ICS 13.200, 93.080.30 PREDBEŽNÁ SLOVENSKÁ TECHNICKÁ NORMA Január 2020

STN P	**Záchytné bezpečnostné zariadenia na pozemných komunikáciách Záchytné bezpečnostné zariadenia pre motocykle znižujúce závažnosť nárazov pri kolízii motocyklistu so zvodidlami**	**STN P CEN/TS 17342** 73 6032

Road restraint systems - Motorcycle road restraint systems which reduce the impact severity of motorcyclist collisions with safety barriers

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/19

Táto predbežná STN je určená na overenie. Pripomienky zasielajte ÚNMS SR najneskôr do augusta 2021.

Obsahuje: CEN/TS 17342:2019

129591

TECHNICAL SPECIFICATION
SPÉCIFICATION TECHNIQUE
TECHNISCHE SPEZIFIKATION

CEN/TS 17342

June 2019

ICS 13.200; 93.080.30 Supersedes CEN/TS 1317-8:2012

English Version

Road restraint systems - Motorcycle road restraint systems which reduce the impact severity of motorcyclist collisions with safety barriers

Dispositifs de retenue routiers - Dispositifs de retenue routiers pour motos réduisant la sévérité de choc en cas de collision de motocyclistes avec les barrières de sécurité

Rückhaltesysteme an Straßen - Rückhaltesysteme für Motorräder, die die Anprallheftigkeit an Schutzplanken für Motorradfahrer reduzieren

This Technical Specification (CEN/TS) was approved by CEN on 15 April 2019 for provisional application.

The period of validity of this CEN/TS is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the CEN/TS can be converted into a European Standard.

CEN members are required to announce the existence of this CEN/TS in the same way as for an EN and to make the CEN/TS available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the CEN/TS) until the final decision about the possible conversion of the CEN/TS into an EN is reached.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Ref. No. CEN/TS 17342:2019 E

Contents

Page

European foreword

This document (CEN/TS 17342:2019) has been prepared by Technical Committee CEN/TC 226 “Road equipment”, the secretariat of which is held by AFNOR.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes CEN/TS 1317-8:2012.

The significant technical changes incorporated in this revision are updates of the European foreword, the Scope and Subclause 6.2, *Test site*.

CEN/TS 1317-8 needed to be brought into line with EN 1317 in development (merging of EN 1317-1:2010, EN 1317-2:2010, EN 1317-3:2010, EN 1317-5, EN 1317-7 and additional test methods for removable barrier sections).

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

In order to improve safety, the design of roads may require the installation of road restraint systems, which are intended to contain and redirect errant vehicles safely for the benefit of the occupants and other road users, or pedestrian parapets designed to restrain and to guide pedestrians and other road users not using vehicles, on sections of road and at particular locations defined by the national or local authorities.

EN 1317-2 contains performance classes, impact test acceptance criteria and test methods for barriers. Whereas EN 1317-2 covers the performance of these systems with respect to cars and heavy vehicles, this document addresses the safety of the riders of powered two-wheeled vehicles impacting the barrier having fallen from their vehicle.

As powered two-wheeler riders may impact a barrier directly (in which case no protection is offered by the vehicle), special attention is given to these vulnerable road-users. In order to minimize the consequences to a rider of such an impact, it may be necessary to fit a barrier with a specific PTW rider protection system. Alternatively, a barrier might specifically incorporate characteristics limiting the consequences of a PTW rider impact.

Rider protection systems may be continuous (including barriers specifically designed with the safety of PTW riders in mind) or discontinuous. A discontinuous system is one which offers rider protection in specific localized areas of a barrier judged to be of higher risk. The most common example of a discontinuous system is one fitted locally to the posts of a post and rail type guardrail - adding nothing between the posts.

The purpose of this document is to define the terminology specific to it, to describe procedures for the initial type-testing of rider protection systems and to provide performance classes and acceptance criteria for them.

Accident statistics from several European countries have shown that riders are injured when impacting barriers either whilst still on their vehicles or having fallen and then sliding along the road surface. Whilst different statistical sources show one or the other of these configurations to be predominant, all known studies show both to constitute a major proportion of rider to barrier impact accidents. Some studies showing the sliding configuration to be predominant have led to the development and use of test procedures in some European countries, evaluating systems with respect to the sliding configuration. At the time of writing, a number of such protection systems were already on the European market. It is for this reason that it was decided to address the issue of sliding riders initially, in order to bring about the adoption of a European Standard in as timely a manner as possible. However, the rider on vehicle configuration should also be considered as soon as possible as a subsequent addition.

This document will be read in conjunction with EN 1317-1 and EN 1317-2.

1 Scope

This document specifies requirements for the impact performance of systems designed for the reduction of impact severity for PTW riders impacting safety barriers whilst sliding along the ground, having fallen from their PTW vehicle. The protection systems concerned are those fitted to barriers or barriers that have an inherent PTW rider protection or risk reduction capability. This document excludes the assessment of the vehicle restraint capabilities of barriers and the risk that they represent to the occupants of impacting cars. The assessment of barrier performance with respect to impacting vehicles is covered by EN 1317-1 and EN 1317-2.

This document defines performance classes taking into account rider speed classes, impact severity and the working width of the system with respect to rider impacts.

For systems designed to be added to a standard barrier, the test results are valid only when the system is fitted to the model of barrier used in the tests since the performance will not necessarily be the same if the system is fitted to a different barrier.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1317-2[1], *Road restraint systems – Part 2: Performance classes, impact test acceptance criteria and test methods for safety barriers including vehicle parapets*

EN 1621-1, *Motorcyclists' protective clothing against mechanical impact – Part 1: Motorcyclists' limb joint impact protectors – Requirements and test methods*

ISO 6487, *Road vehicles – Measurement techniques in impact tests – Instrumentation*

[1] Under revision.