

**Kaitserõivad mootorsae kasutajatele.
Osa 1: Seade vastupidavuse
katsetamiseks mootorsae sisselõigetele**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 381-1:1999 sisaldab Euroopa standardi EN 381-1:1993 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 381-1:1999 consists of the English text of the European standard EN 381-1:1993.</p> <p>This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>Normdokumendi EN 381 käesolev osa määrab kindlaks katseseadme, mida kasutatakse individuaalse kaitsevarustuse kaitsevõime hindamiseks kettsaagide sisselõigete korral. See osa kirjeldab ka kalibreerimisprotsessi.</p>	<p>Scope:</p>
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Võtmesõnad: individuaalne kaitsevarustus, jalad, kaitseriietus, katsestendid, kettsaad, löögikindlus, tehnilised andmed, tööriietus, õnnetuse vältimine

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English version

Protective clothing for users of hand-held chain saws

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

Vêtements de protection pour utilisateurs de scies à chaîne tenues à la main; Partie 1: Banc d'essai pour les essais de résistance à la coupure par une scie à chaîne

Schutzkleidung für die Benutzer von handgeführten Kettensägen; Teil 1: Prüfstand zur Prüfung des Widerstandes gegen Kettensägen-Schnitte

This European Standard was approved by CEN on 1992-10-25.

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

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CEN

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Foreword

This European Standard was prepared by the Technical Committee CEN/TC 162 "Protective clothing including hand and arm protection and lifejackets", of which the secretariat is held by DIN.

This European Standard has been prepared under a mandate given to CEN by the Commission of the European Communities and the European Free Trade Association, and supports essential requirements of the EC Directive(s).

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 August 1993, and conflicting national standards shall be withdrawn at the latest by August 1993.

The Standard was approved and in accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

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0 Introduction

This European Standard 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.

No protective equipment can ensure 100% protection against cutting from a hand-held chain saw.

Nevertheless, experience has shown that it is possible to design protective equipment which offers a certain degree of protection. Different functional principles may be applied in order to give protection. These include

- chain slipping: on contact the chain does not cut the material;
- clogging: fibres are drawn with the chain into the drive sprocket and block chain movement;
- 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.

1 Scope

This first part of this European Standard specifies the test rig to be used to assess the resistance of personal protective equipment to cutting by hand-held chain saws. This part also describes the calibration procedure.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

prEN 381-2	Protective clothing for users of hand-held chainsaws - Part 2: Test method for leg protection
prEN 381-3	Part 3: Test method for boots
prEN 381-4	Part 4: Test method for chainsaw protective gloves
prEN 381-5	Part 5: Requirements for leg protection
prEN 381-6	Part 6: Requirements for boots
prEN 381-7	Part 7: Requirements for chainsaw protective gloves
prEN 381-8	Part 8: Test method for chainsaw protective gaiters
prEN 381-9	Part 9: Requirements for chainsaw protective gaiters

- ISO 4915 1991 Textiles - Stitch types - Classification and terminology
- ISO 3386-1 1986 Polymeric materials, cellular flexible - Determination of stress-strain characteristics in compression -
Part 1: Low-density materials

3 Definitions

For the purposes of this standard the following definitions apply.

3.1 Chain saw

Saw with teeth on an endless chain.

3.2 Resistance to cutting

A general term for the various ways in which a protective material can reject or decelerate the chain of a chain saw. It is measured by applying a moving saw chain with a certain chain speed and energy and studying whether the chain cuts through.

3.3 Cut-through

Cut-through is the term describing that a saw chain has penetrated through a sample, so that the cut is longer than 10 mm in the layer nearest to the body.

3.4 Chain stopping time

The chain stopping time is the period of time taken for the saw chain to decelerate from a specified speed to complete rest, when the saw unit is not under power.

3.5 Free-running stopping time

The free-running stopping time is the chain stopping time when the chain is not brought into contact with a test piece.

3.6 Threshold chain speed

The threshold chain speed is the maximum speed which a sample can withstand during testing without cut-through occurring.

3.7 Chain slipping

Chain slipping is a protective effect whereby the saw chain slides over the surface of the protective material without cutting in.

3.8 Clogging

Clogging is an effect whereby fibres, yarns or other materials are drawn by the saw chain into the saw unit, thereby stopping the movement of the saw chain.