

BS 1470: 1987

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Reprinted, incorporating Amendment No. 1

**British Standard Specification for
Wrought aluminium and aluminium alloys
for general engineering purposes:
plate, sheet and strip**

Aluminium et alliages d'aluminium corroyés pour mécanique générale : tôles fortes, moyennes, minces et feuillards — Spécifications

Bleche und Bänder aus Aluminium und Aluminiumknetlegierungen für den allgemeinen Maschinenbau

**FOR
INFORMATION**

Foreword

This British Standard has been prepared under the direction of the Non-ferrous Metals Standards Committee. It is the fifth revision of this standard and replaces the 1972 edition, which is withdrawn.

Other standards in this series of specifications for wrought aluminium and aluminium alloys for general engineering purposes are as follows.

- BS 1471 Drawn tube
- BS 1472 Forging stock and forgings
- BS 1473 Rivet, bolt and screw stock
- BS 1474 Bars, extruded round tubes and sections
- BS 1475 Wire

New designation systems for both composition and tempers have been introduced in this revision.

As a major step towards alignment of aluminium and aluminium alloy compositions on an international basis a substantial number of countries have agreed to adopt a 4-digit classification for alloy composition designation. This system is administered by the Aluminum Association (AA) of the USA, which issues the 'Registration record of international alloy designations and chemical composition limits for wrought aluminum and wrought aluminum alloys'.

It has been decided to use this system in British Standards to designate the nominal chemical composition of the alloys specified. This has necessitated, in some cases, minor compositional changes from the previous alloys used. The details of the AA system are given in appendix B, and a cross-reference table for the new and old British Standard alloy designations and the nearest equivalent ISO (International Organization for Standardization) alloy designations is included in appendix C.

It has also been decided to adopt the ISO 'alternative' temper designation system, given in ISO 2107, which is now widely recognized internationally. Details of this temper designation system are given in appendix D. Cross-references between the new and old British Standard temper designations are given in appendix C.

The opportunity was taken in this revision to consider the alloys and tempers currently used commercially in significant quantities. As a consequence three alloys previously in BS 4300 (alloys 3105, 5005 and 5454) and a new alloy 2024, clad and unclad, have been included.

The dimensional tolerances given in this standard have been completely revised. The requirements for flatness are given in more detail, following the format of ISO 6361/4. Details of the rounding of numbers rule are given in appendix E.

The appendices contained in the 1972 edition concerning forms of material available; the annealing and heat treatment of wrought aluminium and its alloys; and standard sizes of material have been omitted. Detailed information concerning the annealing and heat treatment of aluminium alloys can be obtained from the Aluminium Federation publication 'Properties of aluminium and its alloys'.

As a result of the trend in the aluminium processing industries towards the use of larger coil masses, the batch size for the mechanical testing of non-heat-treatable alloys has been increased to 10 000 kg in this revision.

In previous editions of this standard, clauses were included entitled 'Inspection' and 'Facilities for testing'. As the clauses were contractual in nature and not relevant to a product standard, they have been omitted from this revision.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

* Available from the Aluminium Federation, Broadway House, Calthorpe Road, Five Ways, Birmingham.