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Protective footwear for motorcycle riders - Requirements and test methods

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. 03/16

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English Version

Protective footwear for motorcycle riders - Requirements and test methods

Chaussures de protection pour motocyclistes -
Exigences et méthodes d'essaiSchutzschuhe für Motorradfahrer - Anforderungen und
Prüfverfahren

This European Standard was approved by CEN on 10 October 2015.

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European foreword

This document (EN 13634:2015) has been prepared by Technical Committee CEN/TC 161 "Foot and leg protectors", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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

This document supersedes EN 13634:2010.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The following significant technical changes have been introduced in comparison with the former edition EN 13634:2010:

- a) The requirement concerning forward facing seams has been removed;
- b) Clarification on the classification of the height of the upper (Table 2, Table 3 and Figure 2). A reduction in minimum upper height has been introduced for footwear having level 1 performance in upper abrasion resistance (4.4.4) and upper impact cut resistance (4.4.5);
- c) The water absorption and desorption requirements for insoles and insocks have been made optional (Table 7) and a new marking is created WAD;
- d) If applicable, the ankle areas shall be tested on the internal and external side of the footwear (5.1);
- e) Any removable component shall be tested during the test of transverse rigidity (6.1.3);
- f) Clarification on test method (6.1.5).

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Motorcyclists' footwear is intended to give a degree of mechanical protection to the foot, optionally the ankle and/or part of the shin in accidents without significantly reducing the ability of the rider to control the motorcycle and operate the foot controls. The particular hazards in motorcycle accidents are abrasion with the road surface plus impacts with the motorcycle, conflicting vehicles, road furniture and road surfaces. Road surface injuries are worse when the foot is trapped under the motorcycle during sliding impacts. The standard sets out a number of basic requirements considered essential for this type of footwear including a number of ergonomic requirements.

For a number of tests, this European Standard includes two performance levels in terms of the protection afforded. The degree of risk or hazard that a motorcyclist will face is closely linked to the type of riding and the nature of the accident. Within EN 13634:2015 'Level 1' performance is deemed as the minimum level required so that the footwear provides useful protection in an accident, and offers footwear with an optimum comfort level to suit all riding types. Where riders feel that their riding style or sport exposes them to an increased accident risk 'Level 2' has been provided, which offers increased performance. However it is likely that this higher performance level has an increased penalty for the weight and comfort so may not be acceptable to all riders.

1 Scope

This European Standard applies to protective footwear for motorcycle riders for use while riding motorcycles for on or off road activities. It specifies the requirements for protection, ergonomic characteristics, innocuousness, mechanical properties, marking and information for users. It also specifies the appropriate test methods.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

EN 13595-2:2002, *Protective clothing for professional motorcycle riders — Jackets, trousers and one-piece or divided suits — Part 2: Test method for determination of impact abrasion resistance*

EN 13595-4:2002, *Protective clothing for professional motorcycle riders — Jackets, trousers and one-piece or divided suits — Part 4: Test method for determination of impact cut resistance*

EN ISO 4045, *Leather — Chemical tests — Determination of pH (ISO 4045)*

EN ISO 11642, *Leather — Tests for colour fastness — Colour fastness to water (ISO 11642)*

EN ISO 17075:2007, *Leather — Chemical tests — Determination of chromium(VI) content (ISO 17075:2007)*

EN ISO 20344:2011, *Personal protective equipment — Test methods for footwear (ISO 20344:2011)*

EN ISO 20345:2011, *Personal protective equipment — Safety footwear (ISO 20345:2011)*

ISO 4649:2010, *Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device*

ISO 5423:1992, *Moulded plastics footwear — Lined or unlined polyurethane boots for general industrial use — Specification*

ISO 7000, *Graphical symbols for use on equipment — Registered symbols*

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