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

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NATIONAL FOREWORD

See Eesti standard EVS-EN 755-1:2016 sisaldab Euroopa standardi EN 755-1:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 755-1:2016 consists of the English text of the European standard EN 755-1:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 08.06.2016.	Date of Availability of the European standard is 08.06.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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Supersedes EN 755-1:2008

English Version

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

Aluminium et alliages d'aluminium - Barres, tubes et profilés filés - Partie 1 : Conditions techniques de contrôle et de livraison

Aluminium und Aluminiumlegierungen - Stranggepresste Stangen, Rohre und Profile - Teil 1: Technische Lieferbedingungen

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

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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-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 755-1:2016) 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 755-1:2008.

The following technical modifications have been introduced during the revision:

— Clause 4, Ordering information,

— Subclause 5.5, Freedom from surface defects,

— Subclause 6.3.2, Mechanical properties.

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 technical conditions for inspection and delivery of wrought aluminium and aluminium alloy extruded rod/bar, tube and profile for general engineering applications.

This European Standard does not apply to:

— forging stock (EN 603 (all parts)),

— extruded precision profiles in alloys EN AW-6060 and EN AW-6063 (EN 12020 (all parts)),

— products delivered in coils (EN 13957),

— coiled tubes cut to length (EN 13957).

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 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 755-2, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 2: Mechanical properties*

EN 755-3, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 3: Round bars, tolerances on dimensions and form*

EN 755-4, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 4: Square bars, tolerances on dimensions and form*

EN 755-5, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 5: Rectangular bars, tolerances on dimensions and form*

EN 755-6, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 6: Hexagonal bars, tolerances on dimensions and form*

EN 755-7, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 7: Seamless tubes, tolerances on dimensions and form*

EN 755-8, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 8: Porthole tubes, tolerances on dimensions and form*

EN 755-9, *Aluminium and aluminium alloys — Extruded rod/bar, tube and profiles — Part 9: Profiles, tolerances on dimensions and form*

EN 2004-1, *Aerospace series — Test methods for aluminium and aluminium alloy products — Part 1: Determination of electrical conductivity of wrought aluminium alloys*

EN 10204, *Metallic products — Types of inspection documents*

EN 12258-1:2012, *Aluminium and aluminium alloys — Terms and definitions — Part 1: General terms*

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

EN 14361, *Aluminium and aluminium alloys — Chemical analysis — Sampling from metal melts*

EN ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method (ISO 6506-1)*

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

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

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12258-1:2012 and the following apply.

3.1
order document
document or set of documents agreed between supplier and purchaser at the time of ordering

4 Ordering information

The order document shall contain the following:

a) form and type of product:

   1) form of the product (extruded rod/bar, tube or profile). If tube, whether seamless or porthole/bridge extruded,

   2) reference to EN 573-3 for chemical composition limits,

   3) reference to EN 515 for temper designation,

   4) purchaser application, in particular whether subsequent anodizing is intended. This shall be clearly stated on the order document;

b) reference to EN 755-2 for mechanical property limits;

c) reference to this document (EN 755-1);

d) dimensions and shape of the product:

   1) round tube:

      i) length,