DIN EN 12642:2017-03 (E)

Securing of cargo on road vehicles - Body structure of commercial vehicles - Minimum requirements

Contents

Page

European foreword 3

Introduction 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 5

4 General requirements 5

5 Testing 6
5.1 General 6
5.2 Static test - Airbag test (Annex A) 7
5.2.1 Requirements 7
5.2.2 General 7
5.2.3 Strenght of the front wall 7
5.2.4 Strength of the rear wall 8
5.2.5 Strength of the side wall 9
5.2.6 Floor ledge (optional) 10
5.2.7 Double-decker design (Code XL only) 11
5.3 Dynamic driving test (Annex B) 12
5.3.1 Test acceleration 12
5.3.2 General 12

6 Documentation 13

7 Maintenance 14

Annex A (normative) Details of the airbag test 15

Annex B (normative) Dynamic driving test 16

B.1 General 16
B.2 General requirements for the test 16
B.3 Conditions of loading 16
B.3.1 Test for body structure with defined cargo units 16
B.3.2 Test of cargo arrangements with other cargo units 16
B.4 Measuring technique and assessment 16
B.5 Driving tests 17
B.5.1 Use of a supporting axle 17
B.5.2 Testing brake deceleration (0,8 g) in longitudinal direction 17
B.5.3 Test of transverse acceleration (0,5 g) - U-turn-test 18
B.5.4 Change of lane test with accelerations of 0,5 g around both curves each - S-test 19
B.5.5 Test of reverse acceleration (0,5 g) 20

Annex C (normative) Test certificate of body structure tested according to EN 12642 22

Annex D (informative) Test report of body structure tested according to EN 12642 24

Bibliography 26