

### SLOVENSKI STANDARD SIST EN ISO 4254-1:2010

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Kmetijski stroji - Varnost - 1. del: Splošne zahteve (ISO 4254-1:2008)

Agricultural machinery - Safety - Part 1: General requirements (ISO 4254-1:2008)

Landmaschinen - Sicherheit - Teil 1: Generelle Anforderungen (ISO 4254-1:2008)

iTeh STANDARD PREVIEW

Matériel agricole - Sécurité - Partie 1: Exigences générales (ISO 4254-1:2008) (standards.iteh.ai)

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65.060.01 Kmetijski stroji in oprema na Agricultural machines and

splošno equipment in general

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM **EN ISO 4254-1** 

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Supersedes EN ISO 4254-1:2005

### **English Version**

## Agricultural machinery - Safety - Part 1: General requirements (ISO 4254-1:2008)

Matériel agricole - Sécurité - Partie 1: Exigences générales (ISO 4254-1:2008)

Landmaschinen - Sicherheit - Teil 1: Generelle Anforderungen (ISO 4254-1:2008)

This European Standard was approved by CEN on 10 August 2009.

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 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 Management Centre has the same status as the official versions.

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

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

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### **Foreword**

This document (EN ISO 4254-1:2009) has been prepared by Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry", Subcommittee 3 "Safety and comfort", the secretariat of which is held by DIN in collaboration with CEN/TC 144 "Tractors and machinery for agriculture and forestry" in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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 March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

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 supersedes EN ISO 4254-1:2005.

This second edition cancels and replaces the first edition (EN ISO 4254-1:2005), which has been technically revised. It also incorporates the Final Draft Amendment ISO 4254-1:2005/FDAM 1:2007.

The following major changes were introduced:

- requirements related to vibration have been added in a new sub-clause 4.3;
  - iTeh STANDARD PREVIEW
- requirements related to ergonomics have been added in new sub-clauses 4.4.6 and 5.1.2.2;
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- requirements related to the transmission of mechanical power between self-propelled machines/tractors and recipient machinery have been added in a new subclause 6.4.1;
  - https://standards.iteh.ai/catalog/standards/sist/1d608828-8d7e-4027-98de
- the requirements related to the guarding of moving parts for power transmission given in 4.6 and Annex C have been deleted.

For the purposes of global relevance, these requirements related to the guarding of moving parts for power transmission have been transferred and published as European Standard EN 15811:2009, "Agricultural machinery - Guards for moving parts of power transmission - Guard opening with tool (ISO/TS 28923:2007 modified)," which includes the guard requirements taken from both 4.6 and Annex C of EN ISO 4254-1:2005.

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 Directives.

For relationship with EU Directives, see informative Annexes ZA and ZB, which are integral parts 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

### **Endorsement notice**

The text of ISO 4254-1:2008 has been approved by CEN as a EN ISO 4254-1:2009 without any modification.

### Annex ZA

(informative)

## Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/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 98/37/EC on machinery, amended by the New Approach Directive 98/79/EC.

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 relevant Essential Requirements, except Essential Requirements 1.3.3 related to ejected objects, 1.3.7 first paragraph, 1.4 with the exception of 1.4.1 first indent, and 3.4.2, all with regard to moving parts for power transmission, 1.3.8 A, 3.4.8, 1.5.11, 1.6 with regard to maintenance and repairs to be carried out by professional service personnel, 3.3.3, and 3.4.7 fourth, sixth and seventh paragraph of that Directive and associated EFTA regulations.

**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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### Annex ZB (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 relevant Essential Requirements, except Essential Requirements 1.3.1 first paragraph, 1.3.3 related to ejected objects, 1.3.7 first paragraph, 1.4 with the exception of 1.4.1 first indent, all with regard to moving parts of power transmission, 1.3.8.1, 1.5.11, 1.6 with regard to maintenance and repairs to be carried out by professional service personnel, 1.7.3 first paragraph first, second and sixth indent, 1.7.4.2 j), o) related to accident, t) and 1.7.4.2 u), 4th paragraph, 2nd sentence of 2006/42, 3.3.3 and 3.4.7 fifth, seventh and eight paragraph of that Directive and associated EFTA regulations.

**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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# INTERNATIONAL STANDARD

ISO 4254-1

Fourth edition 2008-04-01

# Agricultural machinery — Safety — Part 1: General requirements

Matériel agricole — Sécurité — Partie 1: Exigences générales

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### **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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 4254-1 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 3, *Safety and comfort*.

This fourth edition cancels and replaces the third edition (ISO 4254-1:2005), which has been technically revised. It also incorporates the Final Draft Amendment ISO 4254-1:2005/FDAM 1:2007.

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- requirements related to ergonomics have been added in new subclauses 4.4.6 and 5.1.2.2;
- requirements related to the transmission of mechanical power between self-propelled machines/tractors and recipient machinery have been added in a new subclause 6.4.1;
- the requirements related to the guarding of moving parts for power transmission given in 4.6 and Annex C have been deleted.

For the purposes of global relevance, the requirements related to the guarding of moving parts for power transmission have been transferred and published as two separate Technical Specifications: ISO/TS 28923:2007, which includes the guard requirements taken from both 4.6 and Annex C of ISO 4254-1:2005, and ISO/TS 28924:2007, which includes only the requirements from 4.6.

ISO 4254 consists of the following parts, under the general title Agricultural machinery — Safety:

- Part 1: General requirements
- Part 3: Tractors<sup>1)</sup>
- Part 5: Power-driven soil-working machines
- Part 6: Sprayers and liquid fertilizer distributors

1) Under revision. To be replaced by ISO 26322 (see Reference [8]).

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- Part 7: Combine harvesters, forage harvesters and cotton harvesters
- Part 8: Solid fertilizer distributors
- Part 9: Seed drills
- Part 10: Rotary tedders and rakes
- Part 11: Pick-up balers
- Part 12: Rotary mowers and flail-mowers

Part 4, Forestry winches, has been revised and replaced by ISO 19472 [7].

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### Introduction

The structure of safety standards in the field of machinery is as follows.

- a) Type-A standards (basic standards) give basic concepts, principle for design, and general aspects that can be applied to machinery;
- b) Type-B standards (generic safety standards) dealing with one or more safety aspect(s) or one or more type(s) of safeguards that can be used across a wide range of machinery:
  - type-B1 standards on particular safety aspects (e.g. safety distances, surface temperature, noise);
  - type-B2 standards on safeguards (e.g. two-hand controls, interlocking devices, pressure sensitive devices, guards);
- c) Type-C standards (machinery safety standards) dealing with detailed safety requirements for a particular machine or group of machines.

This part of ISO 4254 is a type-C standard as stated in ISO 12100-1.

When provisions of this type-C standard are different from those which are stated in type-A or type-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.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this part of ISO 4254. These hazards are specific to self-propelled ride-on, trailed, semi-mounted and mounted agricultural machines.