STN	Poľnohospodárske stroje. Bezpečnosť. Časť 14: Obaľovače balíkov (ISO 4254-14: 2016).	STN EN ISO 4254-14
		47 0064

Agricultural machinery - Safety - Part 14: Bale wrappers (ISO 4254-14:2016)

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. 08/16

Obsahuje: EN ISO 4254-14:2016, ISO 4254-14:2016

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN ISO 4254-14** 

April 2016

ICS 65.060.01

#### **English Version**

# Agricultural machinery - Safety - Part 14: Bale wrappers (ISO 4254-14:2016)

Matériel agricole - Sécurité - Partie 14: Enrubanneuses (ISO 4254-14:2016)

Landmaschinen - Sicherheit - Teil 14: Ballenwickler (ISO 4254-14:2016)

This European Standard was approved by CEN on 19 December 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.



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 2006/42/EC	4

#### **European foreword**

This document (EN ISO 4254-14:2016) 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 October 2016, and conflicting national standards shall be withdrawn at the latest by October 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 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 relationship with EU Directive, 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.

#### **Endorsement notice**

The text of ISO 4254-14:2016 has been approved by CEN as EN ISO 4254-14:2016 without any modification.

## Annex ZA

(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 one 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 and associated EFTA regulations.

**WARNING:** Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

# INTERNATIONAL STANDARD

## ISO 4254-14

First edition 2016-03-15

# Agricultural machinery — Safety — Part 14: Bale wrappers

Matériel agricole — Sécurité — Partie 14: Enrubanneuses



ISO 4254-14:2016(E)



#### COPYRIGHT PROTECTED DOCUMENT

#### © ISO 2016, Published in Switzerland

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

Con	Contents			Page	
Forev	word			iv	
Intro	duction			<b>v</b>	
1	Scone			1	
2	-		eferences		
3					
4		ist of significant hazards			
5	Safety requirements and/or measures			9	
	5.1				
	5.2		ols		
		5.2.1	General		
		5.2.2	Remote controls (with cables or cableless)		
		5.2.3	Machine stop control		
		5.2.4	Safety and reliability of the controls		
	5.3		nes with automatic mode of operation		
	5.4		ng and unloading of bales		
		5.4.1	Visibility during loading and unloading of bales	11	
		5.4.2	Bale loading and unloading system	11	
		5.4.3	Unloading of bales	11	
		5.4.4	Stability	11	
	5.5	Mainte	enance and adjustments	11	
		5.5.1	Replacement of the plastic wrap/film	12	
		5.5.2	Collection of residue wrap/film		
	5.6	Stretcl	hing system		
		5.6.1	General		
		5.6.2	Stopping device		
		5.6.3	Additional requirements for wrappers with rotating platform		
	5.7 Device to cut the wrap/film				
	5.8		, v. C.		
	510	5.8.1	Noise reduction		
		5.8.2	Verification of requirements on noise based on noise emission values		
_	V: 6:		•		
6			of the safety requirements and/or protective measures		
7	Information for use				
	7.1		tor's manual		
	7.2		ng		
		7.2.1	General		
		7.2.2	Instructional signs	17	
		7.2.3	Safety signs	17	
Anne	<b>x A</b> (info	ormativ	e) Wrappers — Examples	18	
Anne	<b>x B</b> (info	ormativ	e) Stability of the tractor-wrapper combination	20	
Anne	x C (nor	mative)	) Loading stability	21	
Anne			) Test methods and acceptance criteria for sensor arm (pressure	25	
D21 11			rice)		
RIPLI	ography	7		30	

#### **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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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: <a href="www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>

The committee responsible for this document is Technical committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 7, *Equipment for harvesting and conservation*.

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 13: Large rotary mowers
- Part 14: Bale wrappers

#### 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 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-hand controls, 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 part of ISO 4254 is a type-C standard as stated in ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations, or hazardous events are covered are indicated in the scope of this part of ISO 4254. These hazards are specific to mounted, semi-mounted, and trailed bale wrappers for bales of agricultural harvesting products including wrappers which are combined or integrated with pick-up balers.

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

When the 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 provisions of this type-C standard.

### Agricultural machinery — Safety —

#### Part 14:

## **Bale wrappers**

#### 1 Scope

This part of ISO 4254, 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, trailed, and stationary bale wrapper for bales of agricultural harvesting products including wrappers which are combined or integrated with pick-up balers.

It describes methods for the elimination or reduction of hazards arising from the intended use and reasonably foreseeable misuse of these machines by one person (the operator) in the course of normal operation and service.

In addition, it specifies the type of information on safe working practices to be provided by the manufacturer.

NOTE 1 Requirements for self-propelled bale wrappers may be added during the next revision of this part of ISO 4254.

NOTE 2 Examples of these machines are given in Annex A.

NOTE 3 Requirements for pick-up balers are specified in ISO 4254-11.

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

This part of ISO 4254, taken together with ISO 4254-1, deals with all the significant hazards (as listed in <u>Table 1</u>), hazardous situations, and events relevant to mounted, semi-mounted, and trailed bale wrappers including wrappers which are combined with pick-up balers when they are used as intended and under the conditions of misuse that are reasonably foreseeable by the manufacturer (see <u>Clause 4</u>).

This part of ISO 4254 is not applicable to the following:

- non-mobile fixed bale wrappers;
- tube/inline wrappers;
- wrapping process that concerns only the circumferential part of the bale and that occurs in the bale chamber;
- the integrity of safety related parts of control systems with regard to the specification of performance levels;
- environmental hazards (except noise), road safety, and hazards related to moving parts for power transmission;
- hazards related to maintenance or repairs carried out by professional service personnel.

NOTE 4 Specific requirements related to road traffic regulations are not taken into account in this part of ISO 4254.

This part of ISO 4254 is not applicable to machines manufactured before the date of its publication.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3600, Tractors, machinery for agriculture and forestry, powered lawn and garden equipment — Operator's manuals — Content and format

ISO 3864-1, Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings

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

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

ISO 13849-1, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design

ISO 13849-2:2012, Safety of machinery — Safety-related parts of control systems — Part 2: Validation

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

ISO 14982, Agricultural and forestry machinery — Electromagnetic compatibility — Test methods and acceptance criteria

ISO 25119-1, Tractors and machinery for agriculture and forestry — Safety-related parts of control systems — Part 1: General principles for design and development

ISO 25119-2, Tractors and machinery for agriculture and forestry — Safety-related parts of control systems — Part 2: Concept phase

ISO 25119-3, Tractors and machinery for agriculture and forestry — Safety-related parts of control systems — Part 3: Series development, hardware and software

ISO 25119-4, Tractors and machinery for agriculture and forestry — Safety-related parts of control systems — Part 4: Production, operation, modification and supporting processes

ISO/TR 11688-1, Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning

IEC 60204-1, Safety of machinery — Electrical equipment of machines — Part 1: General requirements

### koniec náhľadu – text ďalej pokračuje v platenej verzii STN