

EUROPEAN STANDARD

EN 60745-2-14

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2003

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Supersedes EN 50144-2-14:2001

English version

**Hand-held motor-operated electric tools -
Safety
Part 2-14: Particular requirements for planers
(IEC 60745-2-14:2003, modified)**

Outils électroportatifs à moteur -
Sécurité
Partie 2-14: Règles particulières
pour les rabots
(CEI 60745-2-14:2003, modifiée)

Handgeführte motorbetriebene
Elektrowerkzeuge -
Sicherheit
Teil 2-14: Besondere Anforderungen
für Hobel
(IEC 60745-2-14:2003, modifiziert)

This European Standard was approved by CENELEC on 2003-07-01. 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, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

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Foreword

The text of the International Standard IEC 60745-2-14:2003 prepared by SC 61F, Safety of hand-held motor-operated electric tools, of IEC TC 61, Safety of household and similar electrical appliances, together with the common modifications prepared by the Technical Committee CENELEC TC 61F, Safety of hand-held and transportable motor-operated electric tools was submitted to the formal vote and was approved by CENELEC as EN 60745-2-14 on 2003-07-01

This European Standard supersedes EN 50144-2-14:2001.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2004-07-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-07-01

Other standards referred to in this European standard are listed in Clause 2. Clause 2 lists the valid edition of those documents at the time of issue of this EN.

This standard is divided into two parts:

Part 1: General requirements which are common to most hand-held electric motor operated tools (for the purpose of this standard referred to simply as tools) which could come within the scope of this standard;

Part 2: Requirements for particular types of tools 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 given to CEN and CENELEC by the European Commission and the European Free Trade Association and supports the essential health and safety requirements of the Machinery Directive.

Compliance with the clauses of Part 1 together with this Part 2 provides one means of conforming with the essential health and safety requirements of the Directive concerned.

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

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

This Part 2-14 is to be used in conjunction with EN 60745-1:2003. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 is to be adapted accordingly.

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

Subclauses, tables and figures which are additional to those in IEC 60745-2-14 are prefixed "Z"

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

- Requirements: in roman type;
- *Test specification: in italic type;*
- Notes: in smaller roman type

Endorsement notice

The text of the International Standard IEC 60745-2-14:2003 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

6 Void

Replace by:

6 Environmental requirements

This clause of Part 1 is applicable except as follows:

6.1.2.4 Modification:

Planers are suspended in such a way as to correspond to normal use. The base plate shall be horizontal.

6.1.2.5 Modification:

Planers are tested at no-load.

6.2.2.4 Modification:

Planers are tested under load observing the conditions shown in Table Z101.

Table Z101 - Test conditions

Material	Softwood 400 mm x B x 90 mm, where B is the maximum planing width less 15 mm
Orientation	Planing along the 400 mm x B surface of the material which is fixed to the bench
Tool bit/cutter/ abrasive	Blades as recommended by the manufacturer
Feed force	Just sufficient to cut at a brisk pace
Test cycle	Depth of cut to be 1 mm, or as near as the design allows

8 Marking and instructions

Add:

8.12.2 a) Addition:

Z101) Information on the correct use of the dust collection system

Z102) Advice to wear a dust mask

21 Construction

Add:

21.Z1 *Addition:*

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

HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS – SAFETY –

Part 2-14: Particular requirements for planers

1 Scope

This clause of Part 1 is applicable except as follows:

1.1 *Addition:*

This standard applies to planers.

2 Normative references

This clause of Part 1 is applicable.

3 Definitions

This clause of Part 1 is applicable except as follows:

Additional definitions:

3.101

planer

tool intended for removing surface material, equipped with a rotating cutter where the axis of the cutter is parallel to the base plate

3.102

lift-off device

device which keeps the cutter from making contact with the horizontal surface when the planer is placed on a horizontal surface

4 General requirements

This clause of Part 1 is applicable.

5 General conditions for the tests

This clause of Part 1 is applicable.

6 Void

7 Classification

This clause of Part 1 is applicable.

8 Marking and instructions

This clause of Part 1 is applicable, except as follows:

8.1 Addition:

- direction of rotation of the working spindle. This shall be indicated by an arrow, raised or sunk, or by other means no less visible and indelible;
- rated no load speed.

8.12.1 Addition

Only for planers without an automatic closing guard:

Planer Safety Rules:

- **Wait for the cutter to stop before setting the tool down.** *An exposed cutter may engage the surface leading to possible loss of control and serious injury*

8.12.2 Addition:

The instruction sheet shall also contain the following information:

- instructions for the changing of the blades and their adjustment to the correct position;
- types of cutting heads which can be used, if applicable.

9 Protection against access to live parts

This clause of Part 1 is applicable.

10 Starting

This clause of Part 1 is applicable.

11 Input and current

This clause of Part 1 is applicable.

12 Heating

This clause of Part 1 is applicable, except as follows:

12.4 Replacement:

The tool is operated at rated input or rated current for 30 min. The temperature rises are measured at the end of the 30 min

13 Leakage current

This clause of Part 1 is applicable.

14 Moisture resistance

This clause of Part 1 is applicable.

15 Electric strength

This clause of Part 1 is applicable.

16 Overload protection of transformers and associated circuits

This clause of Part 1 is applicable.

17 Endurance

This clause of Part 1 is applicable.

18 Abnormal operation

This clause of Part 1 is applicable.

19 Mechanical hazards

This clause of Part 1 is applicable.

20 Mechanical strength

This clause of Part 1 is applicable.

21 Construction

This clause of Part 1 is applicable, except as follows:

21.18 Addition:

For planers which have neither a lift-off device nor an automatic closing guard, the mains switch shall switch off the motor automatically as soon as the actuating member of the switch is released. For these tools, the switch shall have no arrangement to lock it in the "on" position.

For planers which have either a lift-off device or an automatic closing guard, the mains switch may be lockable in the "on" position.

For planers without an automatic closing guard or lift-off device, the mains switch shall incorporate an interlock in the "off" position which requires two separate sequential operations before the switch will operate.

Compliance is checked by inspection and by manual test.

22 Internal wiring

This clause of Part 1 is applicable.

23 Components

This clause of Part 1 is applicable

24 Supply connection and external flexible cords

This clause of Part 1 is applicable.

25 Terminals for external conductors

This clause of Part 1 is applicable.

26 Provision for earthing

This clause of Part 1 is applicable

27 Screws and connections

This clause of Part 1 is applicable.

28 Creepage distances, clearances and distances through insulation

This clause of Part 1 is applicable.

29 Resistance to heat, fire and tracking

This clause of Part 1 is applicable.

30 Resistance to rusting

This clause of Part 1 is applicable.

31 Radiation, toxicity and similar hazards

This clause of Part 1 is applicable

Annexes

The annexes of Part 1 are applicable except as follows

Annex K (normative)

Battery tools and battery packs

K.1.1 Addition:

All clauses of this Part 2 apply unless otherwise specified in this annex.

Annex L (normative)

Battery tools and battery packs provided with mains connection or non-isolated sources

L.1.1 Addition:

All clauses of this Part 2 apply unless otherwise specified in this annex.

Bibliography

The bibliography of Part 1 is applicable.
