

KÄESHOITAVAD MOOTORIGA HEKITRIMMERID.
OHUTUS

Powered hand-held hedge trimmers - Safety (ISO
10517:2019)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 10517:2019 sisaldab Euroopa standardi EN ISO 10517:2019 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 10517:2019 consists of the English text of the European standard EN ISO 10517:2019.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 27.02.2019.	Date of Availability of the European standard is 27.02.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 65.060.70

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

EN ISO 10517

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2019

ICS 65.060.70

Supersedes EN ISO 10517:2009, EN ISO
10517:2009/A1:2003

English Version

Powered hand-held hedge trimmers - Safety (ISO 10517:2019)

Taille-haies portatifs à moteur - Sécurité (ISO
10517:2019)

Tragbare motorgetriebene Heckenscheren - Sicherheit
(ISO 10517:2019)

This European Standard was approved by CEN on 26 November 2018.

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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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 10517:2019) 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 August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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 10517:2009 and EN ISO 10517:2009/A1:2013.

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 the 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, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 10517:2019 has been approved by CEN as EN ISO 10517:2019 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC

This European Standard has been prepared under Commission's standardization request "M/396 mandate to CEN and CENELEC for standardization in the field of machinery" to provide one voluntary means of conforming to Essential Requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast).

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 EU Directive 2006/42/EC

Essential requirements of EU Directive 2006/42/EC	Clause(s)/subclause(s) of this EN	Remarks/Notes
Within the limits of the scope all relevant essential requirements are covered	All normative clauses	For relation of normative clauses of this standard to significant hazards/relevant essential requirements of 2006/42/EC see clause 4 "List of significant hazards" of this standard in combination with annex D "Examples of significant hazards, hazardous situations, hazardous events and their relation to the Essential Requirements of the Machinery Directive 2006/42/EC" of CEN Guide 414 https://boss.cen.eu/ref/CEN_414.pdf .

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.

Contents

	Page
Foreword	v
Introduction	vi
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 List of significant hazards	5
5 Safety requirements and/or verification of safety measures	7
5.1 General.....	7
5.2 Handles and cutting device.....	7
5.2.1 Handles.....	7
5.2.2 Hand protection.....	8
5.2.3 Handle strength.....	10
5.2.4 Cutting device and blunt extensions.....	11
5.2.5 Shoulder harness requirements.....	15
5.2.6 Holding moment.....	15
5.2.7 Blade stopping time.....	18
5.2.8 Cutting device cover.....	20
5.2.9 Cutting device accessories.....	20
5.3 Starting and idling.....	20
5.4 Controls.....	20
5.4.1 Marking.....	20
5.4.2 Throttle control.....	20
5.4.3 Engine stop.....	21
5.5 Power driven parts protection.....	21
5.6 Heat protection.....	21
5.6.1 General.....	21
5.6.2 Test equipment, test conditions and test method.....	21
5.6.3 Test acceptance.....	22
5.7 Fuel tank.....	22
5.8 Engine exhaust.....	22
5.9 Electrical requirements of ignition system.....	23
5.9.1 General.....	23
5.9.2 Ignition circuit.....	23
5.9.3 Test method.....	23
5.9.4 Test acceptance.....	23
5.10 Vibration.....	23
5.10.1 Reduction by design and protective measures.....	23
5.10.2 Reduction by information.....	24
5.10.3 Vibration measurement.....	24
5.11 Noise.....	24
5.11.1 Reduction by design and by information.....	24
5.11.2 Noise emission measurement.....	24
6 Information for use	24
6.1 Instructions for use.....	24
6.2 Marking.....	25
6.3 Warnings.....	26
6.4 Test of labels.....	26
6.4.1 Preparation of test specimens and control specimens.....	26
6.4.2 Wipe resistance test.....	27
6.4.3 Adhesion test.....	27
Annex A (informative) Safety instructions	28

Annex B (informative) Examples of safety signs, symbols and pictorials	31
Bibliography	33

This document is a preview generated by EVS

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 www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 13, *Powered lawn and garden equipment*.

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 www.iso.org/members.html.

This third edition cancels and replaces the second edition (ISO 10517:2009), which has been technically revised. It also incorporates the Amendment ISO 10517:2009/Amd 1:2013. The main changes compared to the previous edition are as follows:

- the noise measurement procedure has been removed from the body of the document and has been replaced with the reference to ISO 22868;
- the vibration measurement procedure has been removed from the body of the document and has been replaced with the reference to ISO 22867;
- handle strength requirement has been added;
- extended-reach hedge trimmers have been better implemented in the body of the document;
- a test for the labels has been added;
- several text changes have been made for better understanding.

Introduction

This document is a type-C standard as stated in ISO 12100.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organisations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate in the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the scope of this document.

When requirements of this type-C standard are different from those which are stated in the type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

Powered hand-held hedge trimmers — Safety

1 Scope

This document specifies safety requirements and measures for the verification of the design and construction of hand-held, integrally-driven combustion engine hedge trimmers (hereafter referred to as “hedge trimmers”) designed to be used by a single operator for trimming hedges and bushes while utilizing one or more linear reciprocating cutter blades.

This document is also applicable to “split-boom” type hedge trimmers and to multi-purpose machines when configured as a hedge trimmer.

It establishes methods for the elimination or reduction of hazards arising from the use of the hedge trimmers. In addition, it specifies the type of information to be provided by the manufacturer on safe working practices.

This document deals with all significant hazards, hazardous situations and events relevant to powered hand-held hedge trimmers when they are used as intended and under the conditions of misuse that are reasonably foreseeable by the manufacturer (see [Clause 4](#)).

This document is not applicable to hedge trimmers with an engine displacement over 80 cm³, nor is it applicable to hedge trimmers manufactured before the date of its publication.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3767-1, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols*

ISO 3767-3, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 3: Symbols for powered lawn and garden equipment*

ISO 3767-4, *Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 4: Symbols for forestry machinery*

ISO 3864-2, *Graphical symbols — Safety colours and safety signs — Part 2: Design principles for product safety labels*

ISO 7010, *Graphical symbols — Safety colours and safety signs — Registered safety signs*

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

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 13857:2008, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

ISO 22867, *Forestry and gardening machinery — Vibration test code for portable hand-held machines with internal combustion engine — Vibration at the handles*

ISO 22868, *Forestry and gardening machinery — Noise test code for portable hand-held machines with internal combustion engine — Engineering method (Grade 2 accuracy)*