



# **SLOVENSKI STANDARD**

## **kSIST FprEN 755-1:2015**

**01-november-2015**

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### **Aluminij in aluminijeve zlitine - Iztiskane palice/drogovi, cevi in profili - 1. del: Tehnični pogoji za pregled in dobavo**

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

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

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

**Ta slovenski standard je istoveten z: FprEN 755-1**

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#### **ICS:**

77.150.10	Aluminijski izdelki	Aluminium products
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**kSIST FprEN 755-1:2015**

**en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**FINAL DRAFT**  
**FprEN 755-1**

September 2015

ICS 77.150.10

Will supersede 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 draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 132.

If this draft becomes a European Standard, 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (FprEN 755-1:2015) has been prepared by Technical Committee CEN/TC 132 “Aluminium and aluminium alloys”, the secretariat of which is held by AFNOR.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede 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*

## 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 Aluminium 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 anodising 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,

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and only two of the following dimensions:

ii) outside diameter,

iii) inside diameter,

iv) The tolerances for inside and outside diameter shall state as to whether the proposed tolerances are mean or inclusive of ovality (ie the maximum allowable deviation at any point from the specified diameter). If this is not made clear on the order, the supplier shall assume that the specified tolerances for either or both outside and inside diameters are inclusive of ovality. However, if the purchaser specifically requires that the outside and/or inside diameter tolerances must be both mean and inclusive of ovality then this shall be clearly stated on the order.

v) wall thickness.

2) round bar:

i) diameter,

ii) length.

3) square and hexagonal bar:

i) width across flats,

ii) length.

4) rectangular bar:

i) width,

ii) thickness,

iii) length.

5) all other cases:

i) drawing of cross section,

ii) length.

e) tolerances on dimensions and form, with reference to the appropriate European Standard and/or a drawing;

f) quantity:

1) mass,

2) number of pieces,

3) total length,

4) tolerance on quantity.