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Electric motor-operated hand-held tools,  
transportable tools and lawn and garden machinery -  
Safety - Part 2-22: Particular requirements for  
hand-held cut-off machines

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>See Eesti standard EVS-EN IEC 62841-2-22:2025 sisaldab Euroopa standardi EN IEC 62841-2-22:2025 ingliskeelset teksti.</p> <p>Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.12.2025.</p> <p>Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.</p>	<p>This Estonian standard EVS-EN IEC 62841-2-22:2025 consists of the English text of the European standard EN IEC 62841-2-22:2025.</p> <p>This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.</p> <p>Date of Availability of the European standard is 05.12.2025.</p> <p>The standard is available from the Estonian Centre for Standardisation and Accreditation.</p>
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ICS 25.140.20

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English Version

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery - Safety - Part 2-22: Particular requirements for hand-held cut-off machines  
(IEC 62841-2-22:2025)

Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses - Sécurité - Partie 2-22: Exigences particulières pour les tronçonneuses portatives  
(IEC 62841-2-22:2025)

Elektrische motorbetriebene handgeführte Werkzeuge, transportable Werkzeuge und Rasen- und Gartenmaschinen - Sicherheit - Teil 2-22: Besondere Anforderungen für handgeführte Trennschleifmaschinen  
(IEC 62841-2-22:2025)

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

## European foreword

The text of document 116/870/FDIS, future edition 1 of IEC 62841-2-22, prepared by TC 116 "Safety of motor-operated electric tools" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62841-2-22:2025.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2026-12-31 level by publication of an identical national standard or by endorsement
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This document is read in conjunction with EN IEC 62841-2-22:2025/A11:2025 and EN 62841-1:2015 and all of its amendments and corrigenda (if any).

This document has been prepared under a standardization request addressed to CENELEC by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZZ, which is an integral part of EN IEC 62841-2-22:2025/A11:2025.

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In the official version, for Bibliography, the following notes have to be added for the standard indicated:

- IEC 62841-2-3 NOTE Approved as EN IEC 62841-2-3
- IEC 62841-2-5 NOTE Approved as EN 62841-2-5
- IEC 62841-2-23 NOTE Approved as EN IEC 62841-2-23 <sup>1</sup>

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<sup>1</sup> Under preparation. Stage at the time of publication: FprEN IEC 62841-2-23 :2024..

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety –  
Part 2-22: Particular requirements for hand-held cut-off machines**

**Outils électroportatifs à moteur, outils portables et machines pour jardins et pelouses – Sécurité –  
Partie 2-22: Exigences particulières pour les tronçonneuses portatives**



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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC MOTOR-OPERATED HAND-HELD TOOLS, TRANSPORTABLE TOOLS AND LAWN AND GARDEN MACHINERY – SAFETY –****Part 2-22: Particular requirements for hand-held cut-off machines**

## FOREWORD

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IEC 62841-2-22 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
116/870/FDIS	116/887/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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://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 hand-held cut-off machines.

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;*
- terms defined in Clause 3: **in bold type**
- notes: in small roman type.

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 Annex K and Annex L 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](http://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 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 2-22: Particular requirements for hand-held cut-off machines

### 1 Scope

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

*Replacement of the third paragraph:*

The **rated voltage** is not more than 250 V for single-phase a.c. or d.c. tools, and 480 V for three-phase a.c. tools.

*Addition:*

This document applies to hand-held **cut-off machines** fitted with

- one **bonded reinforced wheel** of Type 41 or Type 42; or
- one or more **diamond cutting wheels** with peripheral gaps, if any,
  - having no positive rake angle; and
  - not exceeding 10 mm for **cut-off machines** other than **flush cutters, power cutters** and **wall chasers**;

and with

- a **rated no-load speed** not exceeding a peripheral speed of the wheel of 100 m/s at **rated capacity**; and
- a **rated capacity** not exceeding 430 mm.

NOTE 101 An example of a permitted **diamond cutting wheel** construction is shown in Figure 106.

These tools are intended to cut materials such as metals, concrete, masonry, glass and tile.

This document does not apply to:

- **cut-off machines** that can be converted to a grinder, sander or polisher, which are covered by IEC 62841-2-3;
- circular saws which are covered by IEC 62841-2-5; and
- die grinders and small rotary tools which are covered by IEC 62841-2-23;
- tools intended to cut wood, except for **utility cutters**;
- **cut-off machines** fitted with a **bonded reinforced wheel** of Type 42 with a diameter exceeding 230 mm.

## 2 Normative references

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

*Addition:*

IEC 61008-1:2010, *Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs) – Part 1: General rules*<sup>1</sup>

IEC 61008-1:2010/AMD1:2012

IEC 61008-1:2010/AMD2:2013

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

ISO 19432-1:2020, *Building construction machinery and equipment – Portable, hand-held, internal combustion engine-driven abrasive cutting machines – Part 1: Safety requirements for cut-off machines for centre-mounted rotating abrasive wheels*

## 3 Terms and definitions

IEC 62841-1:2014, Clause 3 is applicable, except as follows:

*Addition:*

### 3.101 blotter

thin piece of an easily compressible material, between the abrasive wheel and **flange**

### 3.102 bonded reinforced wheel

**accessory** for cutting-off applications that are bonded by means of material such as resin, rubber, shellac or other similar bonding agents and which are reinforced by webbing, fabric or filament

Note 101 to entry: **Bonded reinforced wheels** are covered in ISO 603-15:2022 and ISO 603-16:2022.

Note 102 to entry: In the United States of America, **bonded reinforced wheels** are covered in ANSI/UAMA B7.1:2017.

### 3.103 cut-off machine

**hand-held tool** designed to cut by means of the periphery of a rotating abrasive cut-off wheel (**bonded reinforced wheel** or **diamond cutting wheel**) where the wheel is fixed on a spindle

Note 101 to entry: See Figure 101.

### 3.104 diamond cutting wheel

metal **accessory** with the abrasives located on the periphery of the wheel

### 3.105 flange

collar, disc, or plate between or against which wheels are mounted

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<sup>1</sup> There exists a consolidated version (Edition 3.2:2013) which includes IEC 61008-1:2010 and its Amendment 1 (2012) and Amendment 2 (2013).