

Superpave Gyrotory Compactor

CS9010-1115; CS9010-1230

AASHTO T312 (TP4), ASTM D6925, SHRP M-002, T 0736-2011, EN 12697-10, EN 12697-31



A high quality machine with which the user can easily and safely obtain accurate, repeatable results day after day



INTRODUCTION

Compaction is achieved by the application of a vertical stress (normally 600KPa (87psi)) via end platens to a known mass of asphaltic mixture within a 150 and 100mm (6 and 4inch) internal Ø mold. The longitudinal axis of the mold is rotated (gyrated) at a fixed angle to the vertical while the platens are kept parallel and horizontal. During compaction the height of the sample is automatically measured and both the mixture density and void content calculated.

KEY FEATURES

- Automatic mold insertion and retraction on side table which allows cooling time before extraction without loss of compaction time (especially important for rubberized asphalt)
- 150 mm and 100 mm (6 and 4 inch) internal Ø molds can be tested without changing parts
- Cold mix (emulsion) materials can be compacted and the expelled fluid collected
- Ethernet and multiple USB connections for data acquisition and control system
- User friendly LabVIEW™ software displays results in real time
- Machine calibrated with traceable equipment
- Option for mold up to 300 mm (11.8 inch) high
- Made in California

SOFTWARE

- User friendly, intuitive and reliable Windows® software developed using LabVIEW™
- Software allows 2 methods of compaction – number of gyrations and target density. The operator is guided through every step of the compaction
- Real-time display of current height, density & void content (%) Data is recorded to disk at regular intervals for further analysis
- Utilities are included for transducer check, diagnostic routines and calibration

SPECIFICATIONS

Speed	Normally 30 rpm
Stress	Normally 600 kPa (87psi) , Maximum 1000 kPa (145psi)
Actuator stroke mm (inch)	250 (9.85)
Internal Angle of Gyration	0.2 to > 2°
Electrical Supply	CS9010-1115: 115 V +-10% 50/60 Hz CS9010-1230: 230 V +-10% 50/60 Hz
Specimen Ø mm (inch)	150 (6) and 100 (4)
Compressed Air	7-10 bar (100-145psi) @ 350 L/min (12.5cfm)
Mixtures	Wet or dry
Dimension (WxDxH) mm(inch)	780 x 1000 x 1920 (31 x 40 x 76)
Working Space Required (WxDxH) mm (inch)	2000 x 2000 x 2200 (79 x 79 x 87)
Estimated Weight kg (lb)	508 (1120)
PC	Included

ACCESSORIES INCLUDED

CS-GYR-EXT Specimen Extruder (1 included)
CS-GYRM-150T 150 mm (6 inch) Internal Ø mold & platens which includes feature for specimen temperature measurement (3 included)
CS-GYR-SHEAR Shear force display
CS-GYR-TEMP Specimen Temperature Measurement
CS-GYRCFP-150 150 mm (6 inch) circle filter papers (pack of 100)
CS-GYRM-150 150 mm (6 inch) Internal Ø mold & platens (3 included)
CS-GYRM-100 100 mm (4 inch) Internal Ø mold & platens

YOU MAY ALSO NEED...

CS-GYRMS-150 150 mm (6 inch) Internal Ø mold & platens, slotted for emulsion mix
CS-GYR-SP150_63 Spacer 150 mm (6 inch) to compact 63 mm (2.5 inch) height on CS-GYR
CS-GYR-CALANG Calibration kit for internal angle lead
CS-TGR-840 Small air compressor