INTERNATIONAL STANDARD

ISO 4254-5

Third edition
2018-02

Agricultural machinery — Safety —

Part 5: Power-driven soil-working machines

Matériel agricole — Sécurité —

Partie 5: Machines de travail du sol à outils animés

Reference number
ISO 4254-5:2018(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Published in Switzerland

Contents

Page

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 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 machinery for agriculture and forestry*, Subcommittee SC 3, *Safety and comfort*.

This third edition cancels and replaces the second edition (ISO 4254-5:2008), which has been technically revised and includes the following changes:

— alignment with ISO 4254-1:2013 (whole document);

— addition of noise reduction requirements (4.2);

— editorial improvements concerning the protection of working tools (4.3);

— alignment of the list of significant hazards (Annex A).

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

Introduction

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 organisations, 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 or hazardous events are covered are indicated in the Scope of this document.

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

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.

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

— Type-A standards (basis standards) give basic concepts, principles for design, and general aspects that can be applied to machinery.

— Type-B standards (generic safety standards) deal with one or more safety aspects or one or more types 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-hands controls, interlocking devices, pressure sensitive devices, guards).

— Type-C standards (machinery safety standards) deal with detailed safety requirements for a particular machine or group of machines.

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 5: Power-driven soil-working machines

1 Scope

This document, intended to be used together with ISO 4254-1, specifies the safety requirements and their verification for the design and construction of mounted, semi-mounted and trailed power-driven soil-working machines 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 deals with significant hazards (as listed in Annex A), hazardous situations and events relevant to power-driven soil-working machines used as intended and under the conditions foreseeable by the manufacturer (see Clause 4).

This document is not applicable to

— spading machines, and

— machines fitted with a retractable device making them capable of working between two successive plants in the same row.

This document is not applicable to environmental hazards. It is not applicable to hazards related to moving parts for power transmission (except for strength requirements for guards and barriers) or to maintenance or repairs carried out by professional service personnel.

NOTE 1 Specific requirements related to road traffic regulations are not taken into account in this document.

NOTE 2 Vibrations are not regarded as a significant hazard in the case of mounted, semi-mounted or trailed machines.

This document is not applicable to power-driven soil-working machines 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.

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 12100 and ISO 4254-1 and the following apply.