

# SLOVENSKI STANDARD SIST EN 50260-2-14:2002

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Safety of hand-held battery-powered motor-operated tools and battery packs - Part 2-14: Particular requirements for routers and laminate trimmers

Safety of hand-held battery-powered motor-operated tools and battery packs -- Part 2-14: Particular requirements for routers and laminate trimmers

Sicherheit für handgeführte akkubetriebene Elektrowerkzeuge und Akkublöcke -- Teil 2-14: Besondere Anforderungen für Oberfräsen und Kantenfräsen W

Sécurité des outils électroportatifs alimentés par batteries et des blocs de batteries --Partie 2-14: Règles particulières pour les défonceuses et les affleureuses

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Ta slovenski standard je istoveten z: EN 50260-2-14-2002

### ICS:

| 25.080.20 | Frezalniki                               | Boring and milling machines        |
|-----------|--|------------------------------------|
| 25.140.20 | Ò ^\dã}æ4[¦[åbæ                          | Electric tools                     |
| 29.220.20 | Sã+ ã, •\ãÁ•^\*}åæ+}ãÁ ^}ãÁ;<br>àæe^¦ã6^ | Acid secondary cells and batteries |

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<u>SIST EN 50260-2-14:2002</u> https://standards.iteh.ai/catalog/standards/sist/f9656089-9163-4507-9d0e-20f3bee70d61/sist-en-50260-2-14-2002 **EUROPEAN STANDARD** 

EN 50260-2-14

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 2-14: Particular requirements for routers and laminate trimmers

Sécurité des outils électroportatifs alimentés par batteries et des blocs de batteries Partie 2-14: Règles particulières pour les défonceuses et les affleureuses

Sicherheit für handgeführte akkubetriebene Elektrowerkzeuge und Akkublöcke Teil 2-14: Besondere Anforderungen für Oberfräsen und Kantenfräsen

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This European Standard was approved by CENELEC on 2001-01-01. 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 alternation 12

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, Handheld 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 September 2000 and was approved by CENELEC as EN 50260-2-10 on 2001-01-01.

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.

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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.

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 all types of routers and laminate trimmers.

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 definitions:

#### 2.101

#### router

tool designed to be fitted with suitable rotary cutters for cutting slots into or shaping wood or similar materials

#### 2.102

#### laminate trimmer

tool designed to be fitted with a suitable rotary cutter and an appropriate base for trimming and finishing the edge of plastic laminate sheet, wood veneer or the like including when they are fixed to a substrate

NOTE Laminate trimmers are gripped by only one hand around their body and do not generally have additional handles or gripping areas.

#### 2.103

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https://standards.iteh.ai/catalog/standards/sist/f9656089-9163-4507-9d0efixed base plate

height adjustable base plate provided with a roller to guide the tool relative to the work piece. It may

be equipped with an attachment for trimming to size two laminate sheets to be butted together (see Figure 101)

#### 2.104

#### tilt base plate

height adjustable base plate provided with pivots to cut at an angle (see Figure 102)

#### 2.105

#### off-set base plate

base plate with a height adjustable cutter where the trimmer spindle is off-set from the motor to get into awkward spaces (see Figure 103)

#### 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:

#### 7.8.1 Addition:

- details of the type and shank size of cutters for which the tool is designed;
- draw attention to the necessity for using bits suitable for the speed of the tool.

For routers, the instruction sheet shall include the following:

- the advice that if the router is used in confined areas (e.g. indoors), either to use a dust protection or a dust collection equipment;
- information on the correct use of the dust collection equipment, if any.

#### 8 Protection against electric shock

This clause of Part 1 is applicable.

9 Void

Void

10

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11 Void <u>SIST EN 50260-2-14:2002</u>

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12 Void

#### 13 Environmental requirements

This clause of Part 1 is applicable except as follows:

**13.1** Void

**13.2.2.4** Addition:

The base plate shall be horizontal.

13.2.2.5 Replacement of paragraphs 3, 4 and 5:

Routers and laminate trimmers are tested at no-load.

**13.3.6** Replacement of paragraph 1:

Routers and laminate trimmers are tested at no-load.

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.

#### 17 Abnormal operation

This clause of Part 1 is applicable.

#### 16 Void

#### 18 Mechanical hazards

This clause of 1 is applicable except as follows:

#### **18.3** Addition:

Routers and laminate trimmers shall be provided with at least one handle.

The motor housing, if appropriately shaped, can be considered to be a handle.

Routers having a mass exceeding 2 kg shall be provided with two handles.

The handles shall be shaped or located so as to minimize the risk of inadvertent contact of the hand of the user with the rotating parts. STANDARD PREVIEW

Inadvertent contact of the hand of the user is considered to be sufficiently prevented, for example, if the gripping area of the handle is provided with a suitable shroud(s) or barrier at its end(s) adjacent to the body of the tool, or if there is a distance of at least 120 mm from the furthest side of the handle to the cutter.

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Compliance is checked by inspection or by measurement 0-2-14-2002

For motor housings considered as gripping area, the 120 mm distance is measured from the switch area to the cutter, taking into account any base plate which may be fitted.

For routers, the measurement shall be carried out as shown in Figure 104. If the shape of the tool is such that there is no direct path between the handle and the cutter, the distance separating the two may be measured around the profile of the parts preventing the direct path.

The mass of the router is measured without accessories, e.g. mandrels, cutters, but with the battery recommended by the manufacturer.

Additional subclauses:

**18.101** Routers shall be equipped with a base plate which surrounds the cutter so as to prevent inadvertent contact with the cutter during normal operation.

Compliance is checked by inspection.

**18.102** Adjustable elements intended to be readjusted whilst the cutter is in operation shall be located so that contact with the cutter is avoided.

Compliance is checked by inspection.

**18.103** The maximum speed of the spindle with a fully charged battery shall not exceed the speed marked on the nameplate.

Compliance is checked by measurement.

### 19 Mechanical strength

This clause of Part 1 is applicable.

#### 20 Construction

This clause of Part 1 is applicable except as follows:

### **20.9** Replacement (only for routers):

A router that is fitted with either

- a spring loaded base plate which protects the cutter when not in use, or
- a self-closing guard which is not lockable in the open position, may have a switch which is lockable in the "ON" position.

All other routers shall be fitted with a switch which switches off automatically when the operating means is released.

Compliance is checked by inspection.

#### 20.16 Addition

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

Laminate trimmers are considered not to be tools where a considerable amount of dust is produced.

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This clause of Part 1 is applicable.

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### 22 Internal wiring

Components

This clause of Part 1 is applicable.

23 Void

21

- 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.