

Australian Standard[®]

Tinplate and blackplate

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The following interests are represented on Committee MT/1:

Australian Foundry Institute
Australian Institute of Steel Construction
Bureau of Steel Manufacturers of Australia
Confederation of Australian Industry
Department of Defence
Metal Trades Industry Association of Australia
Railways of Australia Committee
Society of Automotive Engineers, Australasia

Additional interests participating in preparation of Standard:

Australian Tin Information Centre
Canmakers Institute of Australia
CSIRO, Division of Food Research

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PREFACE

This Standard was prepared by the Standards Australia Committee on Iron and Steel to supersede AS 1517—1982, *Tinplate and blackplate*, Part 1: *Sheet*, and Part 2: *Coil*. In this edition, the former Parts 1 and 2 have been combined to form one document.

This edition includes requirements for double cold-reduced blackplate, double cold-reduced electrolytic tinplate and low tin-coated steel, commonly referred to as LTS. Requirements for double cold-reduced electrolytic tinplate are the same as those specified in ISO 4977—1984, *Double cold-reduced electrolytic tinplate*, Part 1: *Sheet*, issued by the International Organization for Standardization.

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STANDARDS AUSTRALIA

Australian Standard

Tinplate and blackplate

SECTION 1 SCOPE AND GENERAL

1.1 SCOPE This Standard specifies requirements for standard grade cold-reduced electrolytic tinplate and cold-reduced blackplate, either in sheet form or in wide coil and slit coil form, as follows:

- (a) Single cold-reduced material with nominal thickness from 0.20 mm up to and including 0.60 mm.
- (b) Double cold-reduced material with nominal thickness from 0.14 mm up to and including 0.29 mm.

It includes requirements for equally-coated, differentially-coated and low tin-coated (LTS) tinplate. This Standard does not apply to material described commercially as tinned sheets, steel sheets or TFS (electrolytic chromium-coated steel).

NOTES:

- 1 Advice and recommendations on information to be supplied by the purchaser at the time of enquiry or order are contained in the purchasing guidelines set out in Appendix A.
- 2 Alternative means for determining compliance with this Standard are given in Appendix B.

1.2 REFERENCED DOCUMENTS The documents below are referred to in this Standard:

AS

- 1050 Methods for the analysis of iron and steel
- 1199 Sampling procedures and tables for inspection by attributes
- 1213 Iron and steel—Methods of sampling
- 1391 Methods for tensile testing of metals
- 1399 Guide to AS 1199—Sampling procedures and tables for inspection by attributes
- 2025 Method for Rockwell superficial hardness test
- 2025.1 Part 1: Testing of metals, N and T scales
- 2706 Numerical values—Rounding and interpretation of limiting values
- 3900 Quality systems—Guide to selection and use
- 3904 Quality systems—Guide to quality management and quality system elements
- K1 Methods for the sampling and analysis of iron and steel

ISO

Guide 44 General rules for ISO or IEC international third-party certification scheme for products.

1.3 DEFINITIONS For the purpose of this Standard, the definitions below apply.

1.3.1 Area—the area of tinplate or blackplate, expressed in SITA (System International Tinplate Area) units, where—

$$1 \text{ SITA} = 100 \text{ m}^2.$$

1.3.2 Batch—a quantity of some commodity produced under conditions which are considered uniform.

NOTE: Each batch is assumed, as far as practicable, to consist of materials or items of a single type, grade, class, size and composition, and to have been manufactured under essentially the same conditions at essentially the same time.

1.3.3 Batch annealing—annealing of cold-reduced strip in tight coil form, within a protective atmosphere.

1.3.4 Blackplate—low carbon steel sheet or coil normally not oiled or otherwise treated. Thicknesses range from 0.14 mm up to and including 0.60 mm.

NOTE: Steel sheet intended for blackplate is line inspected during processing, and material having visible imperfections of only moderate magnitude or frequency is selected. Blackplate is liable to rust but, at the time it is made available by the manufacturer, has a surface condition suitable for normal lacquering and printing.