

ILNAS

Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 13958:2008



National Foreword

This European Standard EN 13958:2008 was adopted as Luxembourgish Standard ILNAS-EN 13958:2008.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

<https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html>

THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

EUROPEAN STANDARD ILNAS-EN 13958:2008 **EN 13958**
NORME EUROPÉENNE
EUROPÄISCHE NORM

October 2008

ICS 77.150.10

Supersedes EN 13958:2003

English Version

**Aluminium and aluminium alloys - Cold drawn, round, coiled
tube for general applications - Specification**

Aluminium et alliages d'aluminium - Tubes ronds étirés
fournis en couronnes pour applications générales -
Spécifications

Aluminium und Aluminiumlegierungen - Gezogene
Rundrohre in Ringen für allgemeine Anwendungen -
Spezifikation

This European Standard was approved by CEN on 6 September 2008.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	4
4 Ordering information	5
5 Requirements	6
5.1 Production and manufacturing processes	6
5.2 Quality control.....	6
5.3 Chemical composition limits	6
5.4 Mechanical properties	6
5.5 Surface quality	6
5.6 Coil characteristics.....	7
5.7 Additional requirements	7
6 Tolerances on dimensions	8
6.1 General.....	8
6.2 Diameter (outside and/or inside).....	8
6.3 Wall thickness and wall thickness variation (eccentricity)	9
6.4 Length	10
6.5 Squareness of cut ends	11
6.6 Cut end quality.....	11
7 Tolerances on form.....	11
7.1 General.....	11
7.2 Straightness	11
Annex A (informative) Wall thickness variation (eccentricity).....	13
A.1 General.....	13
A.2 Specifying round tube sizes and tolerances	13
Bibliography	17

Foreword

This document (EN 13958:2008) has been prepared by Technical Committee CEN/TC 132 "Aluminium and aluminium alloys", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2009, and conflicting national standards shall be withdrawn at the latest by April 2009.

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

This document supersedes EN 13958:2003.

Within its programme of work, Technical Committee CEN/TC 132 entrusted CEN/TC 132/WG 5 "Extruded and drawn products" to revise EN 13958:2003.

The following editorial modifications have been introduced during the revision:

- the contents, text and tables have been changed to bring this European Standard in line with EN 754.

The following technical modifications have been introduced during the revision:

- Clause 1 has been amended to make clear the products covered by this European Standard and those which are not. In addition, the list of the most commonly used general engineering alloys is replaced by a reference to the alloy group only;
- Clauses 3 and 4 including Tables: the text and the tables are updated;
- Annex A (informative) has been added to provide further explanation of wall thickness variation (eccentricity) along with some examples.

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

CEN/TC 132 affirms that it is its policy that in the case when a patentee refuses to grant licenses on standardised standard products under reasonable and not discriminatory conditions, then this product is removed from the corresponding standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the tolerances on dimensions and form of round aluminium and aluminium alloys porthole extruded and cold drawn tubes with an outside diameter (*OD*) of over 2 mm up to and including 50 mm supplied in coil form or in straight lengths cut from coiled material: see Figure 1.

This European Standard mainly applies to round cold drawn tube for general engineering applications manufactured in 1xxx series of aluminium and 3xxx series of alloys. The use of this European Standard for non-standardised 1xxx aluminium and 3xxx alloys or alloys from other series, e.g. 5xxx or 6xxx, is subject to agreement between supplier and purchaser.

This European Standard only applies to:

- round tube extruded by the porthole/bridge method in coil form and then cold drawn to the final dimensions required;
- tube as above but delivered in straight lengths cut from coiled material.

This European Standard does not apply to:

- seamless extruded (die/mandrel method) and drawn tubes (EN 754-7);
- tubes extruded in straight lengths (i.e. not coiled) and drawn (EN 754-8).

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.

EN 515, *Aluminium and aluminium alloys — Wrought products — Temper designations*

EN 573-3, *Aluminium and aluminium alloys — Chemical composition and form of wrought products — Part 3: Chemical composition and form of products*

EN 754-2, *Aluminium and aluminium alloys — Cold drawn rod/bar and tube — Part 2: Mechanical properties*

EN 12258-1:1998, *Aluminium and aluminium alloys — Terms and definitions — Part 1: General terms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12258-1:1998 and the following apply.

3.1

order document

document or set of documents agreed between supplier and purchaser at the time of ordering