

Mootorrattureid mehaaniliste löökide eest kaitsev riietus. Osa 2: Mootorratturi seljakaitse. Nõuded ja katsemeetodid

Motorcyclists' protective clothing against mechanical impact - Part 2: Motorcyclists' back protectors - Requirements and test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1621-2:2003 sisaldab Euroopa standardi EN 1621-2:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 17.09.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1621-2:2003 consists of the English text of the European standard EN 1621-2:2003.</p> <p>This document is endorsed on 17.09.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard specifies the minimum coverage to be provided by motorcyclists' back protectors worn by riders in normal traffic situations. The standard contains the requirements for the performance of the protectors under impact and details of the test methods. Requirements for sizing, ergonomic requirements, and requirements for innocuousness, labelling and the provision of information are included</p>	<p>Scope: This European Standard specifies the minimum coverage to be provided by motorcyclists' back protectors worn by riders in normal traffic situations. The standard contains the requirements for the performance of the protectors under impact and details of the test methods. Requirements for sizing, ergonomic requirements, and requirements for innocuousness, labelling and the provision of information are included</p>
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ICS 13.340.10

Võtmesõnad: anatomy, back, dimensions, human factors engineering, impact t, mechanical testing, motor cyclists, motorcycles, motorcyclist, protective clothing, protective suits, rating tests, safety, safety engineering, size, specification (approval), specifications, testing

ICS 13.340.10

English version

Motorcyclists' protective clothing against mechanical impact - Part 2: Motorcyclists' back protectors - Requirements and test methods

Vêtements de protection contre les chocs mécaniques pour
motocyclistes - Partie 2: Protecteurs dorsaux - Exigences
et méthodes d'essai

Motorradschutzkleidung gegen mechanische Belastung -
Teil 2: Rückenprotektoren - Anforderungen und
Prüfverfahren

This European Standard was approved by CEN on 2 July 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 1621-2:2003) has been prepared by Technical Committee CEN /TC 162, "Protective clothing including hand and arm protection and lifejackets", the secretariat of which is held by DIN.

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 February 2004, and conflicting national standards shall be withdrawn at the latest by February 2004.

This European Standard 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 Directives.

For the relationship with EU Directives, see informative annex ZA, which is an integral part of this standard.

Annex A is normative.

This European Standard is one of a series of standards as listed below:

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

EN 13595-1 *Protective clothing for professional motorcycle riders — Jackets, trousers and one-piece or divided suits — Part 1: General requirements*

EN 13595-2 *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 13595-3 *Protective clothing for professional motorcycle riders — Jackets, trousers and one-piece or divided suits — Part 3: Test method for determination of burst strength*

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

Motorcyclist's back protectors are devices worn within or on top of other protective clothing, covering at least the central part of the back from the waist to the neck. About 13% of motorcyclists injured in road accidents have an injury to this back region. However, only 0,8% of the injured riders suffer a fracture of the spine and less than 0,2% of injured riders have a serious back injury resulting in neurological damage. These serious injuries are usually caused by axial forces due to blows on the head, or bending and twisting forces on the back caused by blows to the shoulders, hips and other parts of the body. Back protectors do not provide protection from these forces. The majority of the more minor injuries are bruises and strains caused by direct blows, and back protectors can provide some protection against these. The scapula is often injured (1,3%), protection should extend to cover this area.

The performance requirements have been chosen as a best practical compromise between protection, comfort, and ergonomic requirements. Protectors that are too stiff or heavy will not be worn. The test methods are designed to provide information on protection against impacts against edges such as kerb stones. The force levels in the tests do not compare directly with the forces to which riders are exposed in accidents, but experiences have shown that products meeting the requirements of this European Standard reduce the incidence and severity of injuries.

Motorcyclists' back protectors are sometimes combined with a product such as a body belt or lumbar support designed to give support to the lower back in normal riding. These elements, within their limited size, can also provide some impact protection, in this case they are to be called 'lumbar protectors' and are also covered by this standard.

1 Scope

This European Standard specifies the minimum coverage to be provided by motorcyclists' back protectors worn by riders in normal traffic situations. The standard contains the requirements for the performance of the protectors under impact and details of the test methods. Requirements for sizing, ergonomic requirements, and requirements for innocuousness, labelling and the provision of information are included.

The provision of this European Standard may not fully cover the needs of particular protectors (e.g. inflatable protector or other types of protector).

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed below. In the case of dated references, subsequent amendments to, or revisions of, any of these publications, apply to this European Standard only when incorporated into it by amendment or revision. In the case of undated references the latest edition of the publications referred to applies (including amendments).

EN 340, *Protective clothing — General requirements*.

EN 1621-1:1997, *Motorcyclists' protective clothing against mechanical impact — Part 1: Requirements and test methods for impact protectors*.

ISO 6487, *Road Vehicles — Measurement techniques in impact tests — Instrumentation*.

ISO 7000, *Graphical symbols for use on equipment — Index and synopsis*.

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply:

3.1 general

3.1.1 motorcyclist's back protectors

motorcyclist's back protectors are specific devices worn on the back that are intended to reduce the severity of injuries caused by impacts

3.1.2 motorcyclist's lumbar protector

motorcyclist's back protector with dimensions limited to cover the lumbar region; intended to reduce the severity of injuries caused by impacts

3.1.3 zone of protection

the zone of protection is a specific area of the protective equipment that is intended to provide protection and this area is subject to specific testing

NOTE The minimum dimensions of the zones of protection will normally be marked on test specimens during the test procedures.