

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Amendment No. 1
to
AS/NZS 62841.2.1:2018
Electric motor-operated hand-held tools, transportable tools and
lawn and garden machinery – Safety –
Part 2.1: Particular requirements for hand-held drills and impact drills**

REVISED TEXT

The 2018 edition of AS/NZS 62841.2.1 is amended as follows;

SUMMARY: This amendment applies to the Committee representation, Foreword, National variations, Clauses 1, 8, 18, 19, 21, Figures, Annex I, Annex K, Annex L and Bibliography

Published on 25 November 2022

Approved for publication in Australia on behalf of the Council of Standards Australia on 17 November 2022

Approved for publication in New Zealand by the New Zealand Standards Approval Board on 5 October 2022

The IEC text in this amendment takes effect two years from the date of publication of this amendment. During this period the Standard AS/NZS 62841.2.1:2018 without this amendment will also remain current.

Regulatory authorities that reference this Standard in regulation may apply these requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements.

COMMITTEE REPRESENTATION:

Add:

Better Regulation Division (Fair Trading, Safework NSW, TestSafe)

FOREWORD

The text of IEC 62841-2-1 Ed 1 amendment 1 (2021), 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 as an amendment to the Standards Australia/Standards New Zealand joint standard AS/NZS 62841.2.1:2018.

This amendment supplements or modifies the corresponding clauses of AS/NZS 62841.2.1:2018.

The national variations to IEC 62841.2.1 Ed 1 amendment 1 (2021) 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).

There are no national variations from the amendment to the IEC Standard from which this amendment is adopted.

- p NOTE In this document, p is used in the margin to indicate instructions for preparing the printed version of the amendment.

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>AS/NZS</u>	<u>Year</u>
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NOTE: The following additional changes to AS/NZS 62841.2.1:2018 are needed to incorporate IEC 62841-2-1 Ed 1 amendment 1.

Foreword

Replace the existing fourth paragraph by the following.

The text of IEC 62841-2-1 edition 1 amendment 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 as an amendment to the Standards Australia/Standards New Zealand joint standard AS/NZS 62841.2.1:2018.

This standard incorporates Amendment No. 1 (November 2022). The changes introduced by the amendments are indicated in the text by a marginal bar and amendment number against the part affected. Where an application date other than immediate is applicable to an amendment the date of application (DOA) and the date of withdrawal (DOW) if relevant, is indicated by the marginal bar against the part affected.

NOTE 1 Regulatory authorities that reference this Standard in regulation may apply these amendment requirements at a different time. Users of this Standard should consult with these authorities to confirm their requirements

This standard is an adoption with national modifications of the first edition of IEC 62841-2-1, *Electric motor-operated hand-held tools, transportable tools and lawn and garden machinery – Safety – Part 2-1: Particular requirements for hand-held drills and impact drills* including its amendment 1 (2021). It has been varied as indicated to take account of Australian and New Zealand conditions.

Replace the existing paragraphs 5, 6 and 7 and Note 1 by the following.

This part of AS/NZS 62841 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 of AS/NZS 62841 supplements or modifies the corresponding clauses of Part 1 of AS/NZS 62841 so as to convert it into the Australian/New Zealand Standard: *Safety requirements for hand-held drills and impact drills*.

When a particular subclause of Part 1 of AS/NZS 62841 is not mentioned in this part of AS/NZS 62841, that subclause applies as far as is reasonable. When this standard states "addition", "modification" or "replacement", the relevant text of Part 1 of AS/NZS 62841 is to be adapted accordingly.

NOTE 2 The following numbering system is used:

- subclauses, tables and figures that are numbered starting from 101 are additional to those in AS/NZS 62841;
- unless notes are in a new subclause or involve notes in AS/NZS 62841.1, 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.

Renumber existing notes 2 and 3 as notes 3 and 4.

In the existing ninth and tenth paragraphs, replace Ed 1. by Ed 1.1.

AUSTRALIAN NATIONAL VARIATIONS

Replace "Part 2" by "part of AS/NZS 62841"

NEW ZEALAND NATIONAL VARIATIONS

Replace "Part 2" by "part of AS/NZS 62841"

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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

Part 2-1: Particular requirements for hand-held drills and impact drills

AMENDMENT 1

FOREWORD

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- 9) Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

Amendment 1 to IEC 62841-2-1:2017 has been prepared by IEC technical committee 116: Safety of motor-operated electric tools.

The text of this Amendment is based on the following documents:

Draft	Report on voting
116/519/FDIS	116/525/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 Amendment 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. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications/.

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 in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

1 Scope

Replace the existing text with the following new text:

This clause of Part 1 is applicable except as follows:

Addition:

This part of IEC 62841 applies to hand-held **drills** and **impact drills**, including **diamond core drills**. This document also applies to **drills** that can be used for driving screws by attaching screwdriver bits.

This document does not apply to rotary hammers, screwdrivers, impact wrenches and ratchet drivers even if they can be used as a **drill**.

NOTE 101 Rotary hammers are covered by IEC 62841-2-6.

NOTE 102 Screwdrivers, impact wrenches and ratchet drivers are covered by IEC 62841-2-2.

8 Marking and instructions

Delete existing Subclause 8.3.

18 Abnormal operation

Replace the existing text of 18.8 with the following new text:

18.8 Replacement of Table 4:**Table 4 – Required performance levels**

Type and purpose of SCF	Minimum performance level (PL)
Power switch – prevent unwanted switch-on for tools with $M_R \leq 25$ Nm measured in accordance with 19.102	a
Power switch – prevent unwanted switch-on for tools with $M_R > 25$ Nm measured in accordance with 19.102	b
Power switch – provide desired switch-off for tools with $M_R \leq 25$ Nm measured in accordance with 19.102	b
Power switch – provide desired switch-off for tools with $M_R > 25$ Nm measured in accordance with 19.102	c
Power switch – provide desired switch-off for tools that require bracing in accordance with 8.14.1.101.	Shall be evaluated using the fault conditions of 18.6.1 without the loss of this SCF
Provide desired direction of rotation for tools that do not require bracing in accordance with 8.14.1.101	Not an SCF
Provide desired direction of rotation for tools that require bracing in accordance with 8.14.1.101	c
Any electronic control to pass the test of 18.3	a
For tools with a rated no-load speed of less than $3\,500\text{ min}^{-1}$, prevent output speed from exceeding 150 % of rated no-load speed as measured in 19.6	a
For tools with a rated no-load speed of $3\,500\text{ min}^{-1}$ or greater, prevent output speed from exceeding 130 % of rated no-load speed as measured in 19.6	a
Prevent exceeding thermal limits as in 18.4	a
Prevent self-resetting as required in 23.3 for tools with $M_R \leq 25$ Nm measured in accordance with 19.102	a
Prevent self-resetting as required in 23.3 for tools with $M_R > 25$ Nm measured in accordance with 19.102	b
Limit the torque to comply with 19.102	c
Prevent unwanted lock-on of the power switch function for tools with $M_R \leq 25$ Nm measured in accordance with 19.102	b
Prevent unwanted lock-on of the power switch function for tools with $M_R > 25$ Nm measured in accordance with 19.102	c

19 Mechanical hazards

Add the following new subclause:

19.6 Replacement:

The no-load speed of the spindle at **rated voltage** shall not exceed 120 % of the **rated no-load speed**.

Compliance is checked by measuring the speed of the spindle after the tool has been operating for 5 min at no-load. During the test, separable accessories are not mounted.