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

**Part 5:  
Round, square and hexagonal bars —  
Tolerances on shape and dimensions**

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

*Partie 5: Barres rondes, carrées et hexagonales — Tolérances sur  
forme et dimensions*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 6362-5 was prepared by Technical Committee ISO/TC 79, *Light metals and their alloys*, Subcommittee SC 6, *Wrought aluminium and aluminium alloys*.

This third edition cancels and replaces the second edition (ISO 6362-5:2001), which has been technically revised.

ISO 6362 consists of the following parts, under the general title *Wrought aluminium and aluminium alloys — Extruded rods/bars, tubes and profiles*:

- *Part 1: Technical conditions for inspection and delivery*
- *Part 2: Mechanical properties*
- *Part 3: Extruded rectangular bars — Tolerances on shape and dimensions*
- *Part 4: Profiles — Tolerances on shape and dimensions*
- *Part 5: Round, square and hexagonal bars — Tolerances on shape and dimensions*
- *Part 6: Round, square, rectangular and hexagonal tubes — Tolerances on shape and dimensions*
- *Part 7: Chemical composition*

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

## Part 5:

## Round, square and hexagonal bars — Tolerances on shape and dimensions

### 1 Scope

This part of ISO 6362 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 applies to extruded round, square and hexagonal bars.

### 2 Normative references

The following referenced documents are indispensable for the application 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.

### 4 Materials

For the purposes of this part of ISO 6362, wrought aluminium and aluminium alloys are divided into two groups, which correspond to varying difficulty when manufacturing the products.

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

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