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Second edition
2018-09

Protective clothing for users of hand-held chainsaws —

Part 2: Performance requirements and test methods for leg protectors

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

Partie 2: Exigences de performance et méthodes d'essai pour protège-jambes



Reference number
ISO 11393-2:2018(E)

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Published in Switzerland

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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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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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 11393-2:1999), 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 terms and definitions [3.1](#), [3.2](#), [3.3](#), [3.4](#), [3.5](#), [3.6](#), [3.7](#), [3.9](#), [3.10](#), [3.12](#), [3.14](#) and [3.17](#) have been added;
- in [Clause 4](#), subclauses have been added, PPE for users of left-handed chainsaws has been added, the previous “design B” has been deleted, a new “design B” has been added to describe chaps, the definition for trousers has been specified and a definition valid for chaps has been added;
- in [Clause 5](#), the definition has been specified;
- in [Clause 6](#), the clause has been completely revised, pre-treatment regulation for testing has been changed; the definitions in [6.2](#), [6.3](#), [6.5](#) and [6.7](#) have been specified, a definition valid for chaps has been added, cuts of the smallest and largest sizes have been added, measuring of chaps has been added, a test method ergonomic testing has been added;
- in [Clause 7](#), marking requirements have been revised;
- in [Clause 9](#), information requirements have been revised;
- in [Clause 9](#), the definition has been specified.

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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.