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IEC 612841-2-5 Ed 1

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Australian/New Zealand Standard™

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery—Safety

Part 2.5: Particular requirements for hand-held circular saws

STANDARDS Australia

STANDARDS NEW ZEALAND
PAEREWA AOTEAROA

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-002, Safety of Household and Similar Electrical Appliances and Small Power Transformers. It was approved on behalf of the Council of Standards Australia on 27 April 2015 and on behalf of the Council of Standards New Zealand on 18 June 2015.
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This Standard was issued in draft form for comment as DR 14915.

Australian/New Zealand Standard™

Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery—Safety

Part 2.5: Particular requirements for hand-held circular saws

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STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

AS/NZS 62841.2.5:2015

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

Part 2.5: Particular requirements for hand-held circular saws

Foreword

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-002- Safety of Household and Similar Electrical Appliances and Small Power Transformers to supersede AS/NZS 60745.2.5:2011 three years from the date of publication. During this period it is anticipated that regulatory authorities will approve hand-held circular saws to either standard.

The objective of this Standard is to provide manufacturers, designers, regulatory authorities, testing laboratories and similar organizations with safety requirements designed to give the user protection against hazards that might occur during normal operation and abnormal operation of the appliance and which may be used as the basis for approval for sale or for connection to the electricity supply mains in Australia and New Zealand

The text of IEC 62841-2-5 Ed 1, prepared by IEC Technical Committee TC 116, was submitted to the Standards Australia/Standards New Zealand Combined Procedure (dual public comment and committee vote) for adoption of the IEC standard as a Standards Australia/Standards New Zealand joint standard.

This Standard is an adoption with national modifications of the first edition of IEC 62841-2-5, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2-5: Particular requirements for hand-held circular saws.* It has been varied as indicated to take account of Australian and New Zealand conditions.

This part 2 has to be used in conjunction with the latest edition of AS/NZS 62841.1 Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 1: General requirements and its Amendments. It was established on the basis of AS/NZS 62841.1:2015.

This part 2 supplements or modifies the corresponding clauses of AS/NZS 62841.1 so as to convert it into the Australian/New Zealand Standard: Safety requirements for appliances for hand-held circular saws.

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

NOTE 1 The following numbering system is used:

– subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;

– unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;

– additional annexes are lettered AA, BB, etc.;

– subclauses, notes and annexes that are additional to those in the IEC standard are prefixed with the letters AZ.

NOTE 2 The following print types are used:

– requirements: in roman type;

– *test specifications: in italic type*;

– notes: in small roman type.

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Words in **bold** in the text are defined in Clause 3.

p NOTE 3 In this document, p is used in the margin to indicate instructions for preparing a consolidated version.

The essential safety requirements in AS/NZS 3820[1] that could be applicable to requirements for hand-held circular saws are covered by this standard.

The national variations to IEC 62841-2-5 Ed 1 form the Australian and New Zealand national variations for purposes of the IECEE scheme for recognition of results of testing to standards for safety of electrical equipment (the CB scheme).

[1] AS/NZS 3820 *Essential safety requirements for electrical equipment*

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The text of the International Standard IEC 62841-2-5 Ed 1 was approved as a joint Australia/New Zealand Standard with the agreed national variations as given below.

AUSTRALIAN NATIONAL VARIATIONS

There are no national variations to this Part 2 other than those listed in the national variations in AS/NZS 62841.1:2015.

NEW ZEALAND NATIONAL VARIATIONS

There are no national variations to this Part 2 other than those listed in the national variations in AS/NZS 62841.1:2015.

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Annex ANZ
(normative)
Normative references to international publications with their corresponding joint Australia/New Zealand publications

The following referenced documents are indispensable for the application of this document. 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 national variations the relevant joint Australia/New Zealand publications applies if the national variations are needed to ensure the safety of the appliance for Australia/New Zealand conditions. These international publications are indicated by (mod). If an international publication is not so indicated, then either it or the listed Australia/New Zealand publication may be used.

Publication	Year	Title	AS/NZS	Year

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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 2-5: Particular requirements for hand-held circular saws

FOREWORD

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International Standard IEC 62841-2-5 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
116/166/FDIS	116/180/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 2-5 is to be used in conjunction with the first edition of IEC 62841-1 (2014).

This Part 2-5 supplements or modifies the corresponding clauses in IEC 62841-1, so as to convert it into the IEC Standard: Particular requirements for hand-held circular saws.

Where a particular subclause of Part 1 is not mentioned in this Part 2-5, 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,
- 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 2-5: Particular requirements for hand-held circular saws

1 Scope

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

Addition:

This part of IEC 62841 applies to hand-held **circular saws**, which hereinafter will be referred to as saws.

This standard does not apply to saws designed for use with abrasive wheels.

NOTE Saws designed for use with abrasive wheels as cut-off machines are covered by IEC 62841-2-22.

2 Normative references

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

Addition:

NOTE In Europe (EN 62841-2-5), the following normative reference applies:

EN 847-1, *Tools for woodworking - Safety requirements - Part 1: Milling tools, circular saw blade*

3 Terms and definitions

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

Addition:

3.101
base plate
part supporting the saw on the material being cut (see Figure 113)

3.102
bevel angle
angular displacement of the saw blade plane with respect to the **base plate** plane, the position of the saw blade plane that is perpendicular to the **base plate** being the 0° bevel position

3.103
circular saw
tool intended for cutting various materials with a rotating toothed blade

3.104
cutting edge zone
outer 20 % of the blade's radius