
Traktorji ter kmetijski in gozdarski stroji - Priključne gredi in njihova zaščita - Varnost - Dopolnilo A1

Tractors and machinery for agriculture and forestry - Power take-off (PTO) drive shafts and their guards - Safety

Traktoren und Maschinen für die Land- und Forstwirtschaft - Gelenkwellen und ihre Schutzeinrichtungen - Sicherheit

Tracteurs et matériels agricoles et forestiers - Arbres de transmission à cardans de prise de force et leurs protecteurs - Sécurité

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Ta slovenski standard je istoveten z: EN 12965:2019/prA1

ICS:

65.060.01	Kmetijski stroji in oprema na splošno	Agricultural machines and equipment in general
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EUROPEAN STANDARD
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English Version

Tractors and machinery for agriculture and forestry - Power take-off (PTO) drive shafts and their guards - Safety

Tracteurs et matériels agricoles et forestiers - Arbres
de transmission à cardans de prise de force et leurs
protecteurs - Sécurité

Traktoren und Maschinen für die Land- und
Forstwirtschaft - Gelenkwellen und ihre
Schutzeinrichtungen - Sicherheit

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 144.

This draft amendment A1, if approved, will modify the European Standard EN 12965:2019. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

This draft amendment was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 12965:2019/prA1:2023) 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 document is currently submitted to the CEN Enquiry.

This document will amend EN 12965:2019.

The following technical modifications have been made:

- Modification to Clause 4.1
- Modification to Clause 4.2.1
- Modification to Clause 4.2.2

These modifications require that also on PIC side, the guard covers the transmission to the ends of the inner jaws in the case of simple universal joints and at least to the centre of the outer joint or joints in the case of wide-angle universal joints.

This document has been prepared under a Standardization Request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) / Regulation(s).

For relationship with EU Directive(s) / Regulation(s), see informative Annex ZA, which is an integral part of EN 12965:2019.

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EN 12965:2019/prA1:2023 (E)

1 Modification to Clause 2, “Normative references”

Insert a footnote after the reference “EN ISO 4254-1:2015” to read as follows:

“EN ISO 4254-1:2015¹, *Agricultural machinery - Safety - Part 1: General requirements - Amendment 1 (ISO 4254-1:2013/Amd 1:2021)*

¹ As impacted by the amendment EN ISO 4254-1:2015/A1:2021.”.

Replace the reference to “ISO 1140:2012, Fibre ropes — Polyamide — 3-, 4-, 8- and 12-strand ropes” with “EN ISO 1140:2021, Fibre ropes — Polyamide — 3-, 4-, 8- and 12-strand ropes (ISO 1140:2021)”.

Replace the reference to “EN ISO 13857:2008, Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)” with “EN ISO 13857:2019, Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2019)”

2 Modification to 4.1, “General requirements”

Replace the second paragraph of 4.1 with the following:

“Concerning the guards between the outer ends of the guard cones, unless otherwise specified in this document, all the apertures and safety distances shall comply with the requirements given in EN ISO 13857:2019, Table 4.”.

Also, add the following text at the end of 4.1:

“The PTO drive shaft guard cone shall cover the PTO drive shaft at least up to the end of the inner yoke of the universal joint.

For wide-angle universal joints, the PTO drive shaft shall be guarded in the straight-line position at least up to the end of the outer joint of the double yoke.”.

3 Modifications to 4.2.1, “Universal joint”

Replace the first paragraph of 4.2.1 with the following:

“In order to ensure sufficient overlap between tractor master shield and PTO drive shaft guard (Figure 1), the values for dimension *c*, distance between axis of locking system and end of guard cone as shown in Figure 3, shall be as given in Table 1.”.

In Table 1, replace the content of the upmost cell on the left with the following:

“PTO type according to ISO 500-3:2014”.

4 Modification to 4.2.2, “Wide-angle universal joint”

Replace the first paragraph of 4.2.2 with the following:

“In order to ensure sufficient overlap between tractor master shield and PTO drive shaft guard (Figure 1), the values for dimension *c*, distance between axis of locking system and end of wide-angle guard cone as shown in Figure 4, as given in Table 1 shall be met.”.

5 Modification to 4.4.1, “General”

Replace the first sentence with the following:

“The PTO drive shaft guard shall comply with the acceptance criteria according to EN ISO 5674:2009.”.

6 Modification to 4.5.1.1, “Lubrication access”

Replace the second indent with the following:

“— indirect access through opening or removing parts of the guard in compliance with EN 15811:2014.”.

7 Modification to 5.1, “General”

Replace the text in the clause with the following:

“Dimensions, where given, shall be verified by measurements. Guards shall be verified by functional test. The compliance of the guard with the acceptance criteria of EN ISO 5674:2009 shall be verified by the tests specified in EN ISO 5674:2009.”.

8 Modification to 5.3.3, “Test sample”

Replace the second sentence with the following:

“The ropes are made of Polyamide (PA) with a diameter of 5 mm and similar to EN ISO 1140:2021 Type L.”.

9 Modification to B.1, “General”

Replace the first indent with the following:

“First prepare the ropes made of Polyamide (PA) with a diameter of 5 mm and similar to EN ISO 1140:2021 Type L.”.

10 Modification to Annex ZA (informative), “Relationship between this European Standards and the Essential Requirements of EU Directive 2006/42/EC aimed to be covered”

In Table ZA.1, replace the row dedicated to EHSR 1.1.2 by the following rows:

“

1. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS		
1.1.2. Principles of safety integration		
1.1.2 (a)	1, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2, 5.3, 6.1, 6.2	
1.1.2 (c)	1, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2, 5.3, 6.1, 6.2	
1.1.2 (d)	1, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 5.1, 5.2, 5.3, 6.1, 6.2	

”.