

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Hand-held motor-operated electric tools – Safety –
Part 2-18: Particular requirements for strapping tools**

[\(https://standards.iteh.ai/\)](https://standards.iteh.ai/)

**Outils électroportatifs à moteur – Sécurité –
Partie 2-18: Règles particulières pour les outils de cerclage**

[IEC 60745-2-18:2003](https://standards.iteh.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003)

<https://standards.iteh.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003>





THIS PUBLICATION IS COPYRIGHT PROTECTED

Copyright © 2008 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.

Droits de reproduction réservés. Sauf indication contraire, aucune partie de cette publication ne peut être reproduite ni utilisée sous quelque forme que ce soit et par aucun procédé, électronique ou mécanique, y compris la photocopie et les microfilms, sans l'accord écrit de l'IEC ou du Comité national de l'IEC du pays du demandeur. Si vous avez des questions sur le copyright de l'IEC ou si vous désirez obtenir des droits supplémentaires sur cette publication, utilisez les coordonnées ci-après ou contactez le Comité national de l'IEC de votre pays de résidence.

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

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
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 corrigenda or an amendment might have been published.

IEC Catalogue - webstore.iec.ch/catalogue

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad.

IEC publications search - www.iec.ch/searchpub

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 also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing 20 000 terms and definitions in English and French, with equivalent terms in 15 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

65 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

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: csc@iec.ch.

A propos de l'IEC

La Commission Electrotechnique Internationale (IEC) est la première organisation mondiale qui élabore et publie des Normes internationales pour tout ce qui a trait à l'électricité, à l'électronique et aux technologies apparentées.

A propos des publications IEC

Le contenu technique des publications IEC est constamment revu. Veuillez vous assurer que vous possédez l'édition la plus récente, un corrigendum ou amendement peut avoir été publié.

Catalogue IEC - webstore.iec.ch/catalogue

Application autonome pour consulter tous les renseignements bibliographiques sur les Normes internationales, Spécifications techniques, Rapports techniques et autres documents de l'IEC. Disponible pour PC, Mac OS, tablettes Android et iPad.

Recherche de publications IEC - www.iec.ch/searchpub

La recherche avancée permet de trouver des publications IEC en utilisant différents critères (numéro de référence, texte, comité d'études,...). Elle donne aussi des informations sur les projets et les publications remplacées ou retirées.

IEC Just Published - webstore.iec.ch/justpublished

Restez informé sur les nouvelles publications IEC. Just Published détaille les nouvelles publications parues. Disponible en ligne et aussi une fois par mois par email.

Electropedia - www.electropedia.org

Le premier dictionnaire en ligne de termes électroniques et électriques. Il contient 20 000 termes et définitions en anglais et en français, ainsi que les termes équivalents dans 15 langues additionnelles. Egalement appelé Vocabulaire Electrotechnique International (IEV) en ligne.

Glossaire IEC - std.iec.ch/glossary

65 000 entrées terminologiques électrotechniques, en anglais et en français, extraites des articles Termes et Définitions des publications IEC parues depuis 2002. Plus certaines entrées antérieures extraites des publications des CE 37, 77, 86 et CISPR de l'IEC.

Service Clients - webstore.iec.ch/csc

Si vous désirez nous donner des commentaires sur cette publication ou si vous avez des questions contactez-nous: csc@iec.ch.



IEC 60745-2-18

Edition 1.1 2008-06
CONSOLIDATED VERSION

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Hand-held motor-operated electric tools – Safety –
Part 2-18: Particular requirements for strapping tools**

**Outils électroportatifs à moteur – Sécurité –
Partie 2-18: Règles particulières pour les outils de cerclage**

IEC 60745-2-18:2003

<https://standards.iteh.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003>

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 25.140.20

ISBN 2-8318-9734-3

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 General requirements	5
5 General conditions for the tests	5
6 Void.....	5
7 Classification.....	5
8 Marking and instructions.....	5
9 Protection against access to live parts.....	5
10 Starting	6
11 Input and current	6
12 Heating	6
13 Leakage current	6
14 Moisture resistance	6
15 Electric strength	6
16 Overload protection of transformers and associated circuits	6
17 Endurance.....	6
18 Abnormal operation	7
19 Mechanical hazards.....	7
20 Mechanical strength	7
21 Construction.....	7
22 Internal wiring.....	7
23 Components	7
24 Supply connection and external flexible cords	7
25 Terminals for external conductors.....	7
26 Provision for earthing	7
27 Screws and connections.....	7
28 Creepage distances, clearances and distances through insulation.....	7
29 Resistance to heat, fire and tracking.....	8
30 Resistance to rusting.....	8
31 Radiation, toxicity and similar hazards.....	8
Annexes	9
Annex K (normative) Battery tools and battery packs	9
Annex L (normative) Battery tools and battery packs provided with mains connection or non-isolated sources.....	9
Bibliography.....	9

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

IEC 60745-2-18:2003
<https://standards.itih.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS –
SAFETY –****Part 2-18: Particular requirements for strapping tools**

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 provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 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) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 60745-2-18 edition 1.1 contains the first edition (2003) [documents 61F/455/FDIS and 61F/498/RVD] and its amendment 1 (2008) [documents 61F/677/CDV and 61F/725/RVC].

A vertical line in the margin shows where the base publication has been modified by amendment 1.

This part of International Standard IEC 60745 has been prepared by subcommittee 61F: Safety of hand-held motor-operated electric tools, of IEC technical committee 61: Safety of household and similar electrical appliances.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This Part 2 is to be used in conjunction with the latest edition of IEC 60745-1, *Hand-held motor-operated electric tools – Safety – Part 1: General requirements*, and its amendments. It was established on the basis of the third edition (2001) of that standard.

NOTE 1 When “Part 1” is mentioned in this standard, it refers to IEC 60745-1.

This part 2 supplements or modifies the corresponding clauses of IEC 60745-1, so as to convert that publication into the IEC standard: Safety requirements for electric strapping tools.

When a particular subclause of Part 1 is not mentioned in this part 2, that subclause applies as far as is reasonable. When this standard states “addition”, “modification” or “replacement”, the relevant text in Part 1 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;
- additional annexes are lettered AA, BB, etc.

NOTE 3 In this standard, the following print types are used:

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

Words in **bold** in the text are defined in Clause 3. When a definition concerns an adjective, the adjective and the associated noun are also in bold.

The committee has decided that the contents of the base publication and its amendments will remain unchanged until the maintenance result date indicated on the IEC web site under “<http://webstore.iec.ch>” in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS – SAFETY –

Part 2-18: Particular requirements for strapping tools

1 Scope

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

Addition:

This standard applies to strapping tools.

2 Normative references

This clause of Part 1 is applicable.

3 Terms and definitions

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

3.101

strapping tool

tool for clinching straps on boxes

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.

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:

12.2 Replacement:

The tool is operated for 30 cycles, each cycle comprising of clinching four straps around a test package within 2 min then the tool switched off for a period of 1 min. The test package is a wooden box 1 m cubic with an internal bracing to prevent collapsing.

12.4 Replacement:

The temperature rises are measured at the end of the "on" period of the 30th cycle of 12.2 or, at the manufacturers option, the tool can be operated continuously until thermal stabilization.

13 Leakage current

This clause of Part 1 is applicable.

14 Moisture resistance

[IEC 60745-2-18:2003](https://standards.iteh.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003)

<https://standards.iteh.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003>

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, except as follows:

20.5 This subclause is not applicable.

21 Construction

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

21.32 This subclause is not applicable.

22 Internal wiring

This clause of Part 1 is applicable.

23 Components

This clause of Part 1 is applicable.

[IEC 60745-2-18:2003](https://standards.iteh.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003)

<https://standards.iteh.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003>

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.

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

[IEC 60745-2-18:2003](https://standards.itih.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003)

<https://standards.itih.ai/catalog/standards/iec/429253ab-43b6-4f53-b403-680624396228/iec-60745-2-18-2003>