



SLOVENSKI STANDARD
SIST EN 16228-7:2014/oprA1:2019
01-julij-2019

**Oprema za vrtnanje in temeljenje - Varnost - 7. del: Zamenljiva pomožna oprema -
Dopolnilo A1**

Drilling and foundation equipment - Safety - Part 7: Interchangeable auxiliary equipment

Geräte für Bohr- und Gründungsarbeiten - Sicherheit - Teil 7: Auswechselbare
Zusatzausrüstungen

Machines de forage et de fondation - Sécurité - Partie 7 : Équipements complémentaires
interchangeables

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Ta slovenski standard je istoveten z: EN 16228-7:2014/prA1

ICS:

53.100	Stroji za zemeljska dela	Earth-moving machinery
93.020	Zemeljska dela. Izkopavanja. Gradnja temeljev. Dela pod zemljo	Earthworks. Excavations. Foundation construction. Underground works

SIST EN 16228-7:2014/oprA1:2019 **en,fr,de**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

DRAFT
EN 16228-7:2014
prA1

May 2019

ICS 93.020

English Version

Drilling and foundation equipment - Safety - Part 7: Interchangeable auxiliary equipment

Machines de forage et de fondation - Sécurité - Partie 7
: Équipements complémentaires interchangeables

Geräte für Bohr- und Gründungsarbeiten - Sicherheit -
Teil 7: Auswechselbare Zusatzausrüstungen

This draft amendment is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 151.

This draft amendment A1, if approved, will modify the European Standard EN 16228-7:2014. 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 16228-7:2014/prA1:2019) has been prepared by Technical Committee CEN/TC 151 “Construction equipment and building material machines - Safety”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of EN 16228-7:2014.

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EN 16228-7:2014/prA1:2019 (E)

1 Modification to the whole text

In the entire document, for all instances found:

Replace “EN 16228-1:2014” with “EN 16228-1:2014+prA1:2019”.

Replace “EN 16228-2:2014” with “EN 16228-2:2014+prA1:2019”.

Replace “EN 16228-3:2014” with “EN 16228-3:2014+prA1:2019”.

Replace “EN 16228-4:2014” with “EN 16228-4:2014+prA1:2019”.

Replace “EN 16228-5:2014” with “EN 16228-5:2014+prA1:2019”.

Replace “EN 16228-6:2014” with “EN 16228-6:2014+prA1:2019”.

Replace “EN 16228-7:2014” with “EN 16228-7:2014+prA1:2019”.

2 Modification to Clause 4 “List of additional significant hazards”

Replace Table 1 with the following: “

Table 1 — List of additional significant hazards and associated requirements

No.	Hazard	Relevant clause(s) in this standard
1	Mechanical hazards	
1.1	Generated by machine parts or work pieces, e.g. by:	
1.1.1	Mass and stability	5.2.1, 5.2.3, 5.2.4
1.1.2	Mass and velocity	5.2.1
1.1.3	Inadequacy of mechanical strength	5.2.1, 5.2.3, 5.2.4, 7.2.4
1.2	Accumulation of energy inside the machinery, e.g. by:	
1.2.1	Fluids under pressure	5.2.4
1.3	Elementary forms of mechanical hazards	
1.3.1	Crushing	5.2.3, 5.2.4, 7.2.6
1.3.2	Cutting or severing	5.2.2
1.3.3	Impact	5.2.1
2	Processed materials and substances, used materials, fuels	
2.1	Hazards from contact with harmful fluids, gases, mists, fumes and dusts	5.2.1
3	Unexpected start-up, unexpected overrun/overspeed (or any similar malfunction) from:	
3.1	Other external influences (gravity, wind, etc.)	5.2.1, 5.2.3, 5.2.4
4	Hazards generated by noise, resulting in:	
4.1	Hearing losses and physiological disorders	Annex A

No.	Hazard	Relevant clause(s) in this standard
4.2	Accidents due to interference with speech communication and warning signals	Annex A
5	Loss of stability/overturning of machinery	5.2.1
6	Relating to the travelling function	
6.1	Uncontrolled movement of machine when starting the engine	5.2.2, 7.2.5
6.2	Movement without an operator at the driving position	5.2.2
6.3	Excessive oscillations when moving	5.2.2
6.4	Insufficient ability of machinery to be slowed down, stopped and immobilized	5.2.2
7	Mechanical hazards at the work position — fall of objects, penetration by object; — contact of persons with machine parts or tools (pedestrian control).	5.2.1, 5.2.3, 5.2.4 5.2.2
8	Vibration at the driving position	5.2.3
9	Mechanical hazards and events	
9.1	From load falls, collision, machine tipping caused by:	
9.1.1	Lack of stability	5.2.1
9.1.2	Uncontrolled loading, overloading, overturning moment exceeded	5.2.1
9.1.3	Unexpected/unintended movement of loads	5.2.3, 5.2.4
9.1.4	Inadequate holding devices/accessories	5.2.3, 5.2.4
9.2	From insufficient mechanical strength of parts	5.2.1, 5.2.3, 5.2.4

“

3 Modification to Subclause 5.2.4 “Clamping devices for connection of pile elements to the driving tool”

After the seventh paragraph, add the following text:

“Clamping devices shall be made such that they facilitate the pitching of the pile into the gap of the clamping device, e. g. by guiding plates or chamfers at the open end of the gap.

Clamping devices shall be equipped with a device to attach and secure the load, e.g. sheet pile.”

In the eighth paragraph, change “to the extractor by means of a safety rope” by “by this device”.

4 Addition of a new Subclause 5.2.5

Add the following text after 5.2.4:

EN 16228-7:2014/prA1:2019 (E)**“5.2.5 Excavator mounted add-on auger drives**

Excavator mounted add-on auger drives complying with EN 16228-1:2014+prA1:2019, 5.24, designed to be used without manual rod/auger handling (i.e. without rod/auger addition or removal during process) shall comply with EN 16228-1:2014+prA1:2019, 5.23.2.2.7.

5 Modification of Clause 6 “Verification of the safety requirements and/or protective measures”

Add the following row to Table 2:

5.2.5	Excavator mounted add-on auger drives	x		x			
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6 Modification to Subclause 7.2.1 “General”

In the third paragraph, first sentence, replace the following text “The manufacturer of interchangeable auxiliary equipment shall provide” with “The following minimum information shall be given”:

In the third paragraph, first sentence, after the words “position of centre of gravity”, add the following text: “ and loads”.

In the third paragraph, first sentence, after the words “to allow calculations for stability”, add the following text:

“ and mechanical strength”.

In the third paragraph, replace “all” by “All”.

Replace the last paragraph with the following text:

“A warning in the instructions regarding assembling the interchangeable auxiliary equipment with drilling and foundation equipment according to EN 16228 parts 1 to 6, earth-moving machinery, agricultural equipment, etc. and changing the original shape or functions of the equipment that shall be considered as a new design of a new machine, if not foreseen by the manufacturer.”

7 Modification to Subclause 7.2.6 “Vibrators”

After the second paragraph, replace the first indent by the following indents:

- information regarding piling elements to be handled;
- procedure for handling and securing of piling elements;
- statement that vibrator/clamps shall not to be used for lifting operations other than lifting the piles;

8 Addition of a new Subclause 7.2.7 “Excavator mounted add-on auger drives “

Add the following new subclause

“7.2.7 Excavator mounted add-on auger drives

- Instructions for mounting and removing tools and rotary head from the base machine;
- Instructions regarding restrictions to access the danger zone.”

9 Modification to Subclause A.1 “General”

Delete the NOTE.