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Agricultural machinery - Safety - Part 9: Seed drills (ISO 4254-9:2018)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/19

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English Version

**Agricultural machinery - Safety - Part 9: Seed drills (ISO
4254-9:2018)**Matériel agricole - Sécurité - Partie 9: Semoirs (ISO
4254-9:2018)Landmaschinen - Sicherheit - Teil 9: Säugeräte (ISO
4254-9:2018)

This European Standard was approved by CEN on 17 August 2018.

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.

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EUROPÄISCHES KOMITEE FÜR NORMUNG**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

EN ISO 4254-9:2018 (E)

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European foreword

This document (EN ISO 4254-9:2018) 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of an identical text or by endorsement, at the latest by April 2019, and conflicting national standards shall be withdrawn at the latest by April 2019.

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 supersedes EN 14018:2005+A1:2009.

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

Endorsement notice

The text of ISO 4254-9:2018 has been approved by CEN as EN ISO 4254-9:2018 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the essential requirements of Directive 2006/42/EC aimed to be covered

This European Standard has been prepared under a Commissions' standardization request "M/396 Mandate to CEN and CENELEC for Standardization in the field of machinery" to provide one voluntary means of conforming to essential requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, amending Directive 95/16/EC (recast).

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Annex I of Directive 2006/42/EC

Essential Requirements of Directive	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
Within the limits of the scope all relevant essential requirements are covered	All normative clauses	<p>For relation of normative clauses of this standard to significant hazards/relevant essential requirements of 2006/42/EC see informative Annex A, List of significant hazards, of this standard in combination with Annex D "Examples of significant hazards, hazardous situations, hazardous events and their relation to the Essential Requirements of the Machinery Directive 2006/42/EC" of CEN Guide 414 (https://boss.cen.eu/ref/CEN_414.pdf).</p> <p>Compliance with EN ISO 4254-9:2018 and the relevant requirements of EN ISO 4254-1:2013 is required to achieve presumption of a conformity with the relevant Essential Requirements of Directive 2006/42/EC.</p>

WARNING 1 — Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this

standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 — Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

**INTERNATIONAL
STANDARD**

**ISO
4254-9**

Third edition
2018-09

Agricultural machinery — Safety —

**Part 9:
Seed drills**

Matériel agricole — Sécurité —

Partie 9: Semoirs



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ISO 4254-9:2018(E)

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 (see 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 (see 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.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 23, *Tractors and agricultural and forestry machinery*, Subcommittee SC 3, *Safety and comfort*.

This third edition cancels and replaces the second edition (ISO 4254-9:2008), which has been technically revised.

The main changes compared to the previous edition are as follows:

- revision of the 2008 edition under the Vienna Agreement (whole document);
- alignment with ISO 4254-1:2013 and ISO 4254-8:2018;
- addition of terms and definitions ([3.5](#), [3.6](#) and [3.7](#));
- modification of control requirements ([4.2.2](#));
- modification of hopper requirements ([4.4](#));
- modification of single seed drills requirements ([4.6](#));
- addition of noise reduction requirements ([4.10](#));
- alignment of the list of significant hazards ([Annex A](#)).

A list of all parts in the ISO 4254 series can be found on the ISO website.

Introduction

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

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.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document. These hazards are specific to seed drills.

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.

Significant hazards that are common to all the agricultural machines (self-propelled, mounted, semi-mounted and trailed) are dealt with in ISO 4254-1.

Agricultural machinery — Safety —

Part 9: Seed drills

1 Scope

This document, intended to be used together with ISO 4254-1, specifies the safety requirements, and their verification for design and construction of mounted, semi-mounted, trailed or self-propelled seed drills, including the seeding function of combined seed and fertilizer drills, and seed drills with integrated and inseparable powered soil-working tools used in agriculture. In addition, it specifies the type of information on safe working practices (including residual risks) to be provided by the manufacturer.

This document is also applicable to seeding systems where components for seed deposition in the soil, for seed metering and for seed storage are distributed between two or more linked vehicles.

This document deals with all significant hazards (as listed in [Annex A](#)), hazardous situations and events relevant to seed drills, when they are used as intended and under the conditions of misuse foreseeable by the manufacturer, excepting the hazards arising from

- electrostatic phenomena,
- external influences on electrical equipment,
- failure of energy supply,
- failure and/or malfunction of the control system,
- inadequate visibility from drivers'/operators' position,
- travelling functions (drive, braking, etc.),
- break down of parts rotating at high speed,
- equipment for loading seeds (and fertilizer), and
- moving parts for power transmission except for strength requirements for guards.

This document is not applicable to

- fertilizer distributors designed only for solid fertilizer application (covered in ISO 4254-8),
- maintenance or repairs carried out by professional service personnel, or
- to environmental hazards (except noise), and
- to seed drills which are manufactured before the date of its publication.

When requirements of this document are different from those which are stated in ISO 4254-1, the requirements of this document take precedence over the requirements of ISO 4254-1 for machines that have been designed and built according to the provisions of this document.

ISO 4254-9:2018(E)**2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

ISO 4254-5, *Agricultural machinery — Safety — Part 5: Power-driven soil-working equipment*

ISO 12100:2010, *Safety of machinery — General principles for design — Risk assessment and risk reduction*

ISO 13857:2008, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

ISO 14120:2015, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*

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