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Self-propelled agricultural machinery - Assessment of in ciple Concernence of the con stability - Part 1: Principles (ISO 16231-1:2013)



EESTI STANDARDI EESSÕNA

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EUROPEAN STANDARD NORME EUROPÉENNE **EUROPÄISCHE NORM**

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English Version

Self-propelled agricultural machinery - Assessment of stability -Part 1: Principles (ISO 16231-1:2013)

Machines agricoles automotrices - Évaluation de la stabilité - Partie 1: Principes (ISO 16231-1:2013)

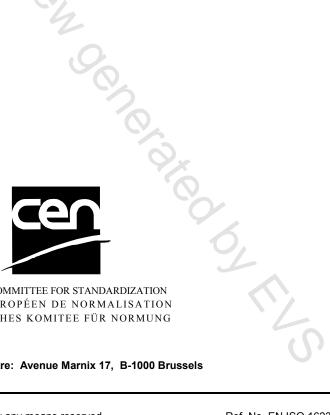
Selbstfahrende Maschinen in der Landwirtschaft -Bewertung der Stabilität - Teil 1: Richtlinien (ISO 16231-1:2013)

This European Standard was approved by CEN on 7 March 2013.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN ISO 16231-1:2013: E

Foreword

This document (EN ISO 16231-1:2013) 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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] 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.

For relationship with EU Directive, 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 16231-1:2013 has been approved by CEN as EN ISO 16231-1:2013 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 a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the Essential Requirement 3.4.3 of that Directive and associated EFTA regulations.

NOTE In addition, compliance with EN ISO 16231-2 is required to achieve presumption of conformity with the Essential Requirement indicated in this Annex.

WARNING - Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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Introduction

Self-propelled agricultural machinery with a ride-on operator (driver) can expose the operator to the hazard of rolling or tipping over during the intended operation. A risk assessment should determine whether this hazard applies to a particular machine and, when appropriate, the protective measures to be used in order to avoid or minimize this hazard for the ride-on operator. For many machines, this risk assessment will be reflected in the requirements of a machine-specific standard.

ε The risk assessment should consider the operating conditions in which the machine is intended to be used, the physical properties of the machine and the required skills to operate the machine as well as any other parameter which can have an impact on the risk for rollover or tip-over.

Self-propelled agricultural machinery — Assessment of stability —

Part 1: **Principles**

1 Scope

This part of ISO 16231 specifies principles for the assessment of stability with respect to the design and construction of self-propelled ride-on machines used in agriculture and the hazard of rolling over or tipping over, or both, when the machine is used as intended and under the conditions foreseeable by the manufacturer. In addition, it specifies the type of information on safe working practices (including residual risks) to be provided by the manufacturer.

This part of ISO 16231 is not applicable to:

- machines with an unladen mass lower than 400 kg;
- machines covered by other machine specific standards dealing with the protection against rollover and tip-over (e.g. agricultural tractors, forestry tractors);
- hazards associated with road transport operations;
- free fall events;
- rollover as a result of impact collisions.

This part of ISO 16231 is not applicable to machines manufactured before the date of its publication.

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.

 $ISO\,3776-1:2006, Tractors and machinery for a griculture \\---Seat belts \\---Part \\1: \\Anchorage \ location \ requirements$

 $ISO\,3776-2:2013, Tractors and machinery for a griculture - Seat belts - Part 2: Anchorage strength requirements$

ISO 3776-3:2009, Tractors and machinery for agriculture — Seat belts — Part 3: Requirements for assemblies

ISO 4254-1:2013, Agricultural machinery — Safety — Part 1: General requirements

3 Terms and definitions

For the purposes of this document, the terms and definitions of ISO 4254-1:2013 and the following apply.