

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

## Part 2-14: Particular requirements for planers

The European Standard EN 60745-2-14:2003 has the status of a  
British Standard

ICS 25.140.20

## National foreword

This British Standard is the official English language version of EN 60745-2-14:2003. It was derived by CENELEC from IEC 60745-2-14:2003. It supersedes BS EN 50144-2-14:2001 which will be withdrawn on 2006-07-01.

The CENELEC common modifications have been implemented at the appropriate places in the text and are indicated by tags **[C]** **[C]**.

The UK participation in its preparation was entrusted by Technical Committee CPL/61, Safety of household electrical appliances, to Subcommittee CPL/61/6, Portable motor operated tools, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
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### Summary of pages

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**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)

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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.

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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.

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# 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:

#### 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 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



## 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.

#### ☐ 8.12.2 a) Addition:

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

Z102) Advice to wear a dust mask ☐

### 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.*

### 21.Z1 Addition:

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

## 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.

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