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Agricultural machinery - Safety - Part 1: General Decree of the second of the se requirements (ISO 4254-1:2013)



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This Estonian standard EVS-EN ISO 4254-1:2013
consists of the English text of the European standard
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EUROPEAN STANDARD

EN ISO 4254-1

NORME EUROPÉENNE EUROPÄISCHE NORM

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Supersedes EN ISO 4254-1:2009

English Version

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

Matériel agricole - Sécurité - Partie 1: Exigences générales (ISO 4254-1:2013)

Landmaschinen - Sicherheit - Teil 1: Generelle Anforderungen (ISO 4254-1:2013)

This European Standard was approved by CEN on 25 April 2013.

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.

CEN members are the national standards bodies of 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 United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

This document (EN ISO 4254-1:2013) 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 supersedes EN ISO 4254-1:2009.

This third edition cancels and replaces the second edition (EN ISO 4254-1:2009), which has been technically revised.

The following major changes were introduced:

- requirements related the protection from moving parts involved in the work have been added in 4.2;
- requirements related to vibration have been added in 4.3;
- requirements related to automatic mode of operation have been added in 4.6;
- requirements related to foldable barriers have been added in 4.9;
- requirements related to operating fluids have been added in 4.15;
- requirements related to emergency stop controls have been added in 4.19;
- requirements related to safety related parts of control systems have been added in 4.20;
- requirements related to roll-over and tip-over hazards have been added in 5.7;
- requirements related to PTO drive shaft guard clearance have been added in 6.4.

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 the Machinery Directive 2006/42/EC. It is intended to be used together with EN 15811:2009 "Agricultural machinery – Guards for moving parts of power transmission – Guard opening with tool (ISO/TS 28923:2007 modified)".

NOTE It is intended to replace EN 15811:2009 by a new edition based on ISO/TS 28923:2012.

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

2013 has been Suhahan Sangarah The text of ISO 4254-1:2013 has been approved by CEN as EN ISO 4254-1:2013 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 relevant Essential Requirements of that Directive and associated EFTA regulations, except Essential Requirements 1.7.3 and 3.6.2.

NOTE Compliance with EN ISO 4254-1 and a machine-specific part of EN ISO 4254 is required to achieve presumption of conformity with the corresponding Essential Requirements of the Directive and associated EFTA regulations. Conformity with ESR 1.7.4.2 u) 4th paragraph, 2nd sentence (uncertainty of noise measurement) can only be claimed if the relevant machine-specific part of EN ISO 4254 includes specifications of the noise measurement uncertainty.

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

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

The machinery concerned and the extent to which hazards, hazardous situations and 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 requipments a previous services of the service 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.

Agricultural machinery — Safety —

Part 1:

General requirements

1 Scope

This part of ISO 4254 specifies the safety requirements and the means of their verification for the design and construction of self-propelled ride-on machines, mounted, semi-mounted and trailed machines used in agriculture in order to deal with the hazards which are typical for most of the machines. In addition, it specifies the type of information on safe working practices including information about residual risks to be provided by the manufacturer.

This document deals with significant hazards, hazardous situations and events, as listed in Annex A, relevant to this agricultural machinery when used as intended and under the conditions of misuse foreseeable by the manufacturer during normal operation and service.

This part of ISO 4254 is not applicable to

- agricultural or forestry tractors,
- aircraft and air-cushion vehicles used in agriculture,
- lawn and garden equipment,
- machine-specific components or functions (e.g. working tools and/or processes).

This part of ISO 4254 is not applicable to hazards related to periodic service, machine conversion and repairs intended to be carried out by professional service personnel, environmental hazards, road safety (e.g. steering, braking), or to the power take-off (PTO) drive shaft; neither is it applicable to guards of moving parts for power transmission except for strength requirements for guards and barriers.

This part of ISO 4254 is not applicable to machines which are manufactured before the date of its publication.

Not all of the hazards dealt with by this part of ISO 4254 are necessarily present on a particular machine. A risk assessment should be carried out by the manufacturer to determine the hazards that are applicable and any hazards in addition to those dealt with by this part or a relevant machine-specific part. The requirements of a machine-specific part of ISO 4254 take precedence over the requirements of this part.

2 Normative references

The following referenced 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 3600:1996, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Operator's manuals — Content and presentation

ISO 3744:2010, Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane

ISO 3767-1:1998, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Symbols for operator controls and other displays — Part 1: Common symbols