

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE



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

**Outils électroportatifs à moteur, outils transportables et machines pour jardins et pelouses – Sécurité –  
Partie 3-10: Exigences particulières pour les tronçonneuses à disque transportables**



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**Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety –  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

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### **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

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

**IEC 62841-3-10 edition 1.1 contains the first edition (2015-09) [documents 116/240/FDIS and 116/253/RVD], its corrigendum (2016-07) and its amendment 1 (2022-05) [documents 116/576/FDIS and 116/584/RVD].**

**In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.**



International Standard IEC 62841-3-10 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

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 the base publication and its amendment will remain unchanged until the stability date indicated on the IEC web site under [webstore.iec.ch](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.

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:

- transportable mitre saws;
- 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*~~

ISO 630-2:2011<sup>1</sup>, *Structural steels – Part 2: Technical delivery conditions for structural steels for general purposes*

*Addition:*

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<sup>1</sup> This document has been replaced by a new edition, but the listed edition applies.

### 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

#### 3.102

##### **bonded reinforced wheel**

wheel for different applications and of a type in accordance with ISO 603-15

#### 3.103

##### **cut-off machine**

tool designed to cut by means of a rotating abrasive cut-off wheel (bonded reinforced or diamond), where the wheel is fixed on a spindle which is mounted on a **cutting unit**, the machine is equipped with a table which supports and positions the workpiece fixed in a vice and the **cutting unit** is fitted to an arm which projects over the table from a pivot located at the table or on part of the frame of the machine

Note 1 to entry: See Figure 101.

#### 3.104

##### **cutting unit**

device with an affixed cut-off wheel, capable of generating a cutting action

#### 3.105

##### ***D***

maximum specified diameter of the wheel

#### 3.106

##### **diamond wheel**

wheel made of metal with a continuous or segmented abrasive rim

#### 3.107

##### **fence**

device to position the workpiece and absorb the horizontal forces from the wheel during the cutting process

#### 3.108

##### **outer flange**

part that supports the front side of the wheel and secures and clamps the wheel to the spindle and the **inner flange**

#### 3.109

##### **rest position**

uppermost position of the **cutting unit** intended by design

#### 3.110

##### **wheel guard**

**guard** which partly encloses the wheel and gives protection to the operator