

TEEHOOLDUSMASINAD. OHUTUS. OSA 3-1: TALVISE
HOOLDUSE MASINAD. NÕUDED PÖÖRLEVATE
SEADMETEGA PUHASTUSMASINATELE JA
LUMESAHKADELE

Road operation machinery - Safety - Part 3-1: Winter
service machines - Requirements for snow clearing
machines with rotating tools and snow ploughs

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 17106-3-1:2021 sisaldab Euroopa standardi EN 17106-3-1:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 17106-3-1:2021 consists of the English text of the European standard EN 17106-3-1:2021.
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 20.10.2021.	Date of Availability of the European standard is 20.10.2021.
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ICS 43.160, 93.080.99

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English Version

Road operation machinery - Safety - Part 3-1: Winter
service machines - Requirements for snow clearing
machines with rotating tools and snow ploughs

Machines d'exploitation des routes - Sécurité - Partie 3-
1 : Machines de service hivernal - Prescriptions
spécifiques pour les machines de déneigement à outil
rotatif et lames de déneigement

Erdbaumaschinen - Sicherheit - Teil 3-1 Maschinen für
den Winterdienst - Anforderungen für
Schneeräumgeräte mit rotierenden Werkzeugen

This European Standard was approved by CEN on 16 August 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

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European foreword

This document (EN 17106-3-1:2021) has been prepared by Technical Committee CEN/TC 151 “Construction equipment and building material machines - Safety”, 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 2022, and conflicting national standards shall be withdrawn at the latest by April 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 13019:2001+A1:2008, EN 13021:2003+A1:2008, EN 13524:2003+A2:2014.

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).

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

EN 17106:2021 consists of the following parts under the general title “Road operation machinery – Safety”:

- Part 1: General requirements
- Part 2: Specific requirements for road surface cleaning machines
- Part 3-1: Winter service machines - Specific requirements for snow clearing machines with rotating tools and snow ploughs
- Part 3-2: Winter service machines - Specific requirements for spreading machines
- Part 4: Road service area maintenance machines - Specific requirements for grass and brush cutting machines

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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Introduction

This document is a type-C standard as stated in EN ISO 12100:2010.

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 organizations, 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 at 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 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.

1 Scope

This document together with EN 17106-1:2021 deals with all significant hazards, hazardous situations and events relevant to winter service machines – snow clearing machines with rotating tools and snow ploughs when used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer (see Annex A) associated with the whole lifetime of the machine as described in EN ISO 12100:2010, 5.4.

The requirements of this document are complementary to the common requirements formulated in EN 17106-1:2021. This document does not repeat the requirements from EN 17106-1:2021 but supplements or modifies the requirements for winter service machines – snow clearing machines with rotating tools and snow ploughs.

This document is not applicable to snow clearing machines with rotating tools and snow ploughs 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.

EN 17106-1:2021, *Road operation machinery - Safety - Part 1: General requirements*

EN ISO 6682:2008, *Earth-moving machinery - Zones of comfort and reach for controls (ISO 6682:1986, including Amd 1:1989)*

EN ISO 12100:2010, *Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)*

EN ISO 13850:2015, *Safety of machinery - Emergency stop function - Principles for design (ISO 13850:2015)*

EN ISO 13857:2019, *Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2019)*

EN 15583-2:2012, *Winter maintenance equipment - Snow ploughs - Part 2: Testing criteria and their requirements*

ISO 5006:2017, *Earth-moving machinery - Operator's field of view - Test method and performance criteria*

ISO 14401-1:2009, *Earth-moving machinery - Field of vision of surveillance and rear-view mirrors - Part 1: Test methods*

ISO 14401-2:2009, *Earth-moving machinery - Field of vision of surveillance and rear-view mirrors - Part 2: Performance criteria*