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Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety –
Part 2-3: Particular requirements for hand-held grinders, disc-type polishers and disc-type sanders

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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 2-3: Particular requirements for hand-held grinders, disc-type polishers and disc-type sanders

FOREWORD

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

IEC 62841-2-3 edition 1.1 contains the first edition (2020-04) [documents 116/444/FDIS and 116/454/RVD] and its corrigendum 1 (2021-04). It also contains its amendment 1 (2024-10) [documents 116/813/FDIS and 116/832/RVD] and its corrigenda 1 (2024-12) and 2 (2026-05).

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 62841-2-3 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

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

This Part 2-3 is to be used in conjunction with the first edition of IEC 62841-1:2014.

This Part 2-3 supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: Particular requirements for hand-held grinders, disc-type polishers and disc-type sanders.

Where a particular subclause of Part 1 is not mentioned in this Part 2-3, 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.

The terms in **bold typeface** in the text are defined in Clause 3

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 document and its amendment will remain unchanged until the stability date indicated on the IEC website under 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.

IMPORTANT – The "colour inside" logo on the cover page of this document 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 2-3: Particular requirements for hand-held grinders, disc-type polishers and disc-type sanders

1 Scope

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

Addition:

This ~~part of IEC 62841~~ document applies to hand-held **grinders**, **disc-type polishers** and **disc-type sanders**, including angle, straight and vertical tools, intended for use on various materials except magnesium, with a **rated capacity** not exceeding 230 mm. For **grinders**, the **rated no-load speed** does not exceed a peripheral speed of the **accessory** of 80 m/s at **rated capacity**.

This document also applies to **concrete surface grinders** for use on various masonry materials with a **rated capacity** not exceeding 230 mm.

This document does not apply to **grinders** intended to be fitted with an **accessory** other than a bonded abrasive product or a **diamond wheel**.

This document does not apply to **grinders** intended to be fitted with **diamond wheels** with

– peripheral gaps exceeding 10 mm; or
– a positive rake angle.

This ~~standard~~ document does not apply to dedicated cut-off machines.

NOTE 101 It is planned that a document on cut-off machines will be published.

This ~~standard~~ document does not apply to orbital polishers and orbital sanders.

NOTE 102 ~~It is planned that a document on orbital polishers and orbital sanders will be published.~~ Orbital polishers and orbital sanders are covered by IEC 62841-2-4.

This ~~standard~~ document does not apply to die grinders.

NOTE 103 ~~Die grinders are covered by IEC 62841-2-23.~~ It is planned that a document on die grinders will be published.

2 Normative references

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

Addition:

ISO 525:~~2013~~2020, *Bonded abrasive products – ~~General requirements~~ Shape types, designation and marking*

Bibliography

The bibliography of Part 1 is applicable, except as follows:

Addition:

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

IEC 62841-2-4, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2-4: Particular requirements for hand-held sanders and polishers other than disc type*

ISO 603-12:1999, *Bonded abrasive products – Dimensions – Part 12: Grinding wheels for deburring and fettling on a straight grinder*

ISO 603-14:~~1999~~2022, *Bonded abrasive products – Dimensions – Part 14: Grinding wheels for deburring and fettling/snagging on an angle grinder*

ISO 603-16:~~1999~~2022, *Bonded abrasive products – Dimensions – Part 16: ~~Grinding~~ Cutting-off wheels ~~for cutting-off~~ on hand held power tools*

ISO 6104:2005, *Superabrasive products – Rotating grinding tools with diamond or cubic boron nitride – General survey, designation and multilingual nomenclature*

UAMA B74.2:2003, *Specifications for Shapes and Sizes of Grinding Wheels, and for Shapes, Sizes and Identification of Mounted Wheels*

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