



SLOVENSKI STANDARD SIST EN ISO 4254-1:2016

01-januar-2016

Nadomešča:

SIST EN ISO 4254-1:2013

Kmetijski stroji - Varnost - 1. del: Splošne zahteve (ISO 4254-1:2013)

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

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

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

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: EN ISO 4254-1:2015

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>

ICS:

65.060.01	Kmetijski stroji in oprema na splošno	Agricultural machines and equipment in general
-----------	---------------------------------------	--

SIST EN ISO 4254-1:2016

en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 4254-1:2016](https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 4254-1

October 2015

ICS 65.060.01

Supersedes EN ISO 4254-1:2013

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 27 September 2015.

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.

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

European foreword.....	3
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive EU Directive 2006/42/EC.....	5

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 4254-1:2016](https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>

European foreword

The text of ISO 4254-1:2013 has been prepared by Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 4254-1:2015 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 2016, and conflicting national standards shall be withdrawn at the latest by April 2016.

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 4254-1:2013.

This 4th edition cancels and replaces the third edition (EN ISO 4254-1:2013) where the following changes were introduced (compared to EN ISO 4254-1:2009):

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

For the 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN ISO 4254-1:2015 (E)

Endorsement notice

The text of ISO 4254-1:2013 has been approved by CEN as EN ISO 4254-1:2015 without any modification.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 4254-1:2016](https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016)
<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>

Annex ZA
(informative)
**Relationship between this European Standard and the Essential
Requirements of EU Directive 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.

iTech STANDARD PREVIEW
(standards.iteh.ai)
<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 4254-1:2016](https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>

INTERNATIONAL STANDARD

**ISO
4254-1**

Fifth edition
2013-05-01

Agricultural machinery — Safety — Part 1: General requirements

*Matériel agricole — Sécurité —
Partie 1: Exigences générales*

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

[SIST EN ISO 4254-1:2016](https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>



Reference number
ISO 4254-1:2013(E)

© ISO 2013

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 4254-1:2016

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	v
Introduction	vii
1 Scope	1
2 Normative references	1
3 Terms and definitions	3
4 Safety requirements and/or measures applicable to all machines	5
4.1 Fundamental principles, design guidance.....	5
4.2 Protection from moving parts involved in the work.....	5
4.3 Noise.....	5
4.4 Vibration.....	6
4.5 Controls.....	6
4.6 Automatic mode of operation.....	7
4.7 Operator stations.....	7
4.8 Other than operator stations.....	10
4.9 Folding elements.....	12
4.10 Strength requirements for guards and barriers.....	12
4.11 Supports for service and maintenance.....	12
4.12 Electric equipment.....	13
4.13 Hydraulic components and fittings.....	13
4.14 Pneumatic systems.....	13
4.15 Operating fluids.....	13
4.16 Manual operation of individual assemblies.....	14
4.17 Service and handling of machine parts.....	14
4.18 Electromagnetic compatibility.....	14
4.19 Emergency stop.....	14
4.20 Safety-related parts of control systems.....	15
5 Safety requirements and/or measures — Self-propelled ride-on machines	15
5.1 Operator station.....	15
5.2 Moving the machine.....	18
5.3 Electric.....	19
5.4 Fuel tank.....	19
5.5 Hot surfaces.....	19
5.6 Exhaust gases.....	19
5.7 Roll- and tip-over.....	19
6 Safety requirements and/or measures — Mounted, semi-mounted and trailed machines	20
6.1 Controls.....	20
6.2 Stability.....	20
6.3 Hitches for towing.....	21
6.4 Transmission of mechanical power between self-propelled machines/tractors and recipient machinery.....	21
6.5 Hydraulic, pneumatic and electrical connections with a self-propelled machine or towing vehicle.....	22
7 Verification of safety requirements or protective measures	22
8 Information for use	23
8.1 General.....	23
8.2 Operator's manual.....	23
8.3 Safety and instructional signs.....	24
8.4 Marking.....	25
Annex A (informative) List of significant hazards	26
Annex B (normative) Noise test code (engineering method grade 2)	30

ISO 4254-1:2013(E)

Annex C (normative) Strength tests	34
Annex D (informative) Stability of tractor machine combinations	36
Bibliography	38

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 4254-1:2016](https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. www.iso.org/patents

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 3, *Safety and comfort*.

This fifth edition of ISO 4254-1 cancels and replaces the fourth edition (ISO 4254-1:2008), which has been technically revised. In particular, requirements relating to the following have been introduced:

- vibrations; [SIST EN ISO 4254-1:2016](https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016)
- protection of moving parts; <https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>
- operation of machine parts;
- operating fluids;
- foldable barriers;
- PTO drive shaft guard clearance;
- emergency stop controls;
- safety related parts of control systems;
- roll-over and tip-over hazards.

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

- *Part 1: General requirements*
- *Part 5: Power-driven soil-working machines*
- *Part 6: Sprayers and liquid fertilizer distributors*
- *Part 7: Combine harvesters, forage harvesters and cotton harvesters*
- *Part 8: Solid fertilizer distributors*
- *Part 9: Seed drills*
- *Part 10: Rotary tedders and rakes*

ISO 4254-1:2013(E)

- *Part 11: Pick-up balers*
- *Part 12: Rotary disc and drum mowers and flail mowers*
- *Part 13: Large rotary mowers*

ISO 4254-2, *Anhydrous ammonia applicators*, has been withdrawn.

ISO 4254-3, *Tractors*, has been cancelled and replaced by ISO 26322 (all parts), *Tractors for agriculture and forestry — Safety*.

ISO 4254-4, *Tractors and machinery for agriculture and forestry — Technical means for providing safety — Part 4: Forestry winches*, has been cancelled and replaced by ISO 19472, *Machinery for forestry — Winches — Dimensions, performance and safety*.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 4254-1:2016](https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>

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 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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 4254-1:2016](https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016)

<https://standards.iteh.ai/catalog/standards/sist/5b3d2d86-fbc2-4bef-b4c5-7824390b91ec/sist-en-iso-4254-1-2016>