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Wrought aluminium and aluminium alloys — Extruded rods/bars, tubes and profiles —

Part 5: Tolerances on form and dimensions for round, square and hexagonal bars

Aluminium et alliages d'aluminium corroyés — Barres, tubes et profilés filés —

Partie 5: Tolérances sur forme et dimensions pour barres rondes, carrées et hexagonales

Reference number
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 79, *Light metals and their alloys*, Subcommittee SC 6, *Wrought aluminium and aluminium alloys*.

This fourth edition cancels and replaces the third edition (ISO 6362-5:2012), which has been technically revised. The main changes are as follows:

— in Clause 4, Table 1 has been separated into Table 1 and Table 2 by alloy group;

— in Clause 4, alloy 6026 has been added to Table 1 and alloy 2033 has been added to Table 2;

— errors have been corrected and expressions modified throughout.

A list of all parts in the ISO 6362 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Wrought aluminium and aluminium alloys — Extruded rods/bars, tubes and profiles —

Part 5: Tolerances on form and dimensions for round, square and hexagonal bars

1 Scope

This document specifies the tolerances on dimensions and shape of the following:

— wrought aluminium and aluminium alloy extruded round bars, having diameters in the range from 8 mm up to 350 mm;

— wrought aluminium and aluminium alloy extruded square and hexagonal bars, having widths across flats in the range from 10 mm up to 220 mm.

It is applicable to extruded round, square and hexagonal bars.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6362-1, *Wrought aluminium and aluminium alloys — Extruded rods/bars, tubes and profiles — Part 1: Technical conditions for inspection and delivery*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6362-1 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Materials

Alloys mentioned in this document are listed in ISO 6362-7.

NOTE Four-digit numerical designations are completely identical with Registration of International Alloy Designations and Chemical Composition Limits for Wrought Aluminum and Wrought Aluminum Alloys (known as “Teal sheets”)[1].

For the purposes of this document, wrought aluminium and aluminium alloys are divided into two groups, which correspond to varying difficulty when manufacturing the products.

The division of the most commonly alloys used in general engineering into Group I and Group II is specified in Table 1 and Table 2, respectively.

Grouping of other alloys is subject to agreement between the purchaser and the supplier.

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