

SLOVENSKI STANDARD SIST EN 12348:2000/kprA1:2008

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Stabilni vrtalni stroji - Varnost

Core drilling machines on stand - Safety

Kernbohrmaschinen auf Ständer - Sicherheit

Foreuses à béton (carotteuses) sur colonne - Sécurité

Ta slovenski standard je istoveten z: EN 12348:2000/prA1

ICS:

25.080.40 Vrtalniki Drilling machines

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English Version

Core drilling machines on stand - Safety

Foreuses à béton (carotteuses) sur colonne - Sécurité

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

This draft amendment A1, if approved, will modify the European Standard EN 12348:2000. 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.

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

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Foreword

This document (EN 12348:2000/prA1:2008) 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 Unique Acceptance Procedure.

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(s), see informative Annexes ZA and ZB, which are integral parts of this document.

1 Modification to the Introduction

In the 1st paragraph replace "EN 292" with "EN ISO 12100-1".

2 Modification to Clause 2, Normative references

Replace "EN 953:1997" with "EN 953".

Delete:

"EN 292-1:1991, Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology"

"EN 292-2:1991, Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles and specifications"

"EN 563:1994, Safety of machinery — Temperatures of touchable surfaces — Ergonomic data to establish temperature limit values for hot surfaces"

"EN 954-1:1996, Safety of machinery — Safety related parts of control systems — Part 1: General principles for design"

"EN 1070:1998, Safety of machinery — Terminology"

Update:

"EN 60204-1:1997, Safety of machinery - Electrical equipment of machine - Part 1: General requirements (IEC 60204-1:1997)" to "EN 60204-1:2006, Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204-1:2005, modified)"

"EN 60335-1:1994, Safety of household and similar electrical appliances – Part 1: General requirements (IEC 60335-1:1991, modified)" to "EN 60335-1:2002, Household and similar electrical appliances — Safety — Part 1: General requirements (IEC 60335-1:2001, modified)"

"EN 60335-2-41:1996, Safety of household and similar electrical appliances – Part 2: Particular requirements for pumps for liquids having a temperature not exceeding 35 °C (IEC 60335-2-41:1996)" to "EN 60335-2-41:2003, Household and similar electrical appliances — Safety — Part 2-41: Particular requirements for pumps (IEC 60335-2-41:2002)"

"prEN 61029-2-6:1992, Safety of transportable motor operated electric tools — Part 2-6: Particular requirements for diamond drills with water supply" to "prEN 61029-2-6:2007, Safety of transportable motor-operated electric tools — Part 2-6: Particular requirements for diamond drills with water supply (IEC 61029-2-6:1993, modified)"

"EN ISO 3744:1995, Acoustics - Determination of sound power levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane (ISO 3744:1994)" to "prEN ISO 3744:2006, Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Engineering method in an essentially free field over a reflecting plane (ISO/DIS 3744:2006)"

Update title of EN ISO 11201:1995 to read as follows: "Acoustics — Noise emitted by machinery and equipment — Measurement of emission sound pressure levels at a work station and at other specified positions — Engineering method in an essentially free field over a reflecting plane (ISO 11201:1995)"

Add:

"EN 206-1:2000, Concrete — Part 1: Specification, performance, production and conformity"

"EN 12096, Mechanical vibration — Declaration and verification of vibration emission values"

"EN SO 5349-2:2001, Mechanical vibration — Measurement and evaluation of human exposure to hand-transmitted vibration — Part 2: Practical guidance for measurement at the workplace (ISO 5349-2:2001)"

"EN ISO 8041, Human response to vibration — Measuring instrumentation (ISO 8041:2005)"

"EN ISO 12100-1:2003, Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology (ISO 12100-1:2003)"

"EN ISO 12100-2:2003, Safety of machinery — Basic concepts, general principles for design — Part 2: Technical principles (ISO 12100-2:2003)"

"EN ISO 13732-1:2006, Ergonomics of the thermal environment — Methods for the assessment of human responses to contact with surfaces — Part 1: Hot surfaces (ISO 13732-1:2006)"

"EN ISO 13849-1:2008, Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design (ISO 13849-1:2006)"

"EN ISO 13850:2008, Safety of machinery — Emergency stop — Principles for design (ISO 13850:2006)"

"EN ISO 20643:2008, Mechanical vibration — Hand-held and hand-guided machinery — Principles for evaluation of vibration emission (ISO 20643:2005)"

"ISO 5348, Mechanical vibration and shock — Mechanical mounting of accelerometers"

"ISO 7000:2004, Graphical symbols for use on equipment — Index and synopsis"

"ISO 16063-1, Methods for the calibration of vibration and shock transducers — Part 1: Basic concepts"

3 Modifications to Clause 3, Terms and definitions

Replace in the 1st paragraph "EN 1070:1998" with "EN ISO 12100-1:2003".

Replace the heading of definition 3.4 with "rated no-load spindle speed".

In the definition replace "no load" with "no-load".

4 Modification to Clause 4, List of significant hazards

In Table 1, add as last item:

"4.24	Hazards generated by vibration	5.11"
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5 Modification to Clause 5, Safety requirements and/or measures

In the 1^{st} paragraph replace "EN 292-1:1991 and EN 292-2:1991" with "EN ISO 12100-1:2003 and EN ISO 12100-2:2003".

In the 2nd paragraph replace "EN 953:1997" with "EN 953" and "EN 60204-1:1992" with "EN 60204-1:2006".

6 Modification to 5.1.2.1, Transmission parts

Replace the 2nd sentence with the following: "These guards shall comply with EN 953 and 5.3.2.2 of EN ISO 12100-2:2003".

Delete 3rd paragraph, listings and NOTE.

7 Modification to 5.1.2.2, Feed of the drilling unit on the column

In the 1st paragraph add "at least in one position" after "lockable" and "stop-" after "any" to read as follows:

"The drilling unit shall be lockable at least in one position or shall be designed to be self-sustaining in any stop-position on the column."

Add as 2nd paragraph the following:

"Machines equipped with a powered feed system shall be self-sustaining in any stop-position."

8 Modification to 5.1.4, Stability during work

Delete in headline "during work" and add a new subclause 5.1.4.1 to read as follows:

"5.1.4 Stability

5.1.4.1 Stability during work"

Add a new subclause 5.1.4.2 to read as follows:

"5.1.4.2 Stability during transportation, assembly and dismantling

As the stability of the drill rig is not given for these situations the operators manual shall give instructions for safe handling."

9 Modification to 5.1.5, Control device

A Modification to 5.1.5.1, General

Replace "EN 60204-1:1997" with "EN 60204-1:2006".

Replace "EN 954-1:1996" with "EN ISO 13849-1:2008."

B Modification to 5.1.5.2, Start and stop control device for the drive of the spindle and the powered feed

Add the following new paragraphs at the end:

"For cable-less control, an automatic stop, which holds the carriage in a sustained position, shall be activated when correct signals are not received, including loss of communication.

Access to danger zones that cannot be supervised by the operator from the different possible control positions shall be avoided by appropriate provisions."

Add a new sub-clause 5.1.5.3 to read as follows:

"5.1.5.3 Emergency stop

Emergency stop device is not required for manual fed machines as it would not reduce the stopping time the operator being close to the drill motor.

All machines with remote control and/or automatic feed shall be fitted with an easily accessible emergency stop in the system. This emergency stop shall be in accordance with EN ISO 13850:2008. It shall stop all dangerous movements as quickly as possible without creating an additional hazard."

10 Modification to 5.2.1, General

In the 1st paragraph replace "prEN 61029-2-6:1992" with "prEN 61029-2-6:2007"

In the 2nd paragraph replace "EN 60204-1:1997" with "EN 60204-1:2006" and "4.4.2 of EN 60204-1:1992" with "4.4.3 of EN 60204-1:2006"

11 Modification to 5.2.2, Water pump

Replace "EN 60335-1:1994" with "EN 60335-1:2002" and "EN 60335-2-41:1996" with "EN 60335-2-41:2003".

12 Modification to 5.4.2

Replace "4.2.2 of EN 563:1994" with "EN ISO 13732-1:2006".

13 Modification to 5.4.3

Replace "EN 563:1994" with "EN ISO 13732-1:2006".

14 Modification to 5.4.4, Test method

In the 2nd paragraph replace "EN 563:1994" with "EN ISO 13732-1:2006".

15 Modification to 5.10.1, Noise reduction at the design stage

In the note replace "EN ISO 11688-2:1999" with EN ISO 11688-2:2000".

Add a new subclause 5.11 "Vibration" to read as follows:

"5.11 Vibration

5.11.1 Vibration reduction at the design stage

Whole-body vibration is not relevant for this type of machinery.

The hand-arm vibration shall be reduced to the lowest level taking into account the technical progress.

5.11.2 Vibration measurement, declaration and verification procedures

Measurement, declaration and verification of hand-arm vibration values shall be made according to the vibration test code given in Annex D."

Renumber 5.11 into 5.12.

16 Modification to Clause 7, Information for use

Replace "5.5 of EN 292-2:1991" with "6.5 of EN ISO 12100-2:2003".

17 Modification to 7.1.1, Regular marking

Replace the first indent with the following indent:

— "business name and full address of the manufacturer and, where applicable, his authorized representative;"