SLOVENSKI STANDARD
SIST EN 50632-2-1:2015

01-december-2015

Elektromotorna orodja - Postopek meritve prahu - 2-1. del: Posebne zahteve za svedre in udarne svedre

Electric motor-operated tools - Dust measurement procedure - Part 2-1: Particular requirements for drills and impact drills

Ta slovenski standard je istoveten z: **EN 50632-2-1:2015**

ICS:

25.100.30	Svedri, greznila, posnemalna orodja	Drills, countersinks, reamers
25.140.20	Električna orodja	Electric tools

SIST EN 50632-2-1:2015 **en,fr**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50632-2-1

August 2015

ICS 25.140.20

English Version

Electric motor-operated tools - Dust measurement procedure - Part 2-1: Particular requirements for diamond core drills

Outils électriques à moteur - Mode opératoire pour la mesure de la poussière - Partie 2-1: Exigences particulières pour les perceuses et les perceuses à percussion

Motorbetriebene Elektrowerkzeuge - Staubmessverfahren - Teil 2-1: Besondere Anforderungen für Diamant-Kernbohrmaschinen

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (EN 50632-2-1:2015) has been prepared by CLC/TC 116 “Safety of motor-operated electric tools”.

The following dates are fixed:

• latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2016-08-03
• latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2017-08-03

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This European Standard is divided into three parts:

Part 1: General requirements for the dust measurement which are common to electric motor-operated tools (for the purpose of this standard referred to simply as tools).

Part 2 or 3: Requirements for the dust measurement for particular types of tools, which either supplement or modify the requirements given in Part 1 to account for the particular characteristics of these specific tools.

This Part 2 is to be used in conjunction with EN 50632-1:2015.

This Part 2 supplements or modifies the corresponding clauses in EN 50632-1:2015.

This Part 2 was developed to set out requirements for the measurement of the concentration for inhalable and respirable dust emitted by diamond core drills.

Where a particular subclause of Part 1 is not mentioned in this Part 2, that subclause applies as far as reasonable. When this standard states “addition”, “modification” or “replacement”, the relevant text in Part 1 is to be adapted accordingly.

Subclauses, notes, tables and figures which are additional to those in Part 1 are numbered starting from 101.

The following print types are used:
- requirements; in roman type
- *test specifications: in italic type;*
- notes: in smaller roman type.

The terms defined in Clause 3 are printed in **bold typeface**.

1 Scope

This clause of Part 1 is applicable except as follows:

Addition:

This part of EN 50632 applies to **diamond core drills**.

2 Normative references

This clause of Part 1 is applicable.

3 Terms and definitions

This clause of Part 1 is applicable except as follows:

3.101
diamond core drill
drill designed to be equipped with a diamond core drill bit with or without water supply to drill with or without percussion into materials such as concrete or brick

4 Test procedure

This clause of Part 1 is applicable except as follows:

4.3 Operating conditions

Addition:

Diamond core drills are tested under load observing the conditions shown in Table 101.

Table 101 — Operating conditions for diamond core drills

Material and set-up	Blocks from calcium silicate with a density between 1 800 kg/m^3 and 2 000 kg/m^3 with a thickness of at least 100 mm and a compressive strength of at least 20 N/mm^2 and without hollow sections. The material shall be stored in a dry environment for at least 2 weeks prior to testing. Blocks are placed on a A-support, see Figure 101, with 15° inclination with the lower workpiece support being (500 ± 50) mm above the floor. The blocks are arranged without gaps to achieve an area of approximately 2 m^2, see Figure 102. NOTE Typical material are blocks from calcium silicate made by UNIKA Kalksandsteinwerk Nordbayern GmbH and Co. KG in Breitengüßbach, Germany. [1)]
Orientation and operation	Drilling holes into the calcium silicate blocks rectangular to their surface of approximately 2 m^2. The holes shall have a depth of 40 mm. The distance between the holes and the distance of the holes to the edge of the blocks shall be large enough so that the dust collection device of the **diamond core drill** does not cover any adjacent holes or overhang the edge of the blocks.
Tool bit/settings	New drill bit with 82 mm diameter as specified by the manufacturer for drilling into calcium silicate at the beginning of each of the three tests. Speed setting devices, if any, shall be adjusted to the setting specified for the drill bit size and for drilling into calcium silicate.
Feed force	The feed force applied to the tool shall be sufficient to ensure stable operation with good performance.
Test	During each test cycle of 10 min, 20 holes as specified above are performed equally distributed over the test cycle. During the resting time, the dust extraction unit may be emptied, if necessary. This shall be done outside the test room. If the above cannot be achieved within 10 min, the time is extended to allow the required number of holes to be drilled.

5 Instrumentation

This clause of Part 1 is applicable.

6 Information to be reported

This clause of Part 1 is applicable except as follows:

k) *Modification:*

The mean value for the concentration of the respirable dust is also required.

p) *Modification:*

Information about extension of the cycle time in case 20 holes could not be performed within 10 min.

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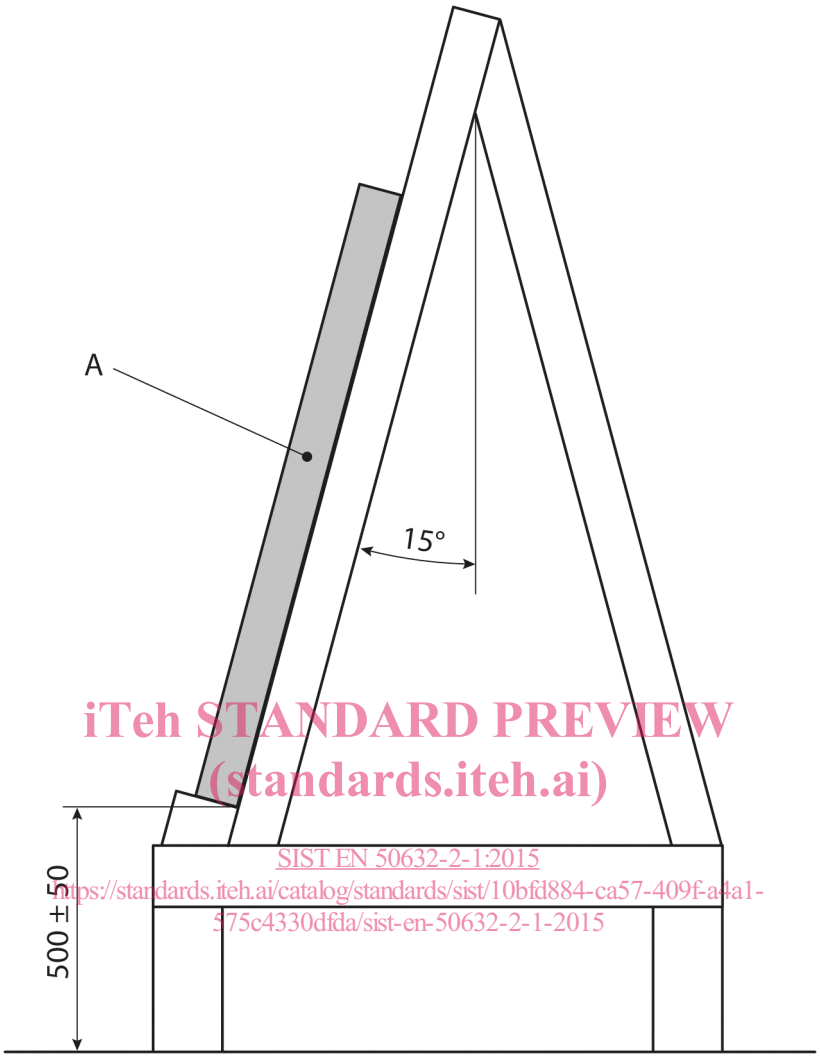
1) This information is given for the convenience of users of this European Standard and does not constitute an endorsement by CENELEC of the product named.

Dimensions in millimetres



Key

A workpiece

Figure 101 – A-support