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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Wrought aluminium and aluminium alloy extruded rods/bars, tubes and profiles —

Part 4 : Extruded profiles — Tolerances on shape and dimensions

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

Partie 4 : Profilés filés — Tolérances sur forme et dimensions

Reference number
ISO 6362-4: 1988 (E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 6362-4 was prepared by Technical Committee ISO/TC 79, *Light metals and their alloys*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

Wrought aluminium and aluminium alloy extruded rods/bars, tubes and profiles —

Part 4 : Extruded profiles — Tolerances on shape and dimensions

1 Scope and field of application

This part of ISO 6362 specifies the tolerances on shape and dimensions of extruded profiles of wrought aluminium and aluminium alloys with cross-sectional dimensions given by a circumscribing circle not greater than 600 mm. The shape of the cross-section is based on a drawing agreed upon by the purchaser and the supplier.

It does not apply to

- rolled profiles;
- drawn profiles;
- profiles made from sheet by roll forming;
- extruded or drawn tube;
- extruded or drawn rod and bar.

2 Alloy groups

Tolerances are generally defined by the alloy types, which may be divided into two groups:

Alloy Group I (with narrower tolerances) includes alloys with the following designations:

Al 99,5	(1050A)	Al Mg2	(5251)
Al 99,0	(1200)	Al Mg2,5	(5052)
Al 99,0Cu	(1100)	Al MgSi	(6060)
Al Mn1	(3103)	Al Mg0,7Si	(6063)
Al Mn1Cu	(3003)	Al Si1MgMn	(6082)
Al Mg1(B)	(5005)	Al SiMg(A)	(6005A)
Al Mg1,5(C)	(5050)	Al Mg1SiCu	(6061)

Alloy Group II (with wider tolerances) includes alloys with the following designations:

Al Mg3	(5754)	Al Cu4MgSi	(2017)
Al Mg3Mn	(5454)	Al Cu4Mg1	(2024)
Al Mg3,5	(5154)	Al Cu4SiMg	(2014)
Al Mg4	(5086)	Al Cu6Mn	(2219)
Al Mg4,5Mn0,7	(5083)	Al Zn4,5Mg1	(7020)
Al Mg5Cr	(5056)	Al Zn5,5MgCu	(7075)
Al Cu2,5Mg	(2117)		

However, in addition to the standard tolerances specified, greater or lesser tolerances may be specified by agreement between purchaser and supplier:

- a) for particular applications, or
- b) for special dimensions.

These deviations from standard shall be stated in the order and indicated on the drawing.

3 Tolerances on shape and dimensions

3.1 Dimensional tolerances

3.1.1 Tolerances on cross-sectional dimensions

The tolerances achieved on the cross-sectional dimensions depend on the type of alloy employed. Profiles from alloys of Alloy Group I may be manufactured to tighter tolerances than those from alloys of Alloy Group II.