



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 381-10:2002

**Protective clothing for users of hand-
held chainsaws - Part 10: Test method
for upper body protectors**

Vêtements de protection pour
utilisateurs de scies à chaîne tenues à la
main - Partie 10: Méthode d'essai pour
vestes de protection

Schutzkleidung für die Benutzer von
handgeführten Kettensägen - Teil 10:
Prüfverfahren für
Oberkörperschutzmittel

10/2002



National Foreword

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EUROPEAN STANDARD ^{ILNAS-EN 381-10:2002} **EN 381-10**
NORME EUROPÉENNE
EUROPÄISCHE NORM

October 2002

ICS 13.340.10

English version

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Kettensägen - Teil 10: Prüfverfahren für
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Foreword

This document (EN 381-10:2002) has been prepared by the 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of an identical text or by endorsement, at the latest by April 2003, and conflicting national standards shall be withdrawn at the latest by April 2003.

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 relationship with EU Directive(s), see informative annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

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 chainsaws.

Accidents occur due to a number of complex reasons, but a common factor is incorrect use of the chainsaw. The importance of correct training and proper use of a chainsaw in preventing accidents cannot be underestimated.

In some countries chainsaw users adopt working practices, which together with training makes the use of chainsaw protective upper body protectors unnecessary. These usually include the instruction to hold the chainsaw with both hands and to use the chain brake if it becomes necessary to stop cutting. It is often found that for ergonomic reasons it is impractical to protect the upper body.

All parts of the upper body have been shown to be at risk when using a chainsaw.

In this European Standard, specifications for the protective coverage and performance of the upper body protectors are given. No personal protective equipment can ensure a 100% protection against cutting from a hand-held chainsaw.

Nevertheless, experience has shown that it is possible to design personal protective equipment, 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 with 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 in chainsaw protective clothing. Upper body protectors meeting this standard are meant to be used by users working off the ground and where risk assessment shows that there is a significant risk to be cut by the moving chain on the upper part of the body such as when working from a sky lift and carrying out tree surgery.

1 Scope

This European Standard, part 10, specifies the procedures for sampling and pre-treatment of upper body protectors intended to provide protection against cutting by hand-held chainsaws, the measurement of the protective coverage, the apparatus and test methods for assessing resistance to cutting, and the practical performance test for evaluating ergonomic properties in relation to part 11 of this standard

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 (including amendments).