



GYROCOMP

The third generation of gyratory compactors for demanding high productivity laboratories

20 years of intensive use in laboratories and job sites all over the world

High productivity Compact and lightweight High reliability and accuracy Certified to EN and AASHTO Full safety and ergonomics Integrated electro-mechanical extruder

Calibrated by exclusive ILS device



GYROCOMP

INTRODUCTION

Gyratory technique basically consists in a compaction of a bituminous mixture contained in a cylindrical mould with the simultaneous action of a vertical static compaction and of the shearing action resulting from the rotation of the mould on its inclined axis. The compaction data is measured and recorded during the test. Controls gyratory compactors, used for the past twenty years all over the world, are the reference point in terms of user-friendliness combined with reliability and ergonomics, and they have been produced in hundreds of units. Thanks to this experience, Controls is introducing the third generation of gyratory compactors with the new GYROCOMP. The new compactor includes and increases the advantages of the previous Controls models.



HIGH PRODUCTIVITY

The new touchscreen control panel and the integrated motorized extruder allows the reducing of the time between two tests. A specially developed testing procedure grants a huge saving of time for multiple tests on the same mix, and the extruder allows to house one mould while a new mould ready to be tested is put into the gyratory compactor.

COMPACT AND LIGHTWEIGHT

GYROCOMP is the lightest and most compact gyratory compactor on the market, and this feature makes it suitable for mobile laboratories and other laboratories with problems of space: it requires an area smaller than 600x600mm. GYROCOMP weighs less than 100 kg, so it really is a portable model. Thanks to its unique design, GYROCOMP grants a stiff and robust frame.

Specifiche della Macela	Feso(%) Feso Specifico(kg/m3)	27	Anondre	(Dent)	1ml	1000(00)	44(2)	Tape .	(See(%)			
Appropria		1	196.4	2362.0	13.8	84	34	226.4	6.8			
Filer .		12	156.4	2824	13.8	1.0	9.8	235.4	0.0			
Marri		2	256.4	2382.8	13.8	8.8	2.8	28.4	6.0			
K correctione Densità	L4	4	136.4	2362.8	12.8	8.8	5.8	226.4	6.8			
Denată teorica e zero vuob Gren, (kg/m3) 0			136.4	3362.8	12.8	14	33	236.4	82.			
Contendo di Intune, % sed volume 8.8 Cinh (minestri), (tigin2) 8/A MontElicazione Parametri di Prova		124	06.4	2042.0	13.8	8.0	34	226.4	60			
		7	296.4	2262.0	13.0	14	2.8	228.4	0.0			
		-	19.3	2262.6	12.6	14	14	28.4	44			
Data (M/11/2010 13/19/16	Peso del campione [gramm] A230	÷	198.2	2041	12.0	÷.	-	28.4	6.0			
Ors 6255	Altazza finale del campione (mm) 250	11	105.4	229.5	12.8	-	24	28.4				
Prova M ^a	Durata della prove (cicli) 40 Annala seguno Tarradi 20	11	int.e	128.5	12.8		24	236.4	6.0			
Macela (-Gerarico	Angolo gratuno (inrad) 20 Pressure verticale (kPa) 2000				10.0	1		1				
	Temperatura prova [*C] 71	Tim	de .									
	Velocità di rotazione [grumer] 30	-45	10.8	1281.6	84	3.0	318	238,4	84			
								-	in first			
Criteria	Min Grein Max % Grein		1		-	-		-				
8, 312, 4			73	1	-					1		
a stronge			:/									
K. Max			2 ==									
			10									
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			-		-	11 2		35	28	4 4	10	-
								Same	8 018			

Example of single test elaboration on PC software.

CERTIFIED TO EN AND AASHTO

The new GYROCOMP allows the adjustment of the vertical pressure on the sample, the mould rotation speed and the mould gyratory angle, granting a perfect calibration of all the parameters and the test performance conforming both to AASHTO T312/Superpave procedure and EN 12697-31, and it's supplied complete with traceable calibration certificate of vertical load and internal angle, performed with the exclusive ILS device conforming to EN 12697-31 Annex C procedure. GYROCOMP grants high test repeatability.

WARRANTY

GYROCOMP increases the affordability of the two previous generations of Controls gyratory compactors, and it is supplied with a 2-year full warranty.

GYROCOMP - Technical Specifications:

Compacted specimen size	150 and 100 mm dia.
Sample height	80 to 200 mm (150 mm) – 50 to 125 mm (100 mm)
Consolidation Pressure	80 - 800 kPa (150 mm) – 160 - 1400 kPa (100 mm)
Angle of Gyration	Adjustable from 0.70 - 1.40 deg Preset to 1.16° internal angle (76-B2522, 76-B2522/A) Preset to 0.82° internal angle (76-B2522/E, 76-B2522/AE)
Speed of Gyration	15 - 60 rpm
Number of Gyrations	0 - 999
Communication with PC	RS 232 or USB connection
Weight	98 kg
Dimensions	500 W x 600 D x 1100 H mm (with integrated worktop)
Power supply	230V/50-60Hz/1ph, 1kW (110V/60Hz/1ph, 1kW models available)
Including	Height calibration tool, PC software, air hose, operating instruction, calibration certificate

C•NTROLS

What's new

GYROCOMP Even more User-friendly and

guaranteed reliability

CONTROLS

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Test Performance...

TOUCHSCREEN INTEGRATED DISPLAY

A new touchscreen control panel makes the interface easy and user-friendly, showing the test graph in real time, and allows, when needed, the connection and a remote test control by PC. On board firmware includes 12 standard languages and the software language can be defined making the interface suitable for any user needs.



INTEGRATED ELECTRO-MECHANICAL EXTRUDER

The new worktop with integrated motorized extruder allows the reduction of the working time between two test, due to the fast, safe and powerful mould extraction.



NEW ERGONOMIC INTERFACE

The machine is easy to adjust and calibrate. All the test parameters are displayed in real time during the test, and all the settings are easily accessible on the machine, with specially dedicated procedures to make all the verification procedures easy and user-friendly.



NEW SLIDING DOOR The safety of the machine is dramatically increased by the new safety door, heavy duty to resist accidental damage and transparent to allow the user to monitor constantly the test performance. The safety door is mounted on sliding rails and it's provided with a handle for easy use. A safety switch included in the door prevents the machines operation when the door is open.



Machine accessories and Ordering information

GYROCOMP ACCESSORIES



76-B0250/6 76-B0250/5 76-B0250/4 76-B0250/3 76-B0250/2

76-B0250/2 Hardened specimen cylinder 150 mm dia. complete with top and bottom plates

76-B0250/3 150 mm dia. distance plate (50 mm height) for low samples

76-B0250/4 Accessories to compact 100 mm dia specimens, including 100 mm height calibration device

76-B0250/5 Hardened specimen cylinder 100 mm dia. complete with top and bottom plates

76-B0250/6 100 mm dia. distance plate (38 mm height) for low samples



76-B0250/10

Hardened specimen cylinder 150 mm dia. with holes for cold mix compaction, complete with top and bottom plates



76-B0250/7 Low noise air compressor with 5 mm filter. 230V/50Hz/1ph.



ILS calibration equipment ▼ 76-B0255 ILS

Internal angle measurement apparatus, for gyratory compactor internal angle calibration conforming to EN 12697-31 Annex C, AASHTO TP71 and ASTM D7115. The

apparatus is supplied complete with PC software, connecting cable, distance plate, steel plate, one pair of loading rings, carrying box.

76-B0250/11 Vertical force testing device

ORDERING INFORMATION

76-B2522

GYROCOMP, gyratory compactor. 230V, 50-60Hz, 1ph.

- Conforming to EN 12697-10, EN 12697-31, AASHTO T321/TP4, SHRP M-002
- Angle factory set to 1.16° internal / 1.25° external to AASHTO T312

76-B2522/E

GYROCOMP, gyratory compactor. 230V, 50-60Hz, 1ph.

- Conforming to EN 12697-10, EN 12697-31, AASHTO T321/TP4, SHRP M-002
- Angle factory set to 0.82° internal to EN 12697-31 Annex C

76-B2524

GYROCOMP, gyratory compactor. 110V, 60Hz, 1ph.

- Conforming to EN 12697-10, EN 12697-31, AASHTO T321/TP4, SHRP M-002
- Angle factory set to 1.16° internal / 1.25° external to AASHTO T312

76-B2524/E

- GYROCOMP, gyratory compactor. 110V, 60Hz, 1ph.
- Conforming to EN 12697-10, EN 12697-31, AASHTO T321/TP4, SHRP M-002
- Angle factory set to 0.82° internal to EN 12697-31 Annex C

▼ 76-B2520/15

Integrated work top for 76-B252X GYROCOMP with electromechanical specimen extruder. 230V/50-60Hz/1ph

76-B0252/14

Integrated work top for 76-B252X GYROCOMP with manual extruder

C NTROLS GROUP

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CONTROLS S.R.L. is calibration Laboratory for compression machines accedited by SIT (member of European co-operation for Accreditation)

5 mm filter. 230V/50Hz/1ph.