საქართველოს სტანდარტი

სასოფლო სამეურნეო მანქანები-უსაფრთხოება- ნაწილი10: მბრუნავი თივასაბრუნელა და ფოცხები (ისო 4254-10:2009)

> საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტო თბილისი

#### საინფორმაციო მონაცემები

1 **შემუშავებულია** საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ

2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2019 წლის 20 დეკემბრის № 102 განკარგულებით

**3 მიღებულია გარეკანის თარგმნის მეთოდით** სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ ისო 4254-10:2009 "სასოფლო სამეურნეო მანქანებიუსაფრთხოება- ნაწილი10:მბრუნავი თივასაბრუნელა და ფოცხები (ისო 4254-10:2009)"

4 პირველად

**5 რეგისტრირებულია** საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 20 დეკემბერი №268-1.3-016758

დაუშვებელია წინამდებარე სტანდარტის სრული ან ნაწილობრივი კვლავწარმოება, ტირაჟირება და გავრცელება სსიპ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## EN ISO 4254-10

December 2009

ICS 65.060.50

**English Version** 

# Agricultural machinery - Safety - Part 10: Rotary tedders and rakes (ISO 4254-10:2009)

Matériel agricole - Sécurité - Partie 10: Faneuses et andaineuses rotatives (ISO 4254-10:2009)

Landmaschinen - Sicherheit - Teil 10: Kreiselzetter und Schwader (ISO 4254-10:2009)

This European Standard was approved by CEN on 14 December 2009.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2009 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

### Contents

Foreword	3
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC, amended by Directive 98/79/EC	4
Annex ZB (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC	5

#### Foreword

This document (EN ISO 4254-10:2009) has been prepared by Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry".

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 June 2010, and conflicting national standards shall be withdrawn at the latest by June 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 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 Directives.

For relationship with EU Directives, see informative Annexes ZA and ZB, which are integral parts of this document.

Regarding the protection of the moving parts for power transmission, see EN 15811:2009 "Agricultural machinery - Guards for moving parts of power transmission – Guard opening with tool (ISO/TS 28923:2007 modified)".

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

# Annex ZA (informative)

#### Relationship between this European Standard and the Essential Requirements of EU Directive 98/37/EC, amended by Directive 98/79/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 "Machinery" Directive 98/37/EC, amended by Directive 98/79/EC.

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, *except Essential Requirements 1.3.8.A, 1.5.9, 1.5.11 (EMC immunity), 3.4.3 (only for self-propelled machines), 3.4.7 (PTO draft shaft)* and associated EFTA regulations.

**WARNING** — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

# Annex ZB (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.

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, except *Essential Requirements 1.2.1, 1.3.8.1, 1.4.2.1 (2nd paragraph), 1.5.9, 1.5.11 (EMC immunity), 1.7.4.2 u) (4th paragraph, 2nd sentence; only for self-propelled machines), 3.4.7 (PTO draft shaft) and 3.6.3.1, and associated EFTA regulations.* 

**WARNING** — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

# INTERNATIONAL STANDARD

## ISO 4254-10

First edition 2009-12-15

## Agricultural machinery — Safety —

Part 10: Rotary tedders and rakes

Matériel agricole — Sécurité — Partie 10: Faneuses et andaineuses rotatives



Reference number ISO 4254-10:2009(E)

#### PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



#### COPYRIGHT PROTECTED DOCUMENT

© ISO 2009

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing 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

	word	
Intro	oduction	v
1	Scope	1
2	Normative references	2
3	Terms and definitions	2
4	List of significant hazards	3
5 5.1	Safety requirements and/or protective measures General	
5.2	Noise	10
5.3 5.4	Protection against inadvertent contact with tines and tine arms	
5.4 5.5	Machine in storage position	
5.6	Swivelling and movable components for transport	24
5.7	Drawbar hitch and/or carrier frame	25
6	Verification of the safety requirements and/or protective measures	25
7	Information for use	26
7.1	Instruction handbook	26
7.2	Marking	
7.3	Safety and instructional signs	27
Anne	ex A (informative) Tedders and swath rakes — Examples	28
Anne	ex B (normative) Strength test	31
Anne	ex C (informative) Stability of tractor-rotary tedder and rake combination	32
Bibli	iography	
		•

#### 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 4254-10 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 144, in collaboration with ISO Technical Committee TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 7, *Equipment for harvesting and conservation*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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
- Part 11: Pick-up balers
- Part 12: Rotary disc and drum mowers and flail mowers

Part 2, Anhydrous ammonia applicators, has been withdrawn.

- Part 3, *Tractors*, has been cancelled and replaced by ISO 26322.
- Part 4, Forestry winches, has been cancelled and replaced by ISO 19472.

#### Introduction

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

- a) type-A standards (basic standards) giving basic concepts, principles for design, and general aspects that can be applied to machinery;
- b) type-B standards (generic safety standards) dealing with one safety aspect or one type 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-hand control devices, interlocking devices, pressure-sensitive devices, guards);
- c) type-C standards (machinery safety standards) dealing with detailed safety requirements for a particular machine or group of machines.

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 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 machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this part of ISO 4254. These hazards are specific to rotary tedders and rakes.

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