METSATÖÖMASINAD. MOOTORIGA KÕRGLAASIMISSAAGIDE OHUTUSNÕUDED JA KATSETAMINE. OSA 1: SISEPÕLEMISMOOTORIGA VARUSTATUD MASINAD

Machinery for forestry - Safety requirements and testing for pole-mounted powered pruners - Part 1: Machines fitted with an integral combustion engine (ISO 11680-1:2021)



#### EESTI STANDARDI EESSÕNA

#### NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 11680-1:2021 sisaldab Euroopa standardi EN ISO 11680-1:2021 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 11680-1:2021 consists of the English text of the European standard EN ISO 11680-1:2021.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 24.11.2021.

Date of Availability of the European standard is 24.11.2021.

Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.

The standard is available from the Estonian Centre for Standardisation and Accreditation.

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ICS 65.060.80

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## EUROPEAN STANDARD

# NORME EUROPÉENNE

### **EUROPÄISCHE NORM**

November 2021

EN ISO 11680-1

ICS 65.060.80; C

Supersedes EN ISO 11680-1:2011

#### **English Version**

Machinery for forestry - Safety requirements and testing for pole-mounted powered pruners - Part 1: Machines fitted with an integral combustion engine (ISO 11680-1:2021)

Matériel forestier - Exigences de sécurité et essais pour les perches élagueuses à moteur - Partie 1: Machines équipées d'un moteur à combustion interne intégré (ISO 11680-1:2021)

Forstmaschinen - Sicherheitstechnische Anforderungen und Prüfung für motorbetriebene Hochentaster - Teil 1: Maschinen mit Antrieb durch integrierten Verbrennungsmotor (ISO 11680-1:2021)

This European Standard was approved by CEN on 9 October 2021.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

#### **European foreword**

This document (EN ISO 11680-1:2021) 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 May 2022, and conflicting national standards shall be withdrawn at the latest by May 2022.

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 ISO 11680-1:2011.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

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

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According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 11680-1:2021 has been approved by CEN as EN ISO 11680-1:2021 without any modification.

### Annex ZA

(informative)

# Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered

This European Standard has been prepared under Commission's standardization request "M/396 mandate to CEN and CENELEC for standardisation in the field of machinery" to provide one voluntary means of conforming to essential requirements of the Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery.

Once this standard is cited in the Official Journal of the European Union under that Directive, 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 Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and and Annex I of Directive 2006/42/EC

The relevant Essential Requirements of EU Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS	CO,	
1.1.2. Principles of safety integration	4.1	
1.1.3. Materials and products	4.12	
1.1.5. Design of machinery to facilitate its handling	4.3; 4.4	
1.1.6. Ergonomics	4.3; 4.4	
1.1.7. Operating positions	4.15; 5.1; 5.2	
1.2. CONTROL SYSTEMS		
1.2.1. Safety and reliability of control systems	4.8; 4.9; 4.10; 4.11	O,
1.2.2. Control devices	4.8; 4.9; 4.10; 5.2	.0
1.2.3. Starting	4.8; 4.10	9/
1.2.4.1. Normal stop	4.9	0,
1.2.4.2. Operational stop	4.11	4
1.2.4.4. Assembly of machinery	4.9; 4.11	
1.2.6. Failure of the power supply	4.8; 4.9	
1.3. PROTECTION AGAINST MECHANICAL HAZARDS		()
1.3.1. Risk of loss of stability	-	not covered
1.3.2. Risk of break-up during	4.5; 4.19; 4.20; 5.1	

The relevant Essential Requirements of EU Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
operation		
1.3.3. Risks due to falling or ejected objects	-	not covered
1.3.4. Risks due to surfaces, edges or angles	4.1; 4.6	
1.3.6. Risks related to variations in operating conditions	4.10	
1.3.7. Risks related to moving parts	4.2; 4.7; 4.11	
1.3.8. Choice of protection against risks arising from moving parts		
1.3.8.1. Moving transmission parts	4.2	
1.3.8.2. Moving parts involved in the process	4.7	
1.3.9. Risks of uncontrolled movements	4.10; 4.11	
1.4. REQUIRED CHARACTERISTICS OF GUARDS AND PROTECTIVE DEVICES	0,	
1.4.1. General requirements	4.2, 4.1.4	
1.4.2.1. Fixed guards	- 70	not covered
1.4.2.2. Interlocking movable guards	- 4	not covered
1.4.2.3. Adjustable guards restricting access		not covered
1.4.3. Special requirements for protective devices	4.2; 4.7	
1.5. RISKS DUE TO OTHER HAZARDS	(Q.	
1.5.2. Static electricity	-	not covered
1.5.3. Energy supply other than electricity	4.12; 4.19; 4.20	
1.5.4. Errors of fitting	5.1	0
1.5.5. Extreme temperatures	4.14	6.
1.5.6. Fire	4.12; 5.1	7
1.5.8. Noise	4.17; 5.1	
1.5.9. Vibrations	4.16; 5.1	1/2
1.5.11. External radiation	4.18	(0)
1.5.13. Emissions of hazardous materials and substances	4.12; 4.15	
1.5.15. Risk of slipping, tripping or	-	not covered

The relevant Essential Requirements of EU Directive 2006/42/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
falling		
1.6. MAINTENANCE		
1.6.1. Machinery maintenance	4.5.1; 5.1	
1.6.2. Access to operating positions and servicing points	-	not covered
1.6.3. Isolation of energy sources	4.9	
1.6.4. Operator intervention	5.1	
1.6.5. Cleaning of internal parts	-	not covered
1.7. INFORMATION		
1.7.1. Information and warnings on the machinery	5.2	
1.7.1.1. Information and information devices	5.2	
1.7.1.2. Warning devices	- 9	not covered
1.7.2. Warning of residual risks	5.1; 5.2	
1.7.3. Marking of machinery	5.2	
1.7.4. Instructions	5.1	
1.7.4.1. General principles for the drafting of instructions	5.1	
1.7.4.2. Contents of the instructions	5.1	
1.7.4.3. Sales literature	0	not covered
2.2. PORTABLE HAND-HELD AND/OR HAND-GUIDED MACHINERY		
2.2.1. General	4.3; 4.9; 4.10; 4.11	
2.2.1.1. Instructions	5.1	0,,

**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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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This document was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 17, *Manually portable (hand-held) powered lawn and garden equipment and forest machinery*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 144, *Tractors and machinery for agriculture and forestry*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 11680-1:2011), which has been technically revised.

The main changes compared to the previous edition are as follows:

- <u>Clause 1</u>, the scope has been broadened to include extended and telescopic machines;
- <u>Clause 3</u>, definitions for "cutting attachment", "dry weight", "extendable", "hand-held" and "telescopic" have been added;
- Figure 1 has been amended to show different types of pole mounted powered pruners;
- Clause 4:
  - a new subclause, <u>4.2</u> "Protection against contact with power driven components", has been added;
  - in <u>4.4</u>, harness requirements have been reworded and amended;
  - in <u>4.5.2</u>, the requirements for circular saw blade securing have been clarified;
  - in 4.7, the distance to the cutting attachment have been clarified;
  - in 4.10.2, the requirement to test the throttle trigger lockout function has been added;
  - in 4.12, the verification method for fuel tank ventilation system has been added;
  - in 4.14, the requirements for protection against hot surfaces have been reworded and amended;

- in 4.19, fuel feed line strength and accessibility requirements have been added;
- in 4.20, fuel tank structural integrity requirements have been added;
- Clause 5:
  - in 5.1, the requirements for instructions have been revised;
  - in <u>5.2</u>, the marking and warning requirements have been rearranged.

A list of all parts in the ISO 11680 series can be found on the ISO website.

an this docun odies can be for. Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.