



# SLOVENSKI STANDARD SIST EN 62841-3-10:2016

01-marec-2016

Nadomešča:

SIST EN 61029-2-10:2010

SIST EN 61029-2-10:2010/A11:2014

---

**Elektromotorna ročna orodja, prenosna orodja ter stroji za trato in vrt - Varnost - 3-10. del: Posebne zahteve za premične rezalnike**

Electric Motor-Operated Hand-Held Tools, Transportable Tools and Lawn and Garden Machinery - Safety - Part 3-10: Particular requirements for transportable cut-off machines

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 62841-3-10:2016](https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016)

<https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016>

**Ta slovenski standard je istoveten z: EN 62841-3-10:2015**

---

**ICS:**

25.100.01	Rezalna orodja na splošno	Cutting tools in general
25.140.20	Električna orodja	Electric tools

**SIST EN 62841-3-10:2016**

**en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 62841-3-10:2016](https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016)

<https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016>

EUROPEAN STANDARD

**EN 62841-3-10**

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2015

ICS 25.140.20

Supersedes EN 61029-2-10:2010

English Version

**Electric motor-operated hand-held tools, transportable tools and  
lawn and garden machinery - Safety - Part 3-10: Particular  
requirements for transportable cut-off machines  
(IEC 62841-3-10:2015 , modified)**

Outils électroportatifs à moteur, outils portables et machines  
pour jardins et pelouses - Sécurité - Partie 3-10: Exigences  
particulières pour les scies à onglets transportables  
(IEC 62841-3-10:2015 , modifiée)

Elektrische motorbetriebene handgeführte Werkzeuge,  
transportable Werkzeuge und Rasen- und  
Gartenmaschinen - Sicherheit - Teil 3-10: Besondere  
Anforderungen für transportable Trennschleifmaschinen  
(IEC 62841-3-10:2015 , modifiziert)

This European Standard was approved by CENELEC on 2015-10-19. 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.

[SIST EN 62841-3-10:2016](https://standards.iteh.ai/SIST/62841-3-10/2016)

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**

EN 62841-3-10:2015 (E)

## European foreword

The text of document 116/240/FDIS, future edition 1 of IEC 62841-3-10, 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 62841-3-10:2015.

A draft amendment, which covers common modifications to IEC 62841-3-10:2015, 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 at national level by publication of an identical national standard or by endorsement (dop) 2016-10-19
- latest date by which the national standards conflicting with this document have to be withdrawn (dow) 2019-10-19

EN 62841-3-10:2015 supersedes EN 61029-2-10:2010 + A11:2013.

This European Standard is divided into four parts:

Part 1: General requirements which are common to most 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 3-10 is to be used in conjunction with EN 62841-1:2015.

This Part 3-10 supplements or modifies the corresponding clauses in EN 62841-1:2015, so as to convert it into the European Standard: Particular requirements for transportable cut-off machines.

Where a particular subclause of Part 1 is not mentioned in this Part 3-10, that subclause applies as far as relevant. 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 3-10 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.

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.

## Endorsement notice

The text of the International Standard IEC 62841-3-10:2015 was approved by CENELEC as a European Standard with agreed common modifications.

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

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: <http://standards.iteh.ai/catalog/standards/sist/62841-3-10-2016>

This annex from EN 62841-1:2015 is applicable with the following addition:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 603-15	-	Bonded abrasive products - Dimensions - Part 15: Grinding wheels for cutting-off on stationary or mobile cutting-off machines	-	-
ISO 630	Series	Structural steels	-	-

**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.

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 62841-3-10:2016](https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016)

<https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016>



# INTERNATIONAL STANDARD



---

**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 3-10: Particular requirements for transportable cut-off machines**

[SIST EN 62841-3-10:2016](https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016)

<https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016>

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

---

ICS 25.140.20

ISBN 978-2-8322-2912-5

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

## CONTENTS

FOREWORD .....	4
1 Scope .....	6
2 Normative references .....	6
3 Terms and definitions .....	6
4 General requirements .....	7
5 General conditions for the tests .....	7
6 Radiation, toxicity and similar hazards .....	8
7 Classification .....	8
8 Marking and instructions .....	8
9 Protection against access to live parts .....	11
10 Starting .....	11
11 Input and current .....	11
12 Heating .....	11
13 Resistance to heat and fire .....	11
14 Moisture resistance .....	11
15 Resistance to rusting .....	11
16 Overload protection of transformers and associated circuits .....	11
17 Endurance .....	11
18 Abnormal operation .....	12
19 Mechanical hazards .....	12
20 Mechanical strength .....	17
21 Construction .....	18
22 Internal wiring .....	18
23 Components .....	19
24 Supply connection and external flexible cords .....	19
25 Terminals for external conductors .....	19
26 Provision for earthing .....	19
27 Screws and connections .....	19
28 Creepage distances, clearances and distances through insulation .....	19
Annexes .....	26
Annex I (informative) Measurement of noise and vibration emissions .....	26
Annex K (normative) Battery tools and battery packs .....	27
Bibliography .....	28
Figure 101 – Example of a cut-off machine .....	20
Figure 102 – Examples of gaps and rake angles .....	21
Figure 103 – Wheel guards .....	22
Figure 104 – Test probe .....	22
Figure 105 – Spark deflection .....	23
Figure 106 – Principal designs and dimensions of flanges .....	24
Figure 107 – Position of test hole for impact test .....	25



Figure 108 – Wheel guard material strength .....	25
Table 4 – Required performance levels .....	12
Table 101 – Flange dimensions .....	16
Table 102 – Torques for testing flanges .....	17
Table I.101 – Noise test conditions for cut-off machines .....	26

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 62841-3-10:2016](https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016)

<https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016>

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

**Part 3-10: Particular requirements for transportable cut-off machines**

**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 62841-3-10 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
116/240/FDIS	116/253/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 3-10 is to be used in conjunction with the first edition of IEC 62841-1 (2014).

This Part 3-10 supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: Particular requirements for transportable cut-off machines.

Where a particular subclause of Part 1 is not mentioned in this Part 3-10, that subclause applies as far as relevant. 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.

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.

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 website 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/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016>
- withdrawn,
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

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.

**IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.**

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

## Part 3-10: Particular requirements for transportable cut-off machines

### 1 Scope

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

*Addition:*

This part of IEC 62841 applies to transportable **cut-off machines** intended to cut materials such as metals, concrete and masonry and to be fitted with one abrasive

- **bonded reinforced wheel** of Type 41, or
- **diamond cut-off wheel** with the peripheral gaps, if any, not exceeding 10 mm

and with

- a **rated no-load speed** not exceeding a peripheral speed of the wheel of 100 m/s with the maximum wheel diameter and
- a wheel diameter range of 250 mm to 410 mm.

This standard does not apply to: [SIST EN 62841-3-10:2016](https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016)

- transportable mitre saws; <https://standards.iteh.ai/catalog/standards/sist/b63dc254-4ff6-45bf-9e12-a4ff36157913/sist-en-62841-3-10-2016>
- transportable tile saws;
- transportable metal saws.

NOTE 101 Transportable mitre saws are covered by IEC 62841-3-9. Transportable tile saws will be covered by a future part of IEC 62841-3. Transportable metal saws will be covered by a future part of IEC 62841-3.

### 2 Normative references

This clause of Part 1 is applicable except as follows:

*Addition:*

ISO 603-15, *Bonded abrasive products – Dimensions – Part 15: Grinding wheels for cutting-off on stationary or mobile cutting-off machines*

ISO 630 (all parts), *Structural steels*

### 3 Terms and definitions

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

#### 3.101

##### **inner flange**

part that contacts and provides support to the back side of the wheel and is located on the spindle between wheel and tool