



SLOVENSKI STANDARD
SIST EN 16303:2020/oprA1:2024
01-oktober-2024

**Oprema cest - Postopek validacije in verifikacije računalniške simulacije
preskusnih trčenj v sisteme za zadrževanje vozil**

Road restraint systems - Validation and verification process for the use of virtual testing
in crash testing against vehicle restraint system

Rückhaltesysteme an Straßen - Validierungs- und Nachweisverfahren für die Nutzung
von Computersimulationen bei Anprallprüfungen an Fahrzeug-Rückhaltesysteme

Dispositifs de retenue routiers - Processus de vérification et de validation pour l'utilisation
dessais virtuels dans les essais de choc contre un dispositif de retenue pour véhicules

Ta slovenski standard je istoveten z: EN 16303:2020/prA1

[SIST EN 16303:2020/oprA1:2024](https://standards.sist.eu/standards/sist/216303/2020/oprA1/2024)

ICS:

13.200	Preprečevanje nesreč in katastrof	Accident and disaster control
93.080.30	Cestna oprema in pomožne naprave	Road equipment and installations

SIST EN 16303:2020/oprA1:2024 en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN 16303:2020
prA1

July 2024

ICS

English Version

Road restraint systems - Validation and verification process for the use of virtual testing in crash testing against vehicle restraint system

Dispositifs de retenue routiers - Processus de vérification et de validation pour l'utilisation d'essais virtuels dans les essais de choc contre un dispositif de retenue pour véhicules

Rückhaltesysteme an Straßen - Validierungs- und Nachweisverfahren für die Nutzung von Computersimulationen bei Anprallprüfungen an Fahrzeug-Rückhaltesysteme

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 226.

This draft amendment A1, if approved, will modify the European Standard EN 16303:2020. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 16303:2020/prA1:2024) has been prepared by Technical Committee CEN/TC 226 “Road equipment”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Enquiry.

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EN 16303:2020/prA1:2024 (E)**1 Modification to European foreword**

In the 5th paragraph, add as new 6th bullet:

“— an Annex K, Ranking table (Normative) has been added to provide rules for the evaluation of numerical models through a stars rating system”

Replace the 6th paragraph with the following one:

“Annexes A, B, C and K are normative and Annexes D to J are informative.”

2 Modification to Introduction

Replace the 1st paragraph with the following:

“This document provides a common basis for the use of virtual testing to reproduce vehicle impacts against vehicle restraint systems including safety barriers, crash cushions, terminals and passive safety devices in accordance with the EN 1317-1:2010, EN 1317-2:2010, EN 1317-3:2010, CEN/TS 1317-7:2023 and the EN 12767:2019.”

3 Modification to Clause 2, “Normative References”

Add the following reference:

CEN/TS 1317-7:2023, *Road restraint systems - Part 7: Performance characterisation and test methods for terminals of safety barriers*

Delete the following reference from Clause 2 and throughout the text:

“ENV 1317-4:2011, *Road restraint systems – Part 4: Performance classes, impact test acceptance criteria and test methods for terminals and transitions of safety barriers*”

4 Modification to Clause 3, “Terms and definitions”

Replace definition 3.8 with the following:

3.8**vehicle restraint system**

device tested according to EN 1317-1, EN 1317-2, EN 1317-3, CEN/TS 1317-7:2023, CEN/TS 1317-9:2023 or CEN/TR 1317-10:2023”

5 Modification to Clause 5, “Requirements for numerical vehicle model”

Add as last sentence of 5.3.1:

“A ranking table related to the overall conformity to the requirements of this standard shall be created according to Annex K.”

6 Modification to Clause 8, “Requirements for validation of virtual testing against test item”

Replace the entire subclause 8.2.3.1 with the following:

“Vehicle impact tests shall be carried out in compliance with criteria given in CEN/TS 1317-7:2023, Table 3.

Type and characteristics of vehicles are described in EN 1317-1:2010, 5.2.”