

Aluminium and aluminium alloys - Extruded rod/bar,
tube and profiles - Part 7: Seamless tubes, tolerances on
dimensions and form

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Aluminium and aluminium alloys - Extruded rod/bar, tube
and profiles - Part 7: Seamless tubes, tolerances on
dimensions and form

Aluminium et alliages d'aluminium - Barres, tubes et
profilés filés - Partie 7 : Tubes filés sur aiguille,
tolérances sur dimensions et forme

Aluminium und Aluminiumlegierungen -
Stranggepresste Stangen, Rohre und Profile - Teil 7:
Nahtlose Rohre, Grenzabmaße und Formtoleranzen

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

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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 755-7:2016) 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of an identical text or by endorsement, at the latest by December 2016, and conflicting national standards shall be withdrawn at the latest by December 2016.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 755-7:2008.

The following technical modifications have been introduced during the revision:

— Subclause 4.2, Diameter - Round tube.

EN 755 comprises the following parts under the general title *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles*:

- *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;*
- *Part 9: Profiles, 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 extruded seamless tubes with an outside diameter (OD) from 8 mm to 450 mm (round tube, see Figure 1) or with a cross section contained within a circumscribing circle (CD) from 10 mm to 350 mm (other than round tube, see Figure 2), supplied in straight lengths.

This European Standard only applies to tube produced by the seamless die/mandrel method of extrusion. This standard applies to extruded seamless tube for general engineering applications only.

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

This European Standard does not apply to:

- extruded tubes produced by porthole/bridge method (EN 755-8),
- tubes delivered in coils (EN 13957),
- coiled tubes cut to length (EN 13957).

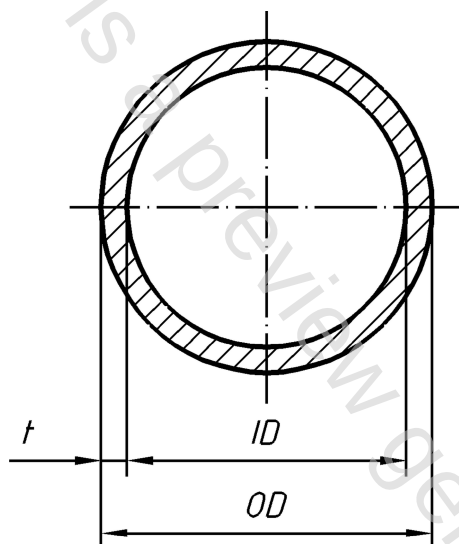


Figure 1 — Round tube

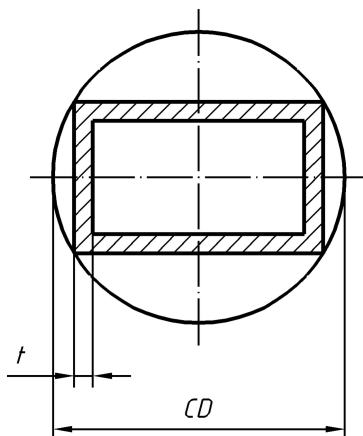


Figure 2 — Circumscribing circle for other than round tube

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 755-1:2016, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 1: Technical conditions for inspection and delivery*

3 Alloy groups

For the purposes of this European Standard, the alloys are distributed into two groups which correspond to varying degrees of 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 supplier and purchaser.

Table 1 — Alloy groups

Group I	EN AW-1050A, EN AW-1070A, EN AW-1200, EN AW-1350 EN AW-3102, EN AW-3003, EN AW-3103 EN AW-5005, EN AW-5005A EN AW-6101A, EN AW-6101B, EN AW-6005, EN AW-6005A, EN AW-6106, EN AW-6008, EN AW-6014, EN AW-6060, EN AW-6360, EN AW-6063, EN AW-6063A, EN AW-6463
Group II	EN AW-2007, EN AW-2011, EN AW-2011A, EN AW-2014, EN AW-2014A, EN AW-2017A, EN AW-2024, EN AW-2030 EN AW-5019, EN AW-5049, EN AW-5051A, EN AW-5251, EN AW-5052, EN AW-5154A, EN AW-5454, EN AW-5754, EN AW-5083, EN AW-5086 EN AW-6110A, EN AW-6012, EN AW-6018, EN AW-6023, EN AW-6351, EN AW-6061, EN AW-6261, EN AW-6262, EN AW-6081, EN AW-6082 EN AW-7003, EN AW-7005, EN AW-7108, EN AW-7108A, EN AW-7020, EN AW-7021, EN AW-7022, EN AW-7049A, EN AW-7075

4 Tolerances on dimensions

4.1 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.

4.2 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.