

INTERNATIONAL STANDARD

**Electric motor-operated tools – Dust measurement procedure –
Part 2-14: Particular requirements for hand-held planers**

IECNORM.COM : Click to view the full PDF of IEC 63241-2-14:2025



THIS PUBLICATION IS COPYRIGHT PROTECTED
Copyright © 2025 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Secretariat
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigendum or an amendment might have been published.

IEC publications search - webstore.iec.ch/advsearchform

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee, ...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and once a month by email.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: sales@iec.ch.

IEC Products & Services Portal - products.iec.ch

Discover our powerful search engine and read freely all the publications previews, graphical symbols and the glossary. With a subscription you will always have access to up to date content tailored to your needs.

Electropedia - www.electropedia.org

The world's leading online dictionary on electrotechnology, containing more than 22 500 terminological entries in English and French, with equivalent terms in 25 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IECNORM.COM : Click to view the full text of IEC 60071-2:2025



IEC 63241-2-14

Edition 1.0 2025-02

INTERNATIONAL STANDARD

**Electric motor-operated tools – Dust measurement procedure –
Part 2-14: Particular requirements for hand-held planers**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 25.140.30

ISBN 978-2-8327-0272-7

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

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 Test procedure	5
5 Instrumentation.....	6
6 Information to be reported.....	6
Figure 101 – Orientation of workpiece, tool and operator during the tests.....	7
Table 101 – Operating conditions for planers intended to cut wood	6

IECNORM.COM : Click to view the full PDF of IEC 63241-2-14:2025

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC MOTOR-OPERATED TOOLS –
DUST MEASUREMENT PROCEDURE –**
Part 2-14: Particular requirements for hand-held planers**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 63241-2-14 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
116/777/CDV	116/848A/RVC

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 the first edition of IEC 63241-1:2023.

This document supplements or modifies the corresponding clauses in IEC 63241-1, so as to convert it into the IEC Standard: *Particular requirements for hand-held planers*.

Where a particular subclause of IEC 63241-1 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 63241-1 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 63241-1 are numbered starting from 101.

A list of all parts of the IEC 63241 series, under the general title: *Electric motor-operated tools – Dust measurement procedure*, 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.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations can need a transitional period following publication of a new, amended or revised IEC publication in which to make products in accordance with the new requirements and to equip themselves for conducting new or revised tests.

It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 36 months from the date of publication.

ELECTRIC MOTOR-OPERATED TOOLS – DUST MEASUREMENT PROCEDURE –

Part 2-14: Particular requirements for hand-held planers

1 Scope

IEC 63241-1:2023, Clause 1 is applicable, except as follows:

Addition:

This part of IEC 63241 applies to **planers**.

2 Normative references

IEC 63241-1:2023, Clause 2 is applicable, except as follows:

Addition:

IEC 63241-1:2023, *Electric motor-operated tools – Dust measurement procedure – Part 1: General requirements*

3 Terms and definitions

IEC 63241-1:2023, Clause 3 is applicable, except as follows:

Addition:

3.101

planer

tool intended for removing surface material, equipped with a rotating cutting head where the axis of rotation of the cutting head is parallel to the base plate, which is the part supporting the tool on the workpiece

Note 1 to entry: The base plate consists of a fixed shoe and an adjustable shoe that determines the depth of cut.

4 Test procedure

IEC 63241-1:2023, Clause 4 is applicable, except as follows:

4.3 Operating conditions

Addition:

Planers intended to cut wood are tested under load observing the conditions shown in Table 101.

Table 101 – Operating conditions for planers intended to cut wood

Material and set-up	<p>Beech: length = (400 ± 2) mm, width a = planing width minus (15 ± 2) mm, thickness sufficient for one test cycle.</p> <p>At the beginning of the test, the wood shall have a humidity of maximum 14 %.</p> <p>The workpiece is mounted horizontally on a bench with a working height matching the requirement for the vertical distance between the upper surface of the workpiece and the intake openings of the dust samplers as specified in IEC 63241-1:2023, 4.2.</p>
Orientation and operation	<p>Planing the complete length of 400 mm at the depth of cut specified below.</p> <p>During the test, the operator shall be positioned as illustrated in Figure 101. The test set-up illustrated in Figure 101 is appropriate for tools for right-handed use. For tools for left-handed use, the test set-up may be mirror-inverted.</p>
Tool bit/settings	<p>New blades at the beginning of each of the three tests.</p> <p>Cutting depth: 0,5 mm or maximum cutting depth if less than 0,5 mm.</p>
Feed force	<p>The feed force applied to the tool shall be sufficient to ensure stable operation with good performance.</p>
Test	<p>During the working time of one test cycle, 80 planing operations as specified above are performed equally distributed over the working time.</p>

5 Instrumentation

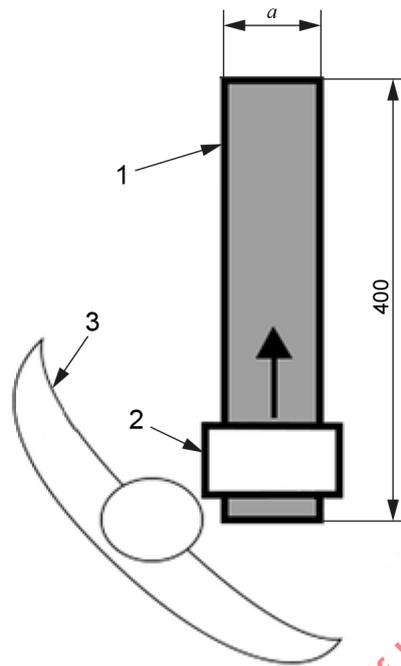
IEC 63241-1:2023, Clause 5 is applicable.

6 Information to be reported

IEC 63241-1:2023, Clause 6 is applicable.

IECNORM.COM : Click to view the full PDF of IEC 63241-2-14:2025

Dimensions in millimetres

**Key**

- 1 workpiece
- 2 tool
- 3 operator
- a width of the workpiece

Figure 101 – Orientation of workpiece, tool and operator during the tests
