

Australian Standard™

**Preferred dimensions of wrought metal
products**

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Australasian Railway Association
Australian Building Codes Board
Australian Foundry Institute
Australian Industry Group
Australian Steel Institute
Bureau of Steel Manufacturers of Australia
Institute of materials engineering Australia

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PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/New Zealand Committee MT-001, Iron and Steel, to supersede AS 2338—1980, *Preferred dimensions of wrought metal products*. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than as an Australian/New Zealand Standard.

The objective of this Standard is to establish preferred sizes (dimensions) for a range of wrought products, such as wire and sheet, in various metals, such as steel and aluminium, with the aim of providing manufacturing and engineering industries with rationalized values from which to choose. However, the Standard does not preclude the use of non-preferred sizes for exacting purposes.

For the most part, the preferred sizes have been based on the Renard (R) series of numbers.

The objective of this revision of the Standard is to update the lists of preferred sizes, since some products are no longer manufactured, and to upgrade the text in general.

The term 'informative' has been used in this Standard to define the application of the Appendix to which it has been applied. An 'informative' Appendix is only for information and guidance.

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STANDARDS AUSTRALIA

Australian Standard

Preferred dimensions of wrought metal products

1 SCOPE

This Standard specifies preferred sizes, or dimensions, of wrought metal products manufactured from steel (hot-rolled and bright—see Note 1), copper, copper alloys, aluminium and aluminium alloys.

It applies to round, square, hexagonal, and rectangular metal products conventionally known as rod, wire and bar, and to flat metal products conventionally known as plate, sheet, and strip.

NOTES:

- 1 For the purposes of this Standard, 'bright steel' is intended to cover cold-drawn, cold-sized, and cold-finished steel, produced by means other than wire manufacture.
- 2 Information on preferred sizes and their application in practice is given in Appendix A.

2 APPLICATION

Rationalized values of sizes for products used for general purposes are specified in Clauses 4 to 6. However, it should be noted that sizes not listed do not preclude their use, since it is recognized that some exacting engineering applications dictate a need for sizes other than the preferred sizes given in this Standard.

NOTE: The supply of non-preferred sizes is subject to negotiation.

It should also be noted that all of the sizes included in this Standard are not necessarily produced in all metals and grades. Manufacturers and distributors should be consulted in respect of availability of particular sizes for a given metal product.

3 SELECTION OF SIZES

Wherever Tables 1 to 5 (see Clause 4) show 'First preference' and 'Second preference' for cross-sectional dimensions, or where preferences are given for width and length of flat-rolled products (see Clauses 5 and 6), it is recommended that the first preference be used in selecting sizes. If no first-preference size is suitable, only then should the second preference values be considered.

NOTE: For cross-sectional dimensions that are not listed in Tables 1 to 5, it is recommended that selection be in accordance with Paragraph A3 of Appendix A.

4 CROSS-SECTIONAL DIMENSIONS

4.1 General

Preferred cross-sectional dimensions for wrought metal products are given in the following tables:

- (a) Table 1 for round metal products.
- (b) Table 2 for square metal products.
- (c) Table 3 for hexagonal metal products.
- (d) Table 4 for rectangular metal products.
- (e) Table 5 for thicknesses of flat metal products.