

**Põllumajandus- ja metsatöömasinad. Külvimasinad.
Ohutus KONSOLIDEERITUD TEKST**

Agricultural and forestry machinery - Seed drills - Safety
CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14018:2005+A1:2009 sisaldab Euroopa standardi EN 14018:2005+A1:2009 ingliskeelset teksti.

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English Version

Agricultural and forestry machinery - Seed drills - Safety

Matériel agricole et forestier - Semoirs - Sécurité

Land- und Forstmaschinen - Sämaschinen - Sicherheit

This European Standard was approved by CEN on 26 August 2005 and includes Amendment 1 approved by CEN on 17 August 2009.

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Foreword

This document (EN 14018:2005+A1:2009) has been prepared 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of an identical text or by endorsement, at the latest by April 2010, and conflicting national standards shall be withdrawn at the latest by April 2010.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 includes Amendment 1, approved by CEN on 2009-08-17.

This document supersedes EN 14018:2005.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{A_1}$ $\boxed{A_1}$.

This European Standard 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).

$\boxed{A_1}$ For relationship with EU Directive(s), see informative Annexes ZA and ZB, which are integral parts of this document. $\boxed{A_1}$

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Introduction

This European Standard is a type C standard as stated in EN ISO 12100-1.

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

Significant hazards that are common to all agricultural machines (self-propelled, mounted, semi-mounted and trailed) are dealt with in EN 1553:1999.

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

1 Scope

This European Standard, applied together with EN 1553:1999, 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, used in agriculture and in forestry. In addition, this European Standard specifies the type of information on safe working practices (including residual risks) to be provided by the manufacturer.

When requirements of this European Standard are different from those which are stated in EN 1553:1999 the requirements of this European Standard take precedence over the requirements of EN 1553:1999 for machines that have been designed and built according to the provisions of this European Standard.

It does not apply to:

- fertilizer distributors designed only for solid fertilizer application (dealt with in EN 14017);
- seed drills with integrated and inseparable powered soil working tools (see 3.2).

NOTE Powered soil working tools are dealt with in EN 708:1996 and EN 708:1996/A1:2000.

This European Standard deals with all the significant hazards, hazardous situations and events relevant to seed drills, when they are used as intended and under the conditions foreseen by the manufacturer (see Clause 4), excepting the hazards arising from:

- electrostatic phenomena;
- external influences on electrical equipment;
- failure of energy supply;
- failure, malfunction of control system;
- inadequate visibility from drivers/operators position;
- travelling functions (drive, braking etc.);
- break-up of parts rotating at high speed;
- equipment for loading seeds (and fertilizer).

It is not applicable to electromagnetic compatibility (EMC) nor to environmental hazards (except noise). These aspects are covered by EN 13740-1:2003 and EN 13740-2:2003 for combined seed and solid fertilizer drills.

This European Standard is not applicable to seed drills which are manufactured before the date of its publication as EN.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 294:1992, *Safety of machinery — Safety distances to prevent danger zones being reached by the upper limbs*

EN 1553:1999, *Agricultural machinery — Agricultural self-propelled, mounted, semi-mounted and trailed machines — Common safety requirements*

EN ISO 11688-1:1998, *Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning (ISO/TR 11688-1:1995)*

EN ISO 12100-1:2003, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)*

EN ISO 12100-2:2003, *Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN ISO 12100-1:2003 and the following apply.

3.1

seed drill

machine for sowing seeds (e.g. cereals) in a continuous manner

3.2

seed drill with integrated and inseparable powered soil working tools

seed drill as a single machine including the functions of seeding and of soil working powered tools of which neither the seed drill nor the powered soil working tools can be used separately

3.3

single seed drill

machine for sowing one seed at a time (e.g. sugar beet) with equal space between each seed

NOTE Examples of such machines are given in Annex A.

3.4

combined seed and fertilizer drill

machine which simultaneously applies seed and fertilizer

NOTE Adapted from EN 13740-1:2003.

3.5

application rate

mass applied in the band of seeds applied per unit area, in kg/ha

NOTE Adapted from EN 13740-1:2003.