

EUROPEAN STANDARD

EN 60745-2-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2003

ICS 25.140.20; 25.140.30; 25.080.50

Supersedes EN 50144-2-4:1999 & EN 50260-2-4:2002

English version

**Hand-held motor-operated electric tools -
Safety
Part 2-4: Particular requirements for sanders
and polishers other than disk type
(IEC 60745-2-4:2002, modified)**

Outils électroportatifs à moteur -
Sécurité
Partie 2-4: Règles particulières pour les
ponceuses et lustreuses,
autres que du type à disque
(CEI 60745-2-4:2002, modifiée)

Handgeführte motorbetriebene
Elektrowerkzeuge -
Sicherheit
Teil 2-4: Besondere Anforderungen
für Schleifer und Polierer außer
Tellerschleifern
(IEC 60745-2-4:2002, modifiziert)

This European Standard was approved by CENELEC on 2003-02-01. 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

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

Foreword

The text of the International Standard IEC 60745-2-4:2002, 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 60745-2-4 on 2003-02-01.

This European Standard supersedes EN 50144-2-4:1999 and EN 50260-2-4:2002.

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) 2004-02-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2006-02-01

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.

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

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 2-4 is to be used in conjunction with EN 60745-1:2003. When this standard states "addition", "modification" or "replacement", the relevant text in 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 60745-2-4 are prefixed "Z".

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

- requirements: in roman type;
- test specifications: in italic type;
- notes: in smaller roman type.

Endorsement notice

The text of the International Standard IEC 60745-2-4:2002 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

1 Scope

Replace the first paragraph of the addition by:

This standard applies to sanders and polishers with the exception of all types of rotating disc-type sanders, which are covered by EN 60745-2-3.

NOTE Until publication of EN 60745-2-3, rotating disc-type sanders are covered by EN 50144-2-3.

6 Void

Replace by:

6 Environmental requirements

This clause of Part 1 is applicable except as follows:

6.1.2.4 Modification:

Sanders and polishers are suspended. The plate of the tool shall be horizontal.

6.1.2.5 Modification:

Sanders and polishers are tested at no-load.

6.2.2.4 Modification:

Sanders and polishers are tested under load observing the conditions shown in Tables Z101 and Z102.

Table Z101 - Test conditions for sanders

Orientation	Sanding a horizontal steel plate 400 mm x 400 mm x 20 mm mounted on a bench
Tool bit	Recommended sanding paper for steel with a grain size of 180
Feed force	50 N ± 5 N
Pre-test requirements	With a new sanding sheet carry out 1 min sanding before starting measurements

Table Z102 - Test conditions for polishers

Orientation	Polishing a horizontal steel plate 400 mm x 400 mm x 20 mm mounted on a bench
Tool bit	Polishing pad
Feed force	50 N \pm 5 N

8 Marking and instructions

Add:

8.12.2 Za) Addition:

101) for sanders:

instructions how to deal with harmful/toxic dusts arising from sanding e.g. lead painted surfaces, woods and metals. These instructions shall be preceded by a warning that contact with or inhalation of these dusts can endanger the health of operator and bystanders. These instructions shall include the use of appropriate personal protective equipment.

21 Construction

Replace by:

This clause of Part 1 is applicable except as follows:

21.Z1 Addition:

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

Bibliography

Replace the addition by:

EN 60745-2-3 ¹⁾, *Safety of hand-held motor-operated electric tools – Part 2: Particular requirements for grinders, polishers and disk-type sanders*

EN 50144-2-3:2002, *Safety of hand-held electric motor-operated tools – Part 2: Particular requirements for grinders, disk-type sanders and polishers*

¹⁾ Under preparation.

