PÕLLUMAJANDUSMASINAD. MAASTIKUL KASUTATAVAD TÖÖPLATVORMID VILJAPUUAEDADESSE (WPO). OHUTUS

Agricultural machinery - Rough-terrain Work

Platforms for Orchard's operations (WPO) - Safety



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

See Eesti standard EVS-EN 16952:2018+A1:2021	This Estonian standard EVS-EN
	16952:2018+A1:2021 consists of the English text
16952:2018+A1:2021 ingliskeelset teksti.	of the European standard EN 16952:2018+A1:2021.
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	Acci cultution.
Euroopa standardi rahvuslikele liikmetele kättesaadavaks 20.10.2021.	Date of Availability of the European standard is 20.10.2021.
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ICS 53.020.99, 65.060.99

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 16952:2018+A1

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ICS 53.020.99; 65.060.99

Supersedes EN 16952:2018

### **English Version**

# Agricultural machinery - Rough-terrain Work Platforms for Orchard's operations (WPO) - Safety

Matériel agricole - Plateformes élévatrices tout terrain pour arboriculture (PEMPA) - Sécurité

Landmaschinen - Geländearbeitsbühnen für Obstplantagearbeiten (WPO) - Sicherheit

This European Standard was approved by CEN on 18 September 2017 and includes Amendment 1 approved by CEN on 14 June 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.

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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

Cont	ents	Page
Europ	ean foreword	4
- Introd	uction	5
1	Scope	6
2	Normative references	
3	Terms and definitions	
4	List of significant hazards	_
5	Safety requirements and/or measures	
5.1	General	
5.2	Structural and stability calculations	
5.3	Chassis	
5.4	Extending structure	
5.4.1 5.4.2	Methods to avoid overturning and exceeding permissible stresses  Extending structure extension and retraction	
5.4.2 5.4.3	Protection against hazards related to the movements of the extending structure	
5.4.4 5.4.4	Position retention of the work platform	
5.4.5	Speed for raising and lowering of the work platform	
5.5	Extending structure drive systems	25
5.6	Work platform	
5.7	Controls	
5.8	Electrical equipment	30
5.9	Hydraulic systems	31
5.10	Hydraulic cylinders	32
	Structural design	
	Safety device for load holding cylinders	
5.11	Safety devices	
6	Verification of the safety requirements and/or measures	38
6.1	Examinations and tests	
6.1.1	General  Design check	
6.1.2	Manufacturing check	
6.1.3 6.1.4	Tests	
6.2	Type tests of WPOs	
6.2.1	General	
6.2.2	Tests before placing on the market	
6.3	Validation of safety functions and performance levels	
7	Information for use	47
7.1	Instruction handbook	
7.1.1 7.2	General	
	Marking	
	A (normative) Calculations	
<b>A.1</b>	General	53
A.2	Loads and forces	53

A.3	Determination of loads and forces	53
A.4	Stability calculations	57
A.5	Structural calculations	58
Annex	x B (normative) Requirements for protective curtains	65
B.1	General	65
<b>B.2</b>	Tensile resistance test	65
<b>B.3</b>	Perforation resistance test	65
<b>B.4</b>	Wear resistance test	65
Annex	x C (normative) Additional requirements for wireless controls and control systems	66
<b>C.1</b>	General	66
<b>C.2</b>	Unauthorized use	66
<b>C.3</b>	Control limitation	66
<b>C.4</b>	Stop	66
<b>C.5</b>	Serial data communication	67
<b>C.6</b>	Use of more than one operator control station	67
<b>C.7</b>	Battery-powered operator control stations	
<b>C.8</b>	Receiver	
<b>C.9</b>	Warnings	
<b>C.10</b>	Information for use	67
Anne	x D (informative) Calculation examples - factor "z", kerb test	68
Anne	x E (informative) Examples of Machines	72
E.1	Examples of Machines covered by the standard	72
<b>E.2</b>	Examples of Machines excluded from the scope of the standard	74
Annex	x ZA (informative) A Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC aimed to be covered (A)	
Biblio	ography	
	6.	

# **European foreword**

This document (EN 16952:2018+A1:2021) has been prepared by 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 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 includes Amendment 1 approved by CEN on 14 June 2021.

This document supersedes (A) EN 16952:2018 (A).

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $\boxed{\mathbb{A}}$ .

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

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.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

### Introduction

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

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

Significant hazards that are common to all the agricultural machines (self-propelled, mounted, semi-mounted and trailed) are dealt with in EN ISO 4254-1.

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

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.

## 1 Scope

1.1 This European Standard, when used together with EN ISO 4254-1 and EN 15811, specifies safety requirements and measures for self-propelled rough-terrain work platforms for orchard's operations (WPO) operating at a maximum of 3 m high as defined in 3.1, where the vertical projection of the centre of the area of the platform in all platform configurations at the maximum chassis inclination specified by the manufacturer is always inside the tipping lines, used in agriculture, designed to work on unimproved natural terrain and/or disturbed terrain and intended to move at least two persons to working positions in an orchard where they are carrying out fruit picking, thinning out, pruning, or other operations related to orchard from the work platform.

NOTE For examples of rough-terrain work platforms for orchard's operations (WPO), see Figures E.1 to E.3.

This European Standard describes methods for the elimination or reduction of hazards arising from the intended use of these machines in the course of normal operation and service, except hazards related to conveyor belts and elevators for the bin. In addition, it specifies the type of information on safe working practices (including residual risks) to be provided by the manufacturer.

When requirements of this document are different from those which are stated in EN ISO 4254-1, the requirements of this document take precedence over the requirements of EN ISO 4254-1 for machines that have been designed and built according to the provisions of this document.

This European Standard, taken together with EN ISO 4254-1 and EN 15811, deals with all the significant hazards, hazardous situations and events (as listed in Table 1) relevant to WPOs, when they are used as intended and under the conditions of misuse foreseeable by the manufacturer.

It does not cover the hazards arising from:

- a) use in potentially explosive atmospheres;
- b) getting on and off the work platform at changing levels;
- c) environmental aspects;
- d) road safety.
- **1.2** This European Standard does not apply to:
- a) Mobile Elevating Work Platforms (MEWPs) (see EN 280);

NOTE 1 Figure E.4 gives an example of this type of machine.

b) boom-type MEWPs (see EN 280);

NOTE 2 Figure E.5 and E.6 give examples of this type of machine.

- c) tail lifts (see EN 1756-1 and EN 1756-2);
- d) mast climbing work platforms (see EN 1495);
- e) lifting tables (see EN 1570-1);
- f) aircraft ground support equipment (see e.g. EN 1915-1 and EN 1915-2);
- g) elevating operator positions on industrial trucks (see EN ISO 3691-3);
- h) unguided work cages suspended from lifting appliances (see e.g. EN 1808);
- i) machines having centre of the area of the platform outside the tipping lines.

NOTE 3 Figure E.7 gives an example of this type of machine.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 349:1993+A1:2008, Safety of machinery - Minimum gaps to avoid crushing of parts of the human body

EN 15811:2014, Agricultural machinery - Fixed guards and interlocked guards with or without guard locking for moving transmission parts (ISO/TS 28923:2012, modified)

EN 60204-1:2006, Safety of machinery - Electrical equipment of machines - Part 1: General requirements (IEC 60204-1:2016)

EN 60204-32:2008, Safety of machinery - Electrical equipment of machines - Part 32: Requirements for hoisting machines (IEC 60204-32:2008)

EN 60529:1991, Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989)

EN ISO 4254-1:2015, Agricultural machinery - Safety - Part 1: General requirements (ISO 4254-1:2013)

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

EN ISO 14982:2009, Agricultural and forestry machinery - Electromagnetic compatibility - Test methods and acceptance criteria (ISO 14982:1998)

EN ISO 13849-1:2015, Safety of machinery - Safety-related parts of control systems - Part 1: General principles for design (ISO 13849-1:2015)

EN ISO 13849-2:2012, Safety of machinery - Safety-related parts of control systems - Part 2: Validation (ISO 13849-2:2012)

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

EN ISO 13857:2008, Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)

ISO 525:2013, Bonded abrasive products - General requirements

ISO 845:2006, Cellular plastics and rubbers - Determination of apparent density

ISO 3864-1:2011, Graphical symbols - Safety colours and safety signs - Part 1: Design principles for safety signs and safety markings

ISO 4302:2016, Cranes - Wind load assessment

ISO 4305:2014, Mobile cranes - Determination of stability

ISO 16001:2017, Earth-moving machinery - Object detection systems and visibility aids - Performance requirements and tests