

Aluminium and aluminium alloys - Cold drawn rod/bar and tube - Part 8: Porthole tubes, tolerances on dimensions and form

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 754-8:2016 sisaldab Euroopa standardi EN 754-8:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 754-8:2016 consists of the English text of the European standard EN 754-8:2016.
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ICS 77.150.10

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English Version

Aluminium and aluminium alloys - Cold drawn rod/bar
and tube - Part 8: Porthole tubes, tolerances on
dimensions and form

Aluminium et alliages d'aluminium - Barres et tubes
étrés - Partie 8 : Tubes filés à pont, tolérances sur
dimensions et forme

Aluminium und Aluminiumlegierungen - Gezogene
Stangen und Rohre - Teil 8: Mit Kammerwerkzeug
Stranggepresste Rohre, Grenzabmaße und
Formtoleranzen

This European Standard was approved by CEN on 11 April 2016.

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European foreword

This document (EN 754-8:2016) 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of an identical text or by endorsement, at the latest by December 2016, and conflicting national standards shall be withdrawn at the latest by December 2016.

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 754-8:2008.

The following technical modifications have been introduced during the revision:

- Subclause 3.2 Diameter - Round tube.

EN 754 comprises the following parts under the general title *Aluminium and aluminium alloys — Cold drawn rod/bar and tube*:

- *Part 1: Technical conditions for inspection and delivery;*
- *Part 2: Mechanical properties;*
- *Part 3: Round bars, tolerances on dimensions and form;*
- *Part 4: Square bars, tolerances on dimensions and form;*
- *Part 5: Rectangular bars, tolerances on dimensions and form;*
- *Part 6: Hexagonal bars, tolerances on dimensions and form;*
- *Part 7: Seamless tubes, tolerances on dimensions and form;*
- *Part 8: Porthole tubes, tolerances on dimensions and form.*

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the tolerances on dimensions and form for aluminium and aluminium alloy cold drawn porthole tubes with an outside diameter (*OD*) from 3 mm to 350 mm (round tube, see Figure 1) or with a cross section contained within a circumscribing circle (*CD*) from 8 mm to 300 mm (other than round tube, see Figure 2), supplied in straight lengths.

This document only applies to cold drawn tube for general engineering applications made in the following alloys:

- EN AW-1050A, EN AW-1200;
- EN AW-3003, EN AW-3103;
- EN AW-5005, EN AW-5005A, EN AW-5049, EN AW-5251, EN AW-5052;
- EN AW-6012, EN AW-6060, EN AW-6061, EN AW-6262, EN AW-6262A;
- EN AW-6063, EN AW-6063A, EN AW-6065, EN AW-6082;
- EN AW-7020.

The temper designations used in this part are according to EN 515.

This document only applies to tube produced by the porthole/bridge method of extrusion only (and then cold drawn to the final dimensions).

This document does not apply to:

- cold drawn tubes produced by the seamless, die/mandrel method (EN 754-7),
- tubes delivered in coils (EN 13958),
- coiled tubes cut to length (EN 13958).

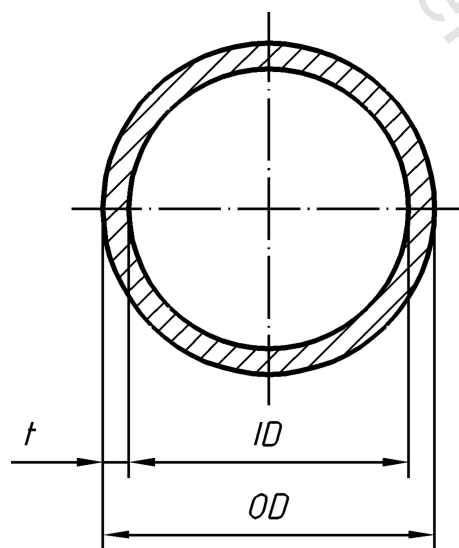


Figure 1 — Round tube

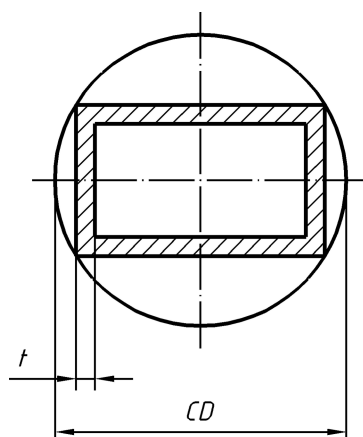


Figure 2 — Circumscribing circle for other than round tube

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 754-1:2016, *Aluminium and aluminium alloys — Cold drawn rod/bar and tube — Part 1: Technical conditions for inspection and delivery*

3 Tolerances on dimensions

3.1 General

When outside diameter OD , inside diameter ID , and wall thickness t , (or their equivalent dimensions in other than round tube) are all specified, standard tolerances shall apply to any two of these dimensions, but not to all three. As a result, the purchaser shall only state two nominal dimensions on any given order.

3.2 Diameter - Round tube

Mean diameter is defined as the average of two diameter measurements taken at right angles to each other at any position along the length.

The maximum allowable deviation at any point from the specified diameter is the maximum difference measured at any point along the length of the tube, i.e. it is inclusive of any ovality in the cross section.

The tolerances on diameter are specified in Table 1.

As detailed in EN 754-1:2016, Clause 4, if the original order does not make clear the nature of the diameter tolerances required, the supplier shall interpret them as inclusive of any ovality (i.e. maximum allowable deviation at any point from the specified diameter in Table 1). However, the diameter tolerances may be expressed as both mean and inclusive of ovality if this is specifically requested by the purchaser.