

# SLOVENSKI STANDARD SIST EN 60745-2-3:2011/oprAA:2013

01-februar-2013

# Električna ročna orodja - Varnost - 2-3. del: Posebne zahteve za brusilnike, polirnike in diskovne peskalnike

Hand-held motor-operated electric tools - Safety - Part 2-3: Particular requirements for grinders, polishers and disk-type sanders

Handgeführte motorbetriebene Elektrowerkzeuge - Sicherheit - Teil 2-3: Besondere Anforderungen für Schleifer, Polierer und Schleifer mit Schleifblatt

Outils électroportatifs à moteur - Sécurité - Partie 2-3: Règles particulières pour les meuleuses, lustreuses et ponceuses du type à disque

Ta slovenski standard je istoveten z: EN 60745-2-3:2011/prAA:2012

ICS:

25.080.50 Brusilni in polirni stroji Grinding and polishing

machines

25.140.20 Električna orodja Electric tools

SIST EN 60745-2-3:2011/oprAA:2013 en

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM DRAFT EN 60745-2-3 prAA

December 2012

**ICS** 

English version

# Hand-held motor-operated electric tools - Safety -

# Part 2-3: Particular requirements for grinders, polishers and disk-type sanders

Outils électroportatifs à moteur -Sécurité -Partie 2-3: Règles particulières pour les meuleuses, lustreuses et ponceuses du type à disque Handgeführte motorbetriebene Elektrowerkzeuge -Sicherheit -Teil 2-3: Besondere Anforderungen für Schleifer, Polierer und Schleifer mit Schleifblatt

This draft amendment prAA, if approved, will modify the European Standard EN 60745-2-3:2011; it is submitted to CENELEC members for CENELEC enquiry. Deadline for CENELEC: 2013-05-10.

It has been drawn up by CLC/TC 116.

If this draft becomes an amendment, CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

This draft amendment was established by CENELEC in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC 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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# **CENELEC**

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

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Project: 23760

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Foreword

- 2 This document [EN 60745-2-3:2011/prAA:2012] has been prepared by CLC/TC 116 "Safety of motor-
- 3 operated electric tools".

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- 4 This document is currently submitted to the Enquiry.
- 5 This document has been prepared under a mandate given to CENELEC by the European Commission
- and the European Free Trade Association, and supports essential requirements of EU Directive(s).
- 7 This amendment was developed to set out requirements for the measurement of the concentration for
- 8 inhalable and respirable dust emitted by concrete grinders or disc-type sanders.
- 9 Clauses, subclauses, notes, tables and figures which are additional to those in IEC 60745-2-3 are
- 10 prefixed "Z".
- Subclauses, tables and figures which are additional to those in Part 1 are numbered starting from 101;
- 12 additional annexes are lettered AA, BB, etc.

#### Text of prAA to EN 60745-2-3:2011 13

14	Annexes
15	Add the following new Annex:
16 17 18	Annex ZC (normative)
19	Dust measurement
20	ZC.1 Scope
21	This clause of Part 1 is applicable except as follows:
22	Addition:
23 24	Annex ZC applies to the measurement of the concentration for inhalable and respirable dust emitted by concrete grinders or disc-type sanders.
25	ZC.2 Normative references
26	This clause of Part 1 is applicable except as follows:
27	Addition:
28	EN 1339:2003, Concrete paving flags – Requirements and test methods
29	ZC.3 Terms and definitions
30	This clause of Part 1 is applicable except as follows:
31	Addition:
32 33 34	ZC.3.101 concrete grinder tool intended for smoothing and deburring concrete surfaces by means of diamond wheels
35	ZC.4 Test procedure
36	This clause of Part 1 is applicable except as follows:
37	ZC.4.3 Operating conditions
38	Addition:
39	Concrete grinders are tested under load observing the conditions shown in Table ZC.101.

## Table ZC.101 — Operating conditions for concrete grinders

Material and set- up	Concrete slabs with minimum dimensions of 400 mm x 400 mm, maximum dimensions of 600 mm x 600 mm and a thickness of (50 ± 5) mm according to EN 1339. The concrete slabs shall be stored for at least three weeks under dry conditions. During storing, the distance between the slabs shall be at least one slab thickness. The slabs shall have the following specifications in accordance with the following subclauses of EN 1339:2003: Class 3 (5.3.3.2), Class 4 (5.3.4.2), Class 70 (5.3.6.2) for 400 mm x 400 mm, Class 45 (5.3.6.2) for 400 mm x 600 mm and 600 mm x 600 mm.
	NOTE Typical material are concrete slabs made by Lithonplus, Germany. 1)
	The slabs are placed on a A-support, see Figure ZC.102, with 15 $^{\circ}$ inclination with the lower workpiece support being (500 $\pm$ 50) mm above the floor. The blocks are arranged without gaps to achieve an area of approximately 2,0 m length and 1,2 m height, see Figure ZC.101.
	For each tested machine, new slabs shall be used.
Orientation and operation	The concrete slabs are ground. During grinding, the grinding wheel shall be at least 50 mm away from the edges of the total area of concrete slabs.
	During grinding, the grinding area of the wheel shall be parallel to the surface of the concrete slabs.
Tool bit/settings	New or re-sharpened diamond wheel as specified by the manufacturer for grinding concrete at the beginning of the first test. If necessary, the wheel may be changed during a resting period.
	Speed setting devices, if any, shall be adjusted to the setting specified for grinding concrete.
Feed force	The forces applied to the tool shall be to achieve an average power consumption during the test of $70 \% - 90 \%$ of the rated input of the tool.
Test	During the entire test a minimum of 1 200 g of material is collected in the dust extraction unit.
	The weight of the material collected may be determined as the weight increase of the dust collection unit by means of scales.

Disc-type sanders intended to process materials containing quartz are tested under load observing the conditions shown in Table ZC.102.

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<sup>1)</sup> 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.

## Table ZC.102 — Operating conditions for sanding plaster fibreboard

Material and set- up	Sheets of plaster fibreboard made from approximately 80 % plaster and 20 % paper fibre without any other binding material or additives with a thickness of approximately 12,5 mm. The material shall be stored in a dry environment for at least 2 weeks prior to testing.
	The sheets are placed on a A-support, see Figure ZC.102, 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 4 m length and 1,5 m height, see Figure ZC.103.
Orientation and operation	The fibreboard sheets are sanded. During sanding, the sanding paper shall be at least 50 mm away from the edges of the total fibreboard area.
	During sanding, the sanding paper shall be parallel to the surface of the fibreboard.
Tool bit/settings	Sanding paper with a grain P80, suitable for the material plaster fibreboard. The sanding paper is replaced after one operating cycle.
	Speed setting devices, if any, shall be adjusted to maximum speed.
Feed force	The forces applied to the tool shall be to achieve an average power consumption during the test of $70 \% - 90 \%$ of the rated power of the tool.
Test	During the entire test a minimum of
	- 1 000 g, for disk type sanders with a rated capacity up to and including 150 mm;
	- 1 500 g, for disk type sanders with a rated capacity above 150 mm
	of material are collected in the dust extraction unit.
	The weight of the material collected may be determined as the weight increase of the dust collection unit by means of scales.

### 46 ZC.5 Test report

- This clause of Part 1 is applicable except as follows:
- 48 j) Modification:

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- For tools tested in accordance with Table ZC.101 or Table ZC.102, the mean value for the
- 50 concentration of the respirable dust is also required.

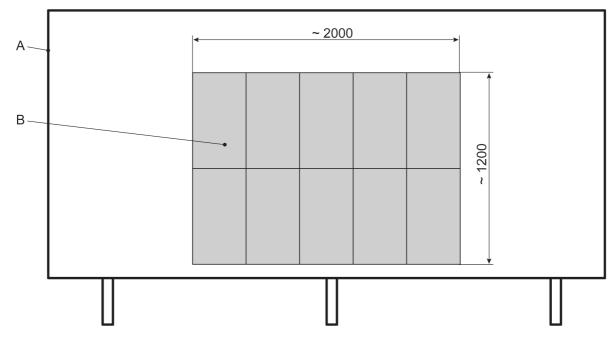
### ZC.6 Additional instructions

- 52 This clause of Part 1 is applicable except as follows:
- 53 Modification of the first dash:
- 54 For tools tested in accordance with Table ZC.101 or Table ZC.102, the mean value for the
- 55 concentration of the respirable dust is also required.

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56 Dimensions in millimetres



58 **Key** 

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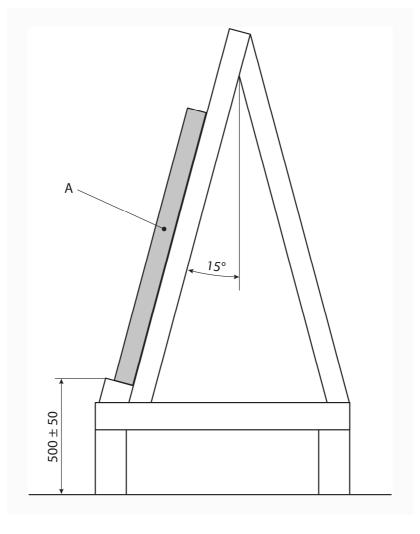
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59 A A-support

60 B workpiece (concrete slabs)

Figure ZC.101 – Test set-up for concrete grinders

Dimensions in millimetres



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64 **Key** 

65 A workpiece

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Figure ZC.102 - A-support