

KÄSIKETTSAAGIDE KASUTAJATE KAITSERIIETUS. OSA
3: KAITSEJALANÕUDE KATSEMEETODID

Protective clothing for users of hand-held chainsaws -
Part 3: Test methods for footwear (ISO 11393-3:2018)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 11393-3:2018 sisaldab Euroopa standardi EN ISO 11393-3:2018 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 11393-3:2018 consists of the English text of the European standard EN ISO 11393-3:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 24.10.2018.	Date of Availability of the European standard is 24.10.2018.
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English Version

Protective clothing for users of hand-held chainsaws - Part 3: Test methods for footwear (ISO 11393-3:2018)

Vêtements de protection pour utilisateurs de scies à
chaîne tenues à la main - Partie 3: Méthodes d'essai
pour chaussures (ISO 11393-3:2018)

Schutzkleidung für die Benutzer von handgeführten
Kettensägen - Teil 3: Prüfverfahren für Schuhwerk (ISO
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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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

European foreword

This document (EN ISO 11393-3:2018) has been prepared by Technical Committee ISO/TC 94 "Personal safety -- Personal protective equipment" in collaboration with 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of an identical text or by endorsement, at the latest by April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.

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 EN 381-3:1996.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 11393-3:2018 has been approved by CEN as EN ISO 11393-3:2018 without any modification.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets*, in collaboration with ISO Technical Committee TC 94, *Personal safety — Personal protective equipment*, Subcommittee SC 13, *Protective clothing*, in accordance with the agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 11393-3:1999), which has been technically revised. The main changes compared to the previous edition are as follows:

- in the Introduction, the term “hand-held chainsaws primarily constructed for cutting wood” has been added;
- the normative references have been updated;
- the term and definition 3.1 has been added;
- in Clause 4, the definition has been adapted to 6.2;
- in Clause 5, the definition and normative reference has been specified;
- in 6.1.2.2, 6.2.1, 6.2.2, 6.2.3, 6.2.4 and Clause 7, definitions have been specified;
- in 6.1.3, a new comprising procedure has been defined;
- in 6.2.1, the total number of cuts has been enlarged, “protection class” has been renamed as “level” and “class 0” has been deleted;
- in 6.2.4, an alternative system for fastening the footwear to the test rig has been added;
- in 6.2.5, the definition “non-steel” has been used following ISO 17249.

A list of all parts in the ISO 11393 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

This document forms part of a series concerned with personal protective equipment (PPE) designed to protect against the risks arising from the use of hand-held chainsaws primarily constructed for cutting wood.

No PPE can ensure a 100 % protection against cutting from a hand-held chainsaw. Nevertheless, experience has shown that it is possible to design PPE that offers a certain degree of protection.

Different functional principles may be applied in order to give protection. These include:

- a) chain slipping: on contact the chain does not cut the material;
- b) clogging: fibres are drawn by the chain into the drive sprocket and block chain movement;
- c) chain braking: fibres have a high resistance to cutting and absorb rotational energy, thereby reducing the chain speed.

Often more than one principle is applied.

Protective clothing for users of hand-held chainsaws —

Part 3: Test methods for footwear

1 Scope

This document specifies test methods for assessing the resistance of footwear to cutting by hand-held chainsaws.

This document is applicable only to footwear with integral protection.

NOTE Methods for testing other forms of foot and leg protection (e.g. gaiters) against hand-held chainsaws are covered in other parts of the ISO 11393 series.

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.

ISO 11393-1:2018, *Protective clothing for users of hand-held chainsaws — Part 1: Test rig for testing resistance to cutting by a chainsaw*

ISO 17249, *Safety footwear with resistance to chain saw cutting*

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1

cut-through

any visible change on the underside of the innermost layer of the test sample caused by the saw chain

3.2

integral protection

footwear in which the chainsaw protective material either comprises the material of the footwear or is permanently attached to the footwear

4 Test specimens

For footwear with steel toecaps, four pairs of three different sizes, representing the smallest, largest and medium size, shall be tested.

For footwear with non-steel toecaps, five pairs of three different sizes, representing the smallest, largest and medium size, shall be tested.