
Stroji za gozdarstvo - Varnostne zahteve in preskušanje za motorne žage za obvejevanje z drogom - 1. del: Stroji z integriranim motorjem z notranjim zgorevanjem (ISO 11680-1:2000)

Machinery for forestry - Safety requirements and testing for pole-mounted powered pruners - Part 1: Units fitted with an integral combustion engine (ISO 11680-1:2000)

Forstmaschinen - Sicherheitstechnische Anforderungen und Prüfung für motorbetriebene Hochentaster - Teil 1: Geräte mit integriertem Verbrennungsmotor (ISO 11680-1:2000)

Matériel forestier - Exigences de sécurité et essais pour les perches élagueuses a moteur - Partie 1: Machines équipées d'un moteur a combustion interne intégré (ISO 11680-1:2000)

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Forstmaschinen - Sicherheitstechnische Anforderungen und Prüfung für motorbetriebene Hochentaster - Teil 1: Geräte mit integriertem Verbrennungsmotor (ISO 11680-1:2000)

This European Standard was approved by CEN on 27 July 2000.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

Corrected 2001-09-05

The text of the International Standard ISO 11680-1:2000 has been prepared by Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry" in collaboration with Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry", the secretariat of which is held by AFNOR.

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 February 2001, and conflicting national standards shall be withdrawn at the latest by February 2001.

This European Standard 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 ZB, which is an integral part of this standard.

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 11680-1:2000 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to International Standards are listed in annex ZA (normative).

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Annex ZA
(normative)**Normative references to international publications with their relevant European publications**

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).

NOTE Where an International Publication has been modified by common modifications, indicated by (mod.), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 266	1997	Acoustics - Preferred frequencies	EN ISO 266	1997
ISO 3744	1994	Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane	EN ISO 3744	1995
ISO 8662-1	1988	Hand-held portable power tools - Measurement of vibrations at the handle - Part 1: General	EN 28662-1	1992
ISO 11201	1995	Acoustics - Noise emitted by machinery and equipment - Measurement of emission sound pressure levels at a work station and at other specified positions - Engineering method in an essentially free field over a reflecting plane	EN ISO 11201	1995

Annex ZB
(informative)

Relationship of this document with EC Directives

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 EC Directive(s) :

Machinery Directive 98/37/EC, amended by Directive 98/79/EC.

Compliance with this document provides one means of conforming with the specific essential requirements of the Directive concerned and associated EFTA regulations.

The clauses of this standard are likely to support requirements of the directive mentioned above, except Essential Requirement (ESR) 1.7.4, which is dealt with only partially.

WARNING: Other requirements and other EC Directives may be applicable to the product(s) falling within the scope of this document.

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STANDARD

ISO
11680-1

First edition
2000-08-01

**Machinery for forestry — Safety
requirements and testing for pole-mounted
powered pruners —**

**Part 1:
Units fitted with an integral combustion
engine**

*Matériel forestier — Exigences de sécurité et essais pour les perches
élagueuses à moteur —*

Partie 1: Machines équipées d'un moteur à combustion interne intégré

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ISO 11680-1:2000(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 3.

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 part of ISO 11680 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 11680-1 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 17, *Manually portable forest machinery*.

ISO 11680 consists of the following parts, under the general title *Machinery for forestry — Safety requirements and testing for pole-mounted powered pruners*:

- *Part 1: Units fitted with an integral combustion engine*
- *Part 2: Units for use with a back-pack power unit*

Annex A to D form a normative part of this part of ISO 11680. Annex E is for information only.

For the purposes of this part of ISO 11680, the CEN annex regarding fulfilment of European Council Directives has been removed.

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Introduction

The extent to which hazards are covered is indicated in the scope of this part of ISO 11680. In respect of hazards not covered by this part of ISO 11680, it is intended that machinery comply as appropriate with ISO/TR 12100.

Certain noise- and vibration-reduction measures are covered in this part of ISO 11680 for the type of machinery concerned. It is the intention of ISO/TC 23/SC 17 to collect noise and vibration values for each forestry-machine type in accordance with relevant measurement standards. These values will be used to define the “state of the art” levels based on principles to be established by SC 17. The interaction of noise and vibration on the machine characteristics will be assessed, and the relationship between “state of the art” values and exposure limits considered.

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Machinery for forestry — Safety requirements and testing for pole-mounted powered pruners —

Part 1: Units fitted with an integral combustion engine

1 Scope

This part of ISO 11680 specifies safety requirements, and the verification of those requirements, for the design, fabrication and use of portable, hand-held, pole-mounted powered pruners, having an integral combustion engine as the power source and using a drive shaft to transmit power to cutting attachments. The cutting attachments covered are saw chains, and reciprocating and circular saw blades.

This part of ISO 11680 describes methods for the elimination or reduction of hazards arising from their use. In addition it specifies the type of information on safe working practices to be provided by the manufacturer. It does not cover the risk of electric shock from overhead electric power lines during use of the pruners, with the exception of warnings and advice intended for inclusion in instruction handbooks. A test method and safety requirements addressing this risk are yet to be developed.

The list of significant hazards which require action to reduce the risk is given in annex A.

Environmental aspects have not been considered.

This part of ISO 11680 applies primarily to pruners manufactured after its date of issue.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 11680. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 11680 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 266:1997, *Acoustics — Preferred frequencies*.

ISO 3744:1994, *Acoustics — Determination of sound power levels of noise sources using sound pressure — Engineering method in an essentially free field over a reflecting plane*.

ISO 3767-5:1992, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 5: Symbols for manual portable forestry machinery*.

ISO 6531:1999, *Machinery for forestry — Portable hand-held chain-saws — Vocabulary*.

ISO 7112:1999, *Machinery for forestry — Portable hand-held brush-cutters and grass-trimmers — Vocabulary*.

ISO 7113:1999, *Portable hand-held forestry machines — Cutting attachments for brush cutters — Single-piece metal blades*.

ISO 11680-1:2000(E)

ISO 8662-1:1988, *Hand-held portable power tools — Measurement of vibrations at the handle — Part 1: General.*

ISO 8893:1997, *Forestry machinery — Portable brush cutters and grass-trimmers — Engine performance and fuel consumption.*

ISO 11201:1995, *Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Engineering method in an essentially free field over a reflecting plane.*

ISO 11684:1995, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Safety signs and hazard pictorials — General principles.*

ISO/TR 12100-1:1992, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology.*¹⁾

ISO/TR 12100-2:1992, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles and specifications.*²⁾

ISO 13852:1996, *Safety of machinery — Safety distances to prevent danger zones being reached by the upper limbs.*³⁾

IEC 60651, *Sound level meters.*

IEC 60804, *Integrating-averaging sound level meters.*

IEC 60335-1:1991, *Safety of household and similar electrical appliances — Part 1: General requirements (third edition).*

IEC 61260:1995, *Electroacoustics — Octave-band and fractional-octave-band filters.*

3 Terms and definitions

For the purposes of this part of ISO 11680, the following terms and definitions apply.

3.1**pole-mounted powered pruner****pruner**

portable, hand-held machine fitted with a cutting attachment mounted on a pole to enable an operator to cut the branches of standing trees

NOTE See example, Figure 1.

3.2**unit**

complete machine including power source, drive shaft, cutting attachment and guard, but excluding harness

3.3**cutting attachment**

cutting device in the form of a reciprocating blade, circular saw blade with its retainer, or saw chain with its guide bar

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1) Equivalent to EN 292-1:1991.

2) Equivalent to EN 292-2:1991.

3) Equivalent to EN 294:1992.