



SLOVENSKI STANDARD SIST EN 50260-2-4:2002

01-september-2002

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Safety of hand-held battery-powered motor-operated tools and battery packs -- Part 2-4:
Particular requirements for sanders

Sicherheit für handgeführte akkubetriebene Elektrowerkzeuge und Akkublöcke -- Teil 2-4:
Besondere Anforderungen für Schwing- und Bandschleifer

Sécurité des outils électroportatifs alimentés par batteries et des blocs de batteries --
Partie 2-4: Règles particulières pour les ponceuses

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Ta slovenski standard je istoveten z: EN 50260-2-4:2002

ICS:

25.080.50	Brusilni in polirni stroji	Grinding and polishing machines
25.140.20	Ò `dã } æ àbæ	Electric tools
29.220.20	Sã ã • \ ã ^ \ } àæ } ã ^ } ãæ àæ ã	Acid secondary cells and batteries

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EUROPEAN STANDARD

EN 50260-2-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2002

ICS 25.140.20

English version

**Safety of hand-held battery-powered motor-operated tools
and battery packs
Part 2-4: Particular requirements for sanders**

Sécurité des outils électroportatifs
alimentés par batteries
et des blocs de batteries
Partie 2-4: Règles particulières
pour les ponceuses

Sicherheit für handgeführte
akkubetriebene Elektrowerkzeuge und
Akkublöcke
Teil 2-4: Besondere Anforderungen
für Schwing- und Bandschleifer

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This European Standard was approved by CENELEC on 2000-08-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

This European Standard has been prepared by the Technical Committee CENELEC TC 61F, Hand-held and transportable electric motor-operated tools.

A first draft was submitted to the Unique Acceptance Procedure in August 1996 with positive result. A second draft incorporating the editorial comments received during the UAP and the modifications necessary to incorporate the mechanical requirements which have been agreed for hand-held tools was submitted to the formal vote in November 1999 and was approved by CENELEC as EN 50260-2-4 on 2000-08-01.

The following dates were fixed:

- latest date by the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2003-03-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2005-03-01

This European Standard is divided into two parts:

Part 1: General requirements which are common to most hand-held battery powered motor operated tools (for the purpose of this European Standard referred to simply as tools).

Part 2: Requirements for particular types of tool which either supplement or modify the requirements given in Part 1 to account for the particular hazards and characteristics of these specific tools.

This European Standard has been prepared under a mandate (M/083) given to CEN and CENELEC by the European Commission and the European Free Trade Association and supports the essential safety requirements of the Machinery Directive.

Compliance with the clauses of Part 1 of this European Standard together with this Part 2 provides one means of conforming with the specified essential requirements of the Directive concerned.

For noise and vibration, this European Standard covers the requirements for their measurement, the provision of information arising from these measurements and the provision of information about the personal protective equipment required. Specific requirements for the reduction of the risk arising from noise and vibration through design of the tool are not given as this reflects the current state of the art. As with any standard, technical progress will be kept under review so that any developments can be taken into account.

Warning: Other requirements and other EC Directives can be applicable to the products falling within the scope of this European Standard.

Hand-held motor-operated tools are covered by the EN 50144 series.

In order to be consistent with the EN 50144 series, the same order of clauses has been kept; the missing clauses are considered void.

CEN/TC 255 is producing standards for non-electric sanders and polishers (EN 792-8).

This European Standard follows the overall requirements of EN 292-1 and EN 292-2.

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

NOTE: In this standard the following print types are used:

- Requirements proper;
- *Test specifications*;
- Explanatory matter.

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1 Scope

This clause of Part 1 is applicable except as follows:

Addition:

This European Standard applies to hand-held reciprocating sanders, belt sanders, orbital sanders and random orbit sanders.

It does not apply to disk type sanders.

This European Standard does not give requirements for the design of the tool to reduce the risks arising from noise and vibration.

2 Definitions

This clause of Part 1 is applicable except as follows.

Additional definition:

2.101

random orbit sander

disc-type sander where the rotating movement is combined with an oscillating movement

3 General requirements

This clause of Part 1 is applicable.

4 General conditions for the tests

This clause of Part 1 is applicable.

5 Rating

This clause of Part 1 is applicable.

6 Void

7 Marking and information for use

This clause of Part 1 is applicable except as follows:

7.1 *Addition:*

Belt type sanders and random orbit sanders shall be marked with:

- direction of rotation.

This shall be clearly marked by an arrow, raised or sunk, or by any other means no less visible and indelible.

7.8.1 Addition:

- the advice that if the sander is used in confined areas, either to use dust protection or separate dust collection equipment;
- information shall be given on the correct use of the dust collection equipment;
- a warning about harmful/toxic dusts arising from sanding lead paint, some woods and metal.

8 Protection against electric shock

This clause of Part 1 is applicable.

9 Void**10 Void****11 Void****12 Void****13 Environmental requirements**

This clause of Part 1 is applicable except as follows:

13.1 Void

13.2.2.4 Addition: <https://standards.iteh.ai/catalog/standards/sist/d6158da3-8e9e-4df7-a4be-00a5049900d8/sist-en-50260-2-4-2002>
 The platen of the sander shall be horizontal.

13.2.2.5 Replacement of paragraphs 3, 4 and 5:

All tools are tested at no-load.

13.3.6 Replacement:

Sanders are tested under load under the conditions shown in Table 101:

Table 101 - Test conditions for sanders

Orientation	<i>Sanding a horizontal steel plate 400 mm x 400 mm x 20 mm mounted on a bench</i>
Tool bit/cutter/abrasive	<i>Recommended sanding paper for steel with a grain size of 180</i>
Feed force	<i>15 N ± 5 N</i>
Pre-test requirements	<i>With a new sanding sheet carry out 1 min sanding before starting measurements</i>

Paragraph 3 is not applicable.

14 Moisture resistance

This clause of Part 1 is applicable.

15 Insulation resistance and electric strength

This clause of Part 1 is applicable.

16 Void**17 Abnormal operation**

This clause of Part 1 is applicable.

18 Mechanical hazards

This clause of Part 1 is applicable.

19 Mechanical strength

This clause of Part 1 is applicable except as follows:

19.1 Addition:

The test of subclause 19.3 is not made on belt-type sanders.

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20 Construction

This clause of Part 1 is applicable except as follows:

20.16 Addition: <https://standards.iteh.ai/catalog/standards/sist/d6158da3-8e9e-4df7-a4be-00a5049900d8/sist-en-50260-2-4-2002>

Sanders are considered to be tools where a considerable amount of dust is produced.

21 Components

This clause of Part 1 is applicable.

22 Internal wiring

This clause of Part 1 is applicable.

23 Void**24 Void****25 Void****26 Screws and connections**

This clause of Part 1 is applicable.

27 Creepage distances, clearances and distances through insulation

This clause of Part 1 is applicable.

28 Resistance to heat, fire and tracking

This clause of Part 1 is applicable.

29 Resistance to rusting

This clause of Part 1 is applicable.

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