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STN	**Ochranné odevy pre používateľov ručných reťazových píl Časť 1: Skúšobné zariadenie na skúšanie odolnosti proti porezaniu reťazovou pílou (ISO 11393-1: 2018)**	**STN EN ISO 11393-1** 83 2720

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

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. 02/19

Rozpracovanie prekladom.

Obsahuje: EN ISO 11393-1:2018, ISO 11393-1:2018

Oznámením tejto normy sa ruší
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EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN ISO 11393-1

October 2018

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Supersedes EN 381-1:1993

English Version

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

Vêtements de protection pour utilisateurs de scies à chaîne tenues à la main - Partie 1: Banc d'essai à volant d'inertie pour les essais de résistance à la coupure par une scie à chaîne (ISO 11393-1:2018)

Schutzkleidung für die Benutzer von handgeführten Kettensägen - Teil 1: Prüfstand zur Prüfung des Widerstandes gegen Kettensägen-Schnitte (ISO 11393-1:2018)

This European Standard was approved by CEN on 12 August 2018.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO 11393-1:2018 E

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European foreword

This document (EN ISO 11393-1:2018) 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of an identical text or by endorsement, at the latest by April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.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 381-1:1993.

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 11393-1:2018 has been approved by CEN as EN ISO 11393-1:2018 without any modification.

INTERNATIONAL STANDARD

ISO 11393-1

Second edition
2018-09

Protective clothing for users of hand-held chainsaws —

Part 1: Test rig for testing resistance to cutting by a chainsaw

Vêtements de protection pour utilisateurs de scies à chaîne tenues à la main —

Partie 1: Banc d'essai à volant d'inertie pour les essais de résistance à la coupure par une scie à chaîne

Reference number
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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 11393-1:1998), which has been technically revised. The main changes compared to the previous edition are as follows:

— the figures have been redrawn;

— measurement tolerances have been added;

— in the Introduction, the term "hand-held chainsaws primarily constructed for cutting wood" has been added;

— in the Scope, the definition has been specified;

— the normative references have been updated;

— the terms and definitions have been revised and updated;

— in Clause 4, the description has been revised;

— in 5.2, the definition has been specified;

— in 5.3, the definition has been specified, a method for measuring the chain tension is added, the description of the saw chain has been updated and the definition of the release system has been revised;

— in 5.4, the description has been specified and the description of the foam has been updated;

— in 7.5, the description has been specified and the definition of the chain has been updated;

— in Annex A, the description has been revised;

— the previous Annex B has been removed and replaced with a new Annex B;

— a new Annex C has been added.

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.

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.

The portable hand-held powered chainsaws are normally operated by electric or internal combustion engines. Experience has shown that the specification of the fuel operated engine is difficult. In order to be able to control the testing parameters, these problems have been eliminated by selecting the flywheel method described in this document.

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.

INTERNATIONAL STANDARD **ISO 11393-1:2018(E)**

Protective clothing for users of hand-held chainsaws —

Part 1:
Test rig for testing resistance to cutting by a chainsaw

1 Scope

This document specifies the test rig for assessing the resistance to cutting of protective clothing, footwear and gloves by hand-held chainsaws. It also describes the calibration procedure.

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 1302, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation*

ISO 2060, *Textiles — Yarn from packages — Determination of linear density (mass per unit length) by the skein method*

ISO 3386-1, *Polymeric materials, cellular flexible — Determination of stress-strain characteristics in compression — Part 1: Low-density materials*

ISO 3801, *Textiles — Woven fabrics — Determination of mass per unit length and mass per unit area*

ISO 4915, *Textiles — Stitch types — Classification and terminology*

ISO 7211-2, *Textiles — Woven fabrics — Construction — Methods of analysis — Part 2: Determination of number of threads per unit length*

ISO 11393-2, *Protective clothing for users of hand-held chainsaws — Part 2: Performance requirements and test methods for leg protectors*

ISO 11393-3, *Protective clothing for users of hand-held chainsaws — Part 3: Test methods for footwear*

ISO 11393-4, *Protective clothing for users of hand-held chainsaws — Part 4: Performance requirements and test methods for protective gloves*

ISO 11393-5, *Protective clothing for users of hand-held chainsaws — Part 5: Performance requirements and test methods for protective gaiters*

ISO 11393-6, *Protective clothing for users of hand-held chainsaws — Part 6: Performance requirements and test methods for upper body protectors*

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

