

STN	Poľnohospodárske stroje Pracovné plošiny do ťažkého terénu na záhradníckej práce (WPO) Bezpečnosť	STN EN 16952 47 0640
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Agricultural machinery - Rough-terrain Work Platforms for Orchards operations (WPO) - Safety

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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

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

Landmaschinen - Geländearbeitsbühnen für
Obstplantagearbeiten (WPO) - Sicherheit

This European Standard was approved by CEN on 18 September 2017.

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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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EN 16952:2018 (E)**European foreword**

This document (EN 16952:2018) 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of an identical text or by endorsement, at the latest by December 2018 and conflicting national standards shall be withdrawn at the latest by December 2018.

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 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 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.

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.

EN 16952:2018 (E)**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*

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