

Australian/New Zealand Standard™

**Hand-held Motor-operated Electric  
Tools—Safety**

**Part 2.3: Particular requirements for  
grinders, polishers and disk-type  
sanders (IEC 60745-2-3 Ed 2.2, MOD)**



### **AS/NZS 60745.2.3:2011**

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 18 April 2011 and on behalf of the Council of Standards New Zealand on 21 April 2011.

This Standard was published on 29 April 2011.

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The following are represented on Committee EL-002:

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Business New Zealand  
Consumer Electronic Suppliers Association, Australia  
Consumers' Federation of Australia  
Electrical Regulatory Authorities, Australia  
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*This Standard was issued in draft form for comment as DR 10923.*

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Australian/New Zealand Standard™

## Hand-held Motor-operated Electric Tools—Safety

### Part 2.3: Particular requirements for grinders, polishers and disk-type sanders (IEC 60745-2-3 Ed 2.2, MOD)

Originated as AS/NZS 60745.2.3:2006.  
Jointly revised and redesignated as AS/NZS 60745.2.3:2011.  
Reissued incorporating Amendment No. 1 (June 2013).

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## AUSTRALIA/NEW ZEALAND STANDARD

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### HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS – SAFETY –

#### Part 2.3: Particular requirements for grinders, polishers and disk-type sanders

#### 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 60745.2.3:2006, *Hand-held motor-operated electric tools – Safety – Part 2.3: Particular requirements for grinders, polishers and disk-type sanders*, two years from publication. During this period it is anticipated that regulatory authorities will approve grinders, polishers and disk-type sanders 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 tool 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.

A1 | This Standard incorporates Amendment No. 1 (June 2013). The changes required by the amendments are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof 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.

A1 | This Standard is an adoption with national modifications and contains the full text of the second edition of IEC 60745-2-3, *Hand-held motor-operated electric tools – Safety – Part 2-3: Particular requirements for grinders, polishers and disk-type sanders* and its amendment 1 (2010) and its corrigendum 1 (2011) and its amendment 2 (2011) and has been varied as indicated to take account of Australian and New Zealand conditions.

This part is to be used in conjunction with AS/NZS 60745.1:2009 and its amendments. The Parts 2 contain clauses to supplement or modify the corresponding clauses in this part to provide the relevant requirements for each type of tool.

NOTE 1 The following print types are used:

- requirements: in roman type;
- *test specifications: in italic type;*
- notes: in small roman type.

A1 | The numbering of clauses, subclauses, notes, tables, figures and annexes follows that of IEC 60745-2-3 Ed 2.2. To allow for the introduction of additional material by the IEC, the numbers 101 to 200 have been reserved. To allow for additional material to be introduced by Australia and New Zealand, the numbers 201 to 300 are used to number further clauses, subclauses, notes, tables and figures in part 1. Additional annexes are lettered ZA, ZB and so on.

This scheme has been introduced to reduce the likelihood of the IEC and Australia and New Zealand using the same identifier for different purposes.

The use of the word VOID indicates that the IEC text is not used in Australia or New Zealand. The use of this word also avoids the need to renumber, clauses, notes, tables and figure if an earlier clause, note, table or figure is not used.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number does not appear on each page of text and its identity is shown on the cover and title page only.
- (b) In the source text "this International Standard" should read "this Australian/New Zealand Standard".
- (c) A full point substitutes for a comma when referring to a decimal marker.

A1 | Variations to IEC 60745-2-3 Ed 2.2 are indicated at the appropriate places throughout this standard. Strikethrough (~~example~~) identifies IEC tables, figures and passages of text which, for the purposes of this Australian/New Zealand standard are deleted. Where Australian/New Zealand tables, figures or passages of text are added, each is set in its proper place and identified by shading (example). Added figures are not themselves shaded, but are identified by a shaded border.

A1 | Variations made to IEC 60745-2-3 Ed 2.2 form the New Zealand variations for the purposes of the IECEE scheme for recognition of testing to standards for safety of electrical equipment (the CB scheme). These variations have been incorporated in the body of the standard. They are listed in Annex ZZ for easy reference.

The essential safety requirements in AS/NZS 3820 that could be applicable to grinders, polishers and disk-type sanders are covered by this standard.

## HAND-HELD MOTOR-OPERATED ELECTRIC TOOLS – SAFETY –

### Part 2.3: Particular requirements for grinders, polishers and disk-type sanders

#### 1 Scope

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

*Addition:*

This standard applies to grinders, polishers and disk-type sanders, including angle, straight and vertical tools, with a rated capacity not exceeding 230 mm. For grinders, the rated speed does not exceed a peripheral speed of the accessory of 80 m/s at rated capacity.

This standard does not apply to dedicated cut-off machines which are covered by IEC 60745-2-22.

This standard does not apply to random-orbit polishers and random-orbit sanders which are covered by IEC 60745-2-4.

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This standard does not apply to die grinders utilizing collets or chucks for mounting threaded cones and mandrel mounted wheels which are covered by IEC 60745-2-23.

#### 2 Normative references

This clause of Part 1 is applicable except as follows:

*Addition:*

ISO 603-12	1999	<i>Bonded abrasive products – Dimensions – Part 12: Grinding wheels for deburring and fettling on a straight grinder</i>
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ISO 603-14	1999	<i>Bonded abrasive products – Dimensions – Part 14: Grinding wheels for deburring and fettling/snagging on an angle grinder</i>
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ISO 603-16	1999	<i>Bonded abrasive products – Dimensions – Part 16: Grinding wheels for cutting-off on hand held power tools</i>
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ANSI B7.1	2000	<i>Safety Requirements for the Use, Care and Protection of Abrasive Wheels</i>
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