BS EN ISO 11393-2:2019

BSI Standards Publication

Protective clothing for users of hand-held chainsaws

Part 2: Performance requirements and test methods for leg protectors

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National foreword

This British Standard is the UK implementation of EN ISO 11393-2:2019. It is identical to ISO 11393-2:2018. It supersedes BS EN 381-2:1995 and BS EN 381-5:1995, which are withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PH/3/5, Mechanical Impact Personal Protective Equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

Protective clothing for users of hand-held chainsaws - Part 2: Performance requirements and test methods for leg protectors (ISO 11393-2:2018)

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 (ISO 11393-2:2018)

Schutzkleidung für die Benutzer von handgeführten Kettensägen - Teil 2: Leistungsanforderungen und Prüfmethoden für Beinschützer (ISO 11393-2:2018)

This European Standard was approved by CEN on 24 April 2019.

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European foreword

This document (EN ISO 11393-2:2019) 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of an identical text or by endorsement, at the latest by March 2020, and conflicting national standards shall be withdrawn at the latest by March 2020.

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 381-2:1995 and EN 381-5:1995.

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(s).

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

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Endorsement notice

The text of ISO 11393-2:2018 has been approved by CEN as EN ISO 11393-2:2019 without any modification.

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Annex ZA
(informative)

Relationship between this European Standard and the essential requirements of REGULATION (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment aimed to be covered

This European Standard has been prepared under a Commission's standardization request to provide one voluntary means of conforming to essential requirements of Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment.

Once this standard is cited in the Official Journal of the European Union under that Regulation (EU) 2016/425, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Regulation (EU) 2016/425 and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Regulation (EU) 2016/425

Essential Requirements of Regulation (EU) 2016/425	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1.1.1. Ergonomics	4.4; 4.8.2	
1.1.2.1. Optimum level of protection	4.4; 4.8.2	
1.1.2.2. Classes of protection appropriate to different levels of risk	4.7.1	
1.2.1. Absence of inherent risks and other nuisance factors	4.4; 4.5; 4.6; 4.8.2	
1.2.1.1. Suitable constituent materials	4.2	
1.2.1.2 Satisfactory surface condition of all PPE parts in contact with the user	4.4	
1.2.1.3 Maximum permissible user impediment	4.4	
1.3.1. Adaptation of PPE to user morphology	4.4; 4.8.2	
1.3.2. Lightness and strength	4.8.	
1.4. Manufacturer's instructions and information	9; 7.	
2.1 PPE incorporating adjustment systems	4.4; 4.8.2	
2.4. PPE subject to ageing	9	

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2.12. PPE bearing one or more identification markings or indicators directly or indirectly relating to health and safety	8.	
3.3. Protection against mechanical injuries	4.7.2	

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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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 11393-2:1999), 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.

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