



PRE-RELEASE VERSION (FDIS)

**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety –
Part 3-3: Particular requirements for transportable planers and thicknessers**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 25.140.20

Warning! Make sure that you obtained this publication from an authorized distributor.



This is a preview - click here to buy the full publication

116/761/FDIS

FINAL DRAFT INTERNATIONAL STANDARD (FDIS)

PROJECT NUMBER:

IEC 62841-3-3 ED1

DATE OF CIRCULATION:

2024-04-12

CLOSING DATE FOR VOTING:

2024-05-24

SUPERSEDES DOCUMENTS:

116/570/CDV, 116/592B/RVC

IEC TC 116 : SAFETY OF MOTOR-OPERATED ELECTRIC TOOLS	
SECRETARIAT: United States of America	SECRETARY: Mr Joseph Harding
OF INTEREST TO THE FOLLOWING COMMITTEES:	HORIZONTAL STANDARD: <input type="checkbox"/>
FUNCTIONS CONCERNED: <input type="checkbox"/> EMC <input type="checkbox"/> ENVIRONMENT <input type="checkbox"/> QUALITY ASSURANCE <input checked="" type="checkbox"/> SAFETY	
<input checked="" type="checkbox"/> SUBMITTED FOR CENELEC PARALLEL VOTING Attention IEC-CENELEC parallel voting The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Final Draft International Standard (FDIS) is submitted for parallel voting. The CENELEC members are invited to vote through the CENELEC online voting system.	<input type="checkbox"/> NOT SUBMITTED FOR CENELEC PARALLEL VOTING

This document is a draft distributed for approval. It may not be referred to as an International Standard until published as such.

In addition to their evaluation as being acceptable for industrial, technological, commercial and user purposes, Final Draft International Standards may on occasion have to be considered in the light of their potential to become standards to which reference may be made in national regulations.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Recipients of this document are invited to consider for future work to include relevant "In Some Countries" clauses. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE [AC/22/2007](#) OR NEW [GUIDANCE DOC](#)).

TITLE:

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 3-3: Particular requirements for transportable planers and thicknessers

PROPOSED STABILITY DATE: 2027

NOTE FROM TC/SC OFFICERS:

Copyright © 2024 International Electrotechnical Commission, IEC. All rights reserved. It is permitted to download this electronic file, to make a copy and to print out the content for the sole purpose of preparing National Committee positions. You may not copy or "mirror" the file or printed version of the document, or any part of it, for any other purpose without permission in writing from IEC.

CONTENTS

FOREWORD	4
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 General requirements	8
5 General conditions for the tests	8
6 Radiation, toxicity and similar hazards	8
7 Classification	8
8 Marking and instructions	8
9 Protection against access to live parts	9
10 Starting	9
11 Input and current	9
12 Heating	10
13 Resistance to heat and fire	10
14 Moisture resistance	10
15 Resistance to rusting	10
16 Overload protection of transformers and associated circuits	10
17 Endurance	10
18 Abnormal operation	10
19 Mechanical hazards	11
20 Mechanical strength	23
21 Construction	23
22 Internal wiring	25
23 Components	25
24 Supply connection and external flexible cords	25
25 Terminals for external conductors	25
26 Provision for earthing	25
27 Screws and connections	25
28 Creepage distances, clearances and distances through insulation	25
Annexes	26
Annex I (informative) Measurement of noise and vibration emissions	26
Annex K (normative) Battery tools and battery packs	27
Annex L (normative) Battery tools and battery packs provided with mains connection or non-isolated sources	28
Annex AA (normative) Stability test for bridge-type guards	29
Bibliography	35
Figure 101 – Example of a combined planer and thicknesser	7
Figure 102 – Example of a thicknesser	8
Figure 103 – Cutter block	12
Figure 104 – Measurement of the cutter block chip groove	12

Figure 105 – Bridge-type guard.....	16
Figure 106 – Details of two alternative bridge type guard leading edges	17
Figure 107 – Example of a swivel-type guard.....	18
Figure 108 – Design preventing kickback.....	20
Figure 109 – Examples of anti-kickback devices	20
Figure 110 – Test probe.....	22
Figure 111 – Example of a push stick	24
Figure AA.1 – Bridge deflection.....	30
Figure AA.2 – Bridge free play	31
Figure AA.3 – Bridge strength test	33
Figure AA.4 – Side impact resistance test.....	34
Figure AA.5 – Side impact test apparatus	34
Table 4 – Required performance levels	10
Table 101 – Table sizes	13
Table 102 – Parallel guide sizes	18
Table 103 – Material specification.....	21
Table 104 – Metal characteristics for guards above and below the table	23
Table I.101 – Noise test conditions for planers and thicknessers	26

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

Part 3-3: Particular requirements for transportable planers and thicknessers

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at <https://patents.iec.ch>. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 62841-3-3 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools. It is an International Standard.

The text of this International Standard is based on the following documents:

Draft	Report on voting
116/XX/FDIS	116/XX/RVD

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

This document is to be used in conjunction with IEC 62841-1:2014.

This document supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: Particular requirements for transportable planers and thicknessers.

Where a particular subclause of IEC 62841-1 is not mentioned in this document, that subclause applies as far as reasonable. Where this document states "addition", "modification" or "replacement", the relevant text in IEC 62841-1 is to be adapted accordingly.

The following print types are used:

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

The terms defined in Clause 3 are printed in **bold typeface**.

Subclauses, notes, tables and figures which are additional to those in IEC 62841-1 are numbered starting from 101.

Subclauses, notes, tables and figures in 0 and 0 which are additional to those in the main body of this document are numbered starting from 301.

A list of all parts in the IEC 62841 series, published under the general title: *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

Part 3-3: Particular requirements for transportable planers and thicknessers

1 Scope

IEC 62841-1:2014, Clause 1 is applicable, except as follows:

Addition:

This document applies to transportable **planers, thicknessers** and **combined planers and thicknessers** intended for cutting wood and analogous materials with a maximum planing width of 330 mm.

This document does not apply to **planers, thicknessers** or **combined planers and thicknessers** other than transportable.

NOTE 101 ISO 19085-7:2019 gives requirements for **planers, thicknessers** or **combined planers and thicknessers** other than transportable.

2 Normative references

IEC 62841-1:2014, Clause 2 is applicable, except as follows:

Addition:

IEC 62841-1:2014, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements*

ISO 180:2023, *Plastics – Determination of Izod impact strength*