AS 1565—1996
Reconfirmed 2020

Australian Standard®

Copper and copper alloys—Ingots and castings

This Australian Standard was prepared by Committee MT/2, Copper and Copper Alloys. It was approved on behalf of the Council of Standards Australia on 17 May 1996 and published on 5 September 1996.

The following interests are represented on Committee MT/2:

AUSTAP

Australian Foundry Institute

Hunter Water Corporation, Australia

Metal Trades Industry Association of Australia

New Zealand Manufacturers Federation

Welding Technology Institute of Australia

Additional interests participating in preparation of Standard:

Non-ferrous foundries

This Standard was issued in draft form for comment as DR 95207.

STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 1565—1996
Copper and copper alloys—Ingots and castings

RECONFIRMATION NOTICE

Technical Committee MT-002 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 18 November 2020.

The following are represented on Technical Committee MT-002:

Weld Australia
International Copper Association Australia
Consumer Electronics Suppliers Association
Australian Institute of Refrigeration, Air Conditioning and Heating
Australian Industry Group

NOTES

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee MT/2, Copper and Copper Alloys, to supersede AS 1565—1985. The grades of copper and copper alloys and their compositions have been revised so that they align with the current listing of the Unified Numbering System designations.

This Standard is the result of a consensus among Australian and New Zealand representatives on the Joint Committee to produce it as an Australian Standard.

No International (ISO) Standards are available on the subject of copper and copper alloy ingots and castings.

The objective of this Standard is to specify the requirements for the manufacture and testing of copper and copper alloy ingots and castings.

Statements expressed in mandatory terms in notes to tables are deemed to be requirements of this Standard.

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

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Originated as AS H13—1940 and AS H14—1940.
Previous edition AS 1565— 1985.
Third edition 1996.

STANDARDS AUSTRALIA

Australian Standard

Copper and copper alloys—Ingots and castings

1 SCOPE This Standard specifies requirements for the manufacture and testing of high conductivity copper castings and copper alloy ingots and castings.

NOTES:

1 Advice and recommendations on information to be supplied by the purchaser at the time of enquiry or order are contained in Appendix A.

2 Provision has been made for additional inspection requirements for castings which can be specified by a coding system (see Appendix B).

2 REFERENCED DOCUMENTS The following documents are referred to in this Standard:

AS
1391 Methods for tensile testing of metals

1515 Copper alloys (all parts)

1696 Copper
1696.1 Part 1: Determination of phosphorus—Spectrophotometric method

1816 Metallic materials—Brinell hardness test

2062 Methods for non-destructive penetrant testing of products and components

2345 Dezincification resistance of copper alloys

2614 Copper and copper alloys—Sampling for chemical analysis and electrical resistivity

2700 Colour standards for general purposes

2706 Numerical values—Rounding and interpretation of limiting values

2883 Analysis of metals—Procedures for the setting up, calibration and standardization of atomic emission spectrometers using arc/spark discharge

3641 Recommended practice for atomic emission spectrometric analysis
3641.1 Part 1: Principles and techniques

K208 Methods for the analysis of unalloyed copper
K208.1 Part 1: Method for the electrolytic determination of copper in unalloyed copper containing not less than 99.85 percent copper

BS
5714 Method of measurement of resistivity of metallic materials

ASTM
E 53 Test methods for chemical analysis of copper

3 DEFINITION For the purpose of this Standard the definition below applies.

3.1 Cast—the product of one furnace melt, one crucible melt, or a number of furnace or crucible melts that are aggregated and mixed prior to sampling.

NOTE: In respect to continuous melting for the production of castings, a 'cast' is defined as 500 kg of melted metal.