 1,940 x 502 x 753 mm (H x W x D)
ASTM/AASHTO (78-PV2532): 1.16° internal angle preset	**Weight with extruder:** 150 kg
EN model (with 78-PV20UP4): 0.82° internal angle preset	**Dimensions w/o extruder:** 1,130 x 469 x 615 mm (H x W x D)
Speed of gyration: 20 to 60 rpm	**Weight w/o extrude:** 100 kg approx

Ordering Information

GYROCOMP EmS is supplied complete with height calibration tool, operating instructions and calibration certificate (included angle calibration with ILS calibration device)

Three versions available:

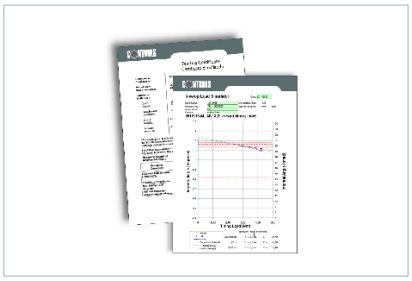
78-PV2532 GYROCOMP EmS gyratory compactor, **AASHTO T312/ASTM D6925** factory preset internal angle 1.16°, 230 V, 50-60 Hz, 1 ph.

78-PV2532/Z GYROCOMP EmS gyratory compactor, **AASHTO T312/ASTM D6925** factory preset internal angle 1.16°, 110 V, 60 Hz, 1 ph.

78-PV20UP4 Calibration to 0.82° to EN 12697-31 Annex B, complete with certificate.



78-PV0250/10
Perforated mold, 150mm dia. for bituminous emulsion cold mix compaction.



All our Gyrocomps are verified and calibrated with the ILS apparatus.



78-PV0250/6, 76-PV0250/5, 78-PV0250/4, 78-PV0250/3, 78-PV0250/2



All our Gyratory compactors are verified and calibrated with 78-PV0255 ILS apparatus.

Accessories

Cylinder molds with top and bottom plates

78-PV0250/2 150 mm diameter mold
78-PV0250/5 100 mm diameter mold, complete with one 38mm distance plate
78-PV0250/8 Perforated, 100 mm diameter mold, complete with one 38mm distance plate
78-PV0250/10 Perforated, 150 mm diameter mold

Distance plates

78-PV0250/3 150 mm diameter, 50 mm high, for preparing short samples.
78-PV0250/6 100 mm diameter, 38 mm high, for preparing short samples.

Compacting accessories

(required to test 100mm specimens)

78-PV0250/4 100mm diameter specimen platens, including 100mm height calibration device.

Spare wearing discs

78-PV0250/13 150 mm wearing disc.
78-PV0250/14 100 mm wearing disc.

Paper discs

78-PV0250/16 150 mm diameter paper discs (pack of 1000).
78-PV0250/17 100 mm diameter paper discs (pack of 1000).

Pc software

78-PV20/SOF PC software

Integrated worktop with extruder

78-PV2520/15 Integrated extruder. 230 V, 50-60 Hz, 1 ph
78-PV2520/15Z Integrated extruder. 110 V, 60 Hz, 1 ph

Internal angle and force calibration devices

78-PV0255 ILS Internal angle measurement apparatus.
78-PV0250/11 Vertical force indicator complete with 25 kN load cell, baser, spherical seat, load readout unit and calibration certificate.

For more details, please refer to our dedicated webpage

GOLDEN JUBILEE

1976 - 2026

Fifty Years of Precision

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