

**SLOVENSKI STANDARD**  
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**01-februar-2017**

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**Varovalna obleka za uporabnike ročnih verižnih žag - 3. del: Preskusne metode za obutev (ISO/DIS 11393-3:2016)**

Protective clothing for users of hand-held chain-saws - Part 3: Test methods for footwear (ISO/DIS 11393-3:2016)

Schutzkleidung für die Benutzer von handgeführten Kettensägen - Teil 3: Prüfverfahren für Schuhwerk (ISO/DIS 11393-3:2016)

Vêtements de protection pour utilisateurs de scies à chaîne tenues à la main - Partie 3: Méthodes d'essai pour chaussures (ISO/DIS 11393-3:2016)

**Ta slovenski standard je istoveten z: prEN ISO 11393-3**

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# DRAFT INTERNATIONAL STANDARD

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### Protective clothing for users of hand-held chain-saws — Part 3: Test methods for footwear

*Vêtements de protection pour utilisateurs de scies à chaîne tenues à la main —**Partie 3: Méthodes d'essai pour chaussures*

ICS: 13.340.50

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## ISO/DIS 11393-3:2016(E)

## 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 11393-3 was prepared by Technical Committee ISO/TC 94, *Personal safety - Protective clothing and equipment*, Subcommittee SC 13, and by Technical Committee CEN/TC 162, *Protective clothing including hand and arm protection and lifejackets* in collaboration.

ISO 11393 consists of the following parts, under the general title *Protective clothing for users of hand-held chain-saws*:

- *Part 1: Test rig for testing resistance to cutting by a chain-saw*
- *Part 2 Test methods and performance requirements for leg protectors*
- *Part 3: Test methods for footwear*
- *Part 4: Test methods and performance requirements for protective gloves*
- *Part 5: Test methods and performance requirements for protective gaiters*
- *Part 6: Test methods and performance requirements for jackets with protection against cuts*

This document will supersede the corresponding ISO 11393-3:1999 and EN 381-3:1996.

## Introduction

This part of draft ISO 11393 forms part of a series concerned with personal protective equipment designed to protect against the risks arising from the use of hand-held chain-saws primarily constructed for cutting wood.

No personal protective equipment can ensure a 100 % protection against cutting from a hand-held chain-saw. Nevertheless, experience has shown that it is possible to design personal protective equipment which 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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# Protective clothing for users of hand-held chain-saws —

## Part 3: Test methods for footwear

### 1 Scope

This part of ISO 11393 specifies test methods to be used to assess the resistance of footwear to cutting by hand-held chain-saws.

This part of ISO 11393 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 chain-saws will be covered in other parts of ISO 11393.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

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

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

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

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### 3 Terms and definitions

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

#### 3.1

##### **footwear with integral protection**

footwear in which the chain-saw protective material either comprises the material of the footwear or is permanently attached to the footwear

#### 3.2

##### **Damage**

Damage in the last layer to the skin means that a hole is cut into this material or a few yarns are visible hit by the saw

#### 3.3

##### **Cut through**

term describing that a saw chain has damaged and/or perforated the innermost layer of the test sample

### 4 Test specimens

For footwear with metallic toecaps, four pairs, size 42 (Paris points), size 8 (UK) shall be tested.

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For footwear with non-metallic toecaps, five pairs, size 42 (Paris points), size 8 (UK) shall be tested.

## 5 Checking of protective coverage

### 5.1 Apparatus

#### 5.1.1 Sizing body for laced footwear,

The sizing body for laced footwear shall have a total height of minimum 500 mm, comprising:

- ankle cylinder: height  $(76 \pm 1)$  mm; diameter  $(84 \pm 1)$  mm;
- conical section: height  $(274 \pm 1)$  mm;
- upper cylinder: height 150 mm min.; diameter  $(110 \pm 1)$  mm.

See [Figure 1](#):

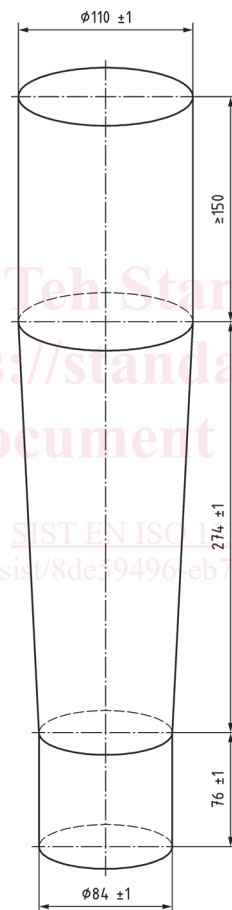


Figure 1 — Sizing body for laced footwear

### 5.2 Procedure

Insert the sizing body for laced footwear into the leg of the footwear and tighten any fastenings (e.g. laces or straps) about it. Check that the coverage requirements given in ISO 17249, Clause 6.2 and 6.3 are fulfilled.

Test one pair. Samples that have been cut tested in [Clause 6.2](#) may be used.