

**Kaitseriietus. Elektrinugade tekitatud
lõikehaavade eest kaitsvad kindad ja
käsivarrekaitised. Nõuded ja
katsemeetodid**

Protective clothing - Gloves and armguards
protecting against cuts by powered knives -
Requirements and test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14328:2005 sisaldab Euroopa standardi EN 14328:2005 ingliskeelset teksti.	This Estonian standard EVS-EN 14328:2005 consists of the English text of the European standard EN 14328:2005.
Käesolev dokument on jõustatud 22.06.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 22.06.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: This document specifies the requirements for the design, cut resistance, ergonomic characteristics, innocuousness, fixings, construction materials, marking and instructions for use, for chain mail gloves and armguards providing protection against powered knives. Appropriate test methods are also specified.	Scope: This document specifies the requirements for the design, cut resistance, ergonomic characteristics, innocuousness, fixings, construction materials, marking and instructions for use, for chain mail gloves and armguards providing protection against powered knives. Appropriate test methods are also specified.
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ICS 13.340.40

Võtmesõnad: human factors engineering, insulating gloves, kniv, marking, materials, mechanical properties, occupational safety, pocket-knife, protective clothing, protective gloves, safety, safety engineering, specification (approval), specifications, testing, user information

English version

Protective clothing - Gloves and armguards protecting against
cuts by powered knives - Requirements and test methods

Vêtements de protection - Gants et protège-bras
protégeant contre les coupures par des couteaux
électriques - Exigences et méthodes d'essai

Schutzkleidung - Handschuhe und Armschützer zum
Schutz gegen Schnittverletzungen durch angetriebene
Messer - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 15 March 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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Foreword

This document (EN 14328:2005) 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 October 2005, and conflicting national standards shall be withdrawn at the latest by October 2005.

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 89/686/EEC.

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

This document contains a bibliography.

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

Introduction

Powered knives are used when it is advantageous, to reduce the muscular effort required by the worker, or to increase their rate of working. They are commonly used in clothing factories, in slaughterhouses and in meat cutting plants. Band knives, reciprocating straight knives, rotating circular cutters and other designs are used. Electricity or compressed air normally powers them. The tool driving the blade may be partly supported by the work pieces or by the workbench, or may be held in one hand. The edges of the blades may be quite smooth, coarsely honed, finely serrated or scalloped. They need to be distinguished from cutting blades with saw-tooth edges with teeth above 1 mm in height, which generally are unsafe to use with chain mail gloves, and armguards.

Powered knives enable workers to cut rapidly through very resistant materials. Their hands are always in the vicinity of the blade in order to present the work piece to the blade, and it is not possible to guard the whole cutting edge. Thus there is significant potential for serious hand injuries during cutting operations. Most accidents occur during cutting but they are also recorded during blade changing, blade cleaning, guard adjustment, and moving the tool.

At the present time it is not known that any practical glove material other than metal chain mail provides significant protection against powered knives. Even chain mail is rapidly cut through and injuries will only be avoided by strict adherence to safe working practices. Armguards made from sheet metal or rigid plastic material also provide some protection. Users of chain mail gloves note that the vibration and noise caused by contact of their glove with a powered knife blade often enables them to react in time to prevent an injury.

1 Scope

This document specifies the requirements for the design, cut resistance, ergonomic characteristics, innocuousness, fixings, construction materials, marking and instructions for use, for chain mail gloves and armguards providing protection against powered knives. Appropriate test methods are also specified.

2 Normative references

The following referenced documents are indispensable for the application 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 340, *Protective clothing — General requirements*.

EN 420, *Protective gloves — General requirements and test methods*.

EN 1082-1:1996, *Protective clothing — Gloves and arm guards protecting against cuts and stabs by hand knives — Part 1: Chain mail gloves and arm guards*.

EN 1082-2:2000, *Protective clothing — Gloves and arm guards protecting against cuts and stabs by hand knives — Part 2: Gloves and arm guards made of material other than chain mail*.

EN 1811, *Reference test method for release of nickel from products intended to come into direct and prolonged contact with the skin*.

EN 12472, *Method for the simulation of wear and corrosion for the detection of nickel release from coated items*.

EN 14362-1, *Textiles — Methods for the determination of certain aromatic amines derived from azo colorants — Part 1: Detection of the use of certain azo colorants accessible without extraction*.

EN 14362-2, *Textiles — Methods for determination of certain aromatic amines derived from azo colorants — Part 2: Detection of the use of certain azo colorants accessible by extracting the fibres*.

EN 23758, *Textiles — Care labelling code using symbols (ISO 3758:1991)*.

EN ISO 4045, *Leather — Determination of pH (ISO 4045:1977)*.

EN ISO 13998, *Protective clothing — Aprons, trousers and vests protecting against cuts and stabs by hand knives (ISO 13998:2003)*.

ISO 3071, *Textiles — Determination of pH of the aqueous extract*.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1082-1:1996 and EN 1082-2:2000, and the following apply.

3.1

powered knife

hand held or fixed machine using a power source to drive a rotating, reciprocating or vibrating knife blade

3.2

knife blade

sharp edged cutting tool with either a smooth edge, or a serrated edge with points less than 1 mm high, or with a scalloped edge with points less than 3 mm high