

SLOVENSKI STANDARD

SIST EN 62841-2-2:2014

01-oktober-2014

Nadomešča:

SIST EN 60745-2-2:2010

Električna motorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 2-2. del: Posebne zahteve za ročne vijačnike in udarne vijačnike (račne) (IEC 62841-2-2:2014)

Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 2-2: Particular requirements for hand-held screwdrivers and impact wrenches

iTeh STANDARD PREVIEW

(standards.itteh.ai)

Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen - Sicherheit - Teil 2-2: Besondere Anforderungen für handgeführte Schrauber und Schlagschrauber

SIST EN 62841-2-2:2014
<https://standards.itteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-4b78fd8c5ab1/sist-en-62841-2-2-2014>

Ta slovenski standard je istoveten z: EN 62841-2-2:2014

ICS:

25.140.20	Električna orodja	Electric tools
-----------	-------------------	----------------

SIST EN 62841-2-2:2014

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 62841-2-2:2014

<https://standards.iteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-4b78fd8c5ab1/sist-en-62841-2-2-2014>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62841-2-2

August 2014

ICS 25.140.20

Supersedes EN 60745-2-2:2010

English Version

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2-2: Particular requirements for hand-held screwdrivers and impact wrenches (IEC 62841-2-2:2014, modified)

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité - Partie 2-2: Règles particulières pour les visseuses et les clés à chocs portatives
(CEI 62841-2-2:2014, modifiée)

Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen - Sicherheit - Teil 2-2: Besondere Anforderungen für handgeführte Schrauber und Schlagschrauber
(IEC 62841-2-2:2014, modifiziert)

This European Standard was approved by CENELEC on 2014-06-26. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of document 116/162/FDIS, future edition 1 of IEC 62841-2-2, prepared by IEC/TC 116 "Safety of motor-operated electric tools" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62841-2-2:2014.

A draft amendment, which covers common modifications to IEC 62841-2-2:2014, was prepared by CLC/TC 116 "Safety of motor-operated electric tools" and approved by CENELEC.

The following dates are fixed:

- latest date by which this document has to be implemented (dop) 2015-06-26
at national level by publication of an identical
national standard or by endorsement
- latest date by which the national standards conflicting (dow) 2018-06-26
with this document have to be withdrawn

This document supersedes EN 60745-2-2:2010.

This European Standard is divided into four 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, 3 or 4:** 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 Part 2 is to be used in conjunction with EN 62841-1:201X.

This Part 2 supplements or modifies the corresponding clauses in EN 62841-1:201X, so as to convert it into the European Standard: Particular requirements for hand-held screwdrivers and impact wrenches.

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

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 EU Directives can be applicable to the products falling within the scope of this standard.

This European Standard follows the overall requirements of EN ISO 12100.

The following print types are used:

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

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

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

Clauses, subclauses, notes, tables, figures and annexes which are additional to those in IEC 62841-2-2:2014 are prefixed "Z".

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s), see informative Annex ZZ, which is an integral part of this document.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 62841-2-2:2014](https://standards.iteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-4b78fd8c5ab1/sist-en-62841-2-2-2014)

<https://standards.iteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-4b78fd8c5ab1/sist-en-62841-2-2-2014>

COMMON MODIFICATIONS

Replace the title of Annex I by the following:

Annex I (normative)

Measurement of noise and vibration emissions

Add the following annexes:

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

SIST EN 62841-2-2:2014

This annex from Part 1 is applicable with the following addition:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 28927-2	2009	Hand-held portable power tools - Test methods for evaluation of vibration emission - Part 2: Wrenches, nutrunners and screwdrivers	EN ISO 28927-2	2009

Annex ZZ (informative)

Coverage of Essential Requirements of Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association and within its scope the standard covers all relevant Essential Requirements as given in EU Directive 2006/42/EC (Machinery Directive).

Compliance with this standard provides one means of conformity with the specified essential requirements of the Directives concerned.

WARNING: Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.



IEC 62841-2-2

Edition 1.0 2014-05

INTERNATIONAL STANDARD

NORME INTERNATIONALE



Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety –
Part 2-2: Particular requirements for hand-held screwdrivers and impact wrenches

[SIST EN 62841-2-2:2014](https://standards.iteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-4f8913c51b1e-62841-2-2:2014)

<https://standards.iteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-4f8913c51b1e-62841-2-2:2014>

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses – Sécurité –
Partie 2-2: Règles particulières pour les visseuses et les clés à chocs portatives

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

P

ICS 25.140.20

ISBN 978-2-8322-1520-3

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	6
5 General conditions for the tests	6
6 Radiation, toxicity and similar hazards.....	6
7 Classification.....	6
8 Marking and instructions.....	6
9 Protection against access to live parts.....	6
10 Starting	6
11 Input and current	6
12 Heating.....	6
13 Resistance to heat and fire.....	7
14 Moisture resistance	7
15 Resistance to rusting.....	7
16 Overload protection of transformers and associated circuits	7
17 Endurance.....	7
18 Abnormal operation	8
19 Mechanical hazards.....	8
20 Mechanical strength.....	8
21 Construction	9
22 Internal wiring.....	9
23 Components	9
24 Supply connection and external flexible cords	9
25 Terminals for external conductors.....	9
26 Provision for earthing	9
27 Screws and connections.....	9
28 Creepage distances, clearances and distances through insulation.....	9
Annexes	10
Annex I (informative) Measurement of noise and vibration emissions.....	10
Annex K (normative) Battery tools and battery packs	15
Bibliography.....	16
Figure I.101 – Brake	12
Figure I.102 – Position of transducer for screwdrivers.....	12
Figure I.103 – Positions of transducers for impact wrenches.....	13
Figure I.104 – Test fixture options for impact wrenches	14
Table 4 – Required performance levels.....	8
Table I.101 – Operating conditions for screwdrivers.....	11
Table I.102 – Operating conditions for impact wrenches	11

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2-2: Particular requirements for hand-held screwdrivers and impact wrenches

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) 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.

International Standard IEC 62841-2-2 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

The text of this standard is based on the following documents:

FDIS	Report on voting
116/162/FDIS	116/177/RVD

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

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

This Part 2-2 is to be used in conjunction with the first edition of IEC 62841-1:2014.

This Part 2-2 supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: Particular requirements for hand-held screwdrivers and impact wrenches.

Where a particular subclause of Part 1 is not mentioned in this Part 2-2, that subclause applies as far as reasonable. Where this standard states “addition”, “modification” or “replacement”, the relevant text in Part 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 and figures which are additional to those in Part 1 are numbered starting from 101.

A list of all parts of the IEC 62841 series, 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 publication will remain unchanged until the stability 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, <https://standards.iteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-4b78fd8c5ab1/sist-en-62841-2-2-2014>
- withdrawn,
- replaced by a revised edition, or
- amended.

NOTE The attention of National Committees is drawn to the fact that equipment manufacturers and testing organizations may 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 HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –

Part 2-2: Particular requirements for hand-held screwdrivers and impact wrenches

1 Scope

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

Addition:

This part of IEC 62841 applies to **screwdrivers** and **impact wrenches**.

This standard does not apply to drills that can be used for driving screws by attaching **screwdriver** bits.

2 Normative references

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

Addition:

[SIST EN 62841-2-2:2014](https://standards.iteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-5841-7e20-ISO-28927-2-2009)

[https://standards.iteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-](https://standards.iteh.ai/catalog/standards/sist/da2acc14-ad59-4455-ad9e-5841-7e20-ISO-28927-2-2009)

ISO 28927-2:2009, *Hand-held portable power tools – Test methods for evaluation of vibration emission – Part 2: Wrenches, nutrunners and screwdrivers*

3 Terms and definitions

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

Additional definitions:

3.101

screwdriver

tool equipped with a non-circular tool holder, such as hexagonal or square, intended for tightening and loosening screws, nuts, and the like and not equipped with an impact mechanism but which may have a device for depth setting or setting the torque or means for switching off the rotation

3.102

impact wrench

tool equipped with a non-circular tool holder, such as hexagonal or square, intended for tightening and loosening screws, nuts, and the like and equipped with a rotary impact mechanism

Note 1 to entry: Some **impact wrenches** are equipped with a means for depth setting and may have a means for setting the torque or switching off the rotation.