
**Wrought aluminium and aluminium
alloys — Sheets, strips and plates —**

Part 1:
**Technical conditions for inspection and
delivery**

*Aluminium et alliages d'aluminium corroyés — Tôles, bandes et tôles
épaisses —*

Partie 1: Conditions techniques de contrôle et de livraison



This document is a preview generated by EVIS



COPYRIGHT PROTECTED DOCUMENT

© ISO 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

| | |
|--|-----------|
| Foreword | iv |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 2 |
| 4 Orders or tenders | 3 |
| 5 Requirements | 4 |
| 5.1 Production and manufacturing processes | 4 |
| 5.2 Quality control | 4 |
| 5.3 Chemical composition | 4 |
| 5.4 Mechanical properties | 4 |
| 5.5 Corrosion behaviour | 4 |
| 5.6 Surface finish | 4 |
| 5.7 Dimensional tolerances | 5 |
| 6 Test procedure | 5 |
| 6.1 Sampling | 5 |
| 6.2 Test methods | 7 |
| 6.3 Retests | 9 |
| 7 Inspection documents | 9 |
| 7.1 General | 9 |
| 7.2 Certificate of conformity | 10 |
| 7.3 Test report | 10 |
| 7.4 Specific test report | 10 |
| 8 Marking | 10 |
| 9 Packing | 10 |
| 10 Arbitration tests | 10 |

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 6361-1 was prepared by Technical Committee ISO/TC 79, *Light metals and their alloys*, Subcommittee SC 6, *Wrought aluminium and aluminium alloys*.

This second edition cancels and replaces the first edition (ISO 6361-1:1986), which has been technically revised.

ISO 6361 consists of the following parts, under the general title *Wrought aluminium and aluminium alloys — Sheets, strips and plates*:

- *Part 1: Technical conditions for inspection and delivery*
- *Part 2: Mechanical properties*
- *Part 3: Strips: Tolerances on shape and dimensions*
- *Part 4: Sheets and plates: Tolerances on shape and dimensions*
- *Part 5: Chemical composition*

Wrought aluminium and aluminium alloys — Sheets, strips and plates —

Part 1: Technical conditions for inspection and delivery

1 Scope

This part of ISO 6361 specifies the technical conditions for inspection and delivery of wrought aluminium and aluminium alloy sheets, strips and plates for general engineering applications.

It applies to flat-rolled products with a thickness over 0,15 mm up to and including 400 mm.

It does not directly apply to semi-finished rolled products in coiled form to be subjected to further rolling (reroll stock) or to special applications, such as aerospace, can stock, fin stock, etc.

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 6361-2:2011, *Wrought aluminium and aluminium alloys — Sheets, strips and plates — Part 2: Mechanical properties*

ISO 6361-3:2011, *Wrought aluminium and aluminium alloys — Sheets, strips and plates — Part 3: Strips: Tolerances on shape and dimensions*

ISO 6361-4:2011, *Wrought aluminium and aluminium alloys — Sheets, strips and plates — Part 4: Sheets and plates: Tolerances on shape and dimensions*

ISO 6361-5:2011, *Wrought aluminium and aluminium alloys — Sheets, strips and plates — Part 5: Chemical composition*

ISO 6892-1, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature*

ISO 7438, *Metallic materials — Bend test*

ISO 9591, *Corrosion of aluminium alloys — Determination of resistance to stress corrosion cracking*

ISO 11881, *Corrosion of metals and alloys — Exfoliation corrosion testing of aluminium alloys*

ASTM E34, *Standard Test Methods for Chemical Analysis of Aluminum and Aluminum-Base Alloys*

ASTM G34, *Standard Test Method for Exfoliation Corrosion Susceptibility in 2XXX and 7XXX Series Aluminum Alloys (EXCO Test)*

ASTM G47, *Standard Test Method for Determining Susceptibility to Stress-Corrosion Cracking of 2XXX and 7XXX Aluminum Alloy Products*

ASTM G66, *Standard Test Method for Visual Assessment of Exfoliation Corrosion Susceptibility of 5XXX Series Aluminum Alloys (ASSET Test)*

ASTM G67, *Standard Test Method for Determining the Susceptibility to Intergranular Corrosion of 5XXX Series Aluminum Alloys by Mass Loss After Exposure to Nitric Acid (NAMLT Test)*

ASTM E716, *Standard Practices for Sampling and Sample Preparation of Aluminum and Aluminum Alloys for Determination of Chemical Composition by Spectrochemical Analysis*

ASTM B557M, *Standard Test Methods for Tension Testing Wrought and Cast Aluminum- and Magnesium-Alloy Products [Metric]*

ASTM E607, *Standard Test Method for Atomic Emission Spectrometric Analysis Aluminum Alloys by the Point-to-Plane Technique, Nitrogen Atmosphere*

ASTM E1251, *Standard Test Method for Analysis of Aluminum and Aluminum Alloys by Atomic Emission Spectrometry*

EN 485-1, *Aluminium and aluminium alloys — Sheet, strip and plate — Part 1: Technical conditions for inspection and delivery*

EN 14242, *Aluminium and aluminium alloys — Chemical analysis — Inductively coupled plasma optical emission spectral analysis*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 sheet
rolled product that is rectangular in cross-section with nominal thickness less than 6 mm, but not less than 0,20 mm, and with slit, sheared or sawed edges

NOTE 1 A sheet can be supplied in a corrugated, embossed, coated, edge-conditioned or perforated form.

NOTE 2 A sheet between 3 mm and 6 mm is sometimes called "shate".

NOTE 3 In some regions, the term "sheet" is only used for rolled products supplied in straight length; for coiled sheet, the term "strip" is used.

NOTE 4 In the USA, there is an overlap in the thickness range 0,15 mm to 0,20 mm defined for foil and sheet. Sheet products in this gauge range are supplied according to sheet product specifications.

3.2 strip
flat-rolled product of rectangular cross-section with uniform thickness less than 6 mm, but not less than 0,20 mm, supplied in coils usually with trimmed edges, with thickness not exceeding one-tenth of the width

NOTE 1 Corrugated, embossed (with patterns, for example grooves, ribs, checkers, tears, buttons, lozenges), coated, edge conditioned and perforated products in this general form when derived from strip as defined above are classified as strip.

NOTE 2 Strip is sometimes called coil.