

DIN EN 12697-31:2007-06 (E)

Bituminous mixtures - Test methods for hot mix asphalt - Part 31: Specimen preparation by gyratory compactor

Contents	Page
Foreword	4
1 Scope	7
2 Normative references	7
3 Terms, definitions and symbols	8
3.1 Terms and definitions	8
3.2 Symbols	9
4 Principle	10
5 Apparatus	10
5.1 Test device	10
5.2 Metallic moulds	11
5.3 Round metallic inserts	11
5.4 Device for measuring the distance between inserts	11
5.5 Device for counting the number of rotations to within one revolution	11
6 Preparation of specimens	12
6.1 Mass of mixture to be introduced in the mould	12
6.2 Preparation of test pieces	12
7 Test procedure	13
7.1 Preliminary setting	13
7.2 Compaction	13
8 Test report	14
9 Precision	15
Annex A (normative) Procedure for setting the angle and force for types of gyratory compactor using central reference material	16
A.1 Scope	16
A.2 Principle	16
A.3 Gyratory-type testing procedure	16
A.4 Procedure to test the conformity of a gyratory compactor to a type	18
A.5 Summary of the gyratory calibration chain	19
Annex B (normative) Procedure to evaluate the gyratory compactor internal angle of gyration using a self-contained measurement unit	20
B.1 Scope	20
B.2 Principle	20
B.3 Equipment	20
B.4 Procedure	21
B.5 Calculation	23
B.6 Compliance	24
B.7 Report	25
B.8 Precision data	25

Annex C (normative) Procedure to evaluate the gyratory compactor (GC) internal angle of gyration and related parameters using simulated loading	26
C.1 Scope	26
C.2 Principle	26
C.3 Procedure	26
C.4 Calculation of results	27
C.5 Compliance	28
C.6 Report	28
C.7 Precision and bias	28
Bibliography	30