## SLOVENSKI PREDSTANDARD

## oSIST prEN 683-2:2005

april 2005

### Aluminij in aluminijeve zlitine - Hladno valjani polizdelki za toplotne izmenjevalnike - 2. del: Mehanske lastnosti

Aluminium and aluminium alloys - Finstock - Part 2: Mechanical properties

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

## DRAFT prEN 683-2

January 2005

Will supersede EN 683-2:1996

English version

# Aluminium and aluminium alloys - Finstock - Part 2: Mechanical properties

Aluminium et alliages d'aluminium - Bandes pour échangeurs thermiques - Partie 2: Caractéristiques mécaniques Aluminium und Aluminiumlegierungen - Vormaterial für Wärmeraustauscher (Finstock) - Teil 2: Mechanische Eigenschaften

This draft European Standard is submitted to CEN members for enquiry. 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.

This draft European Standard was established by CEN 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 Management Centre has the same status as the official versions.

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#### <u>IST EN 683-2:200´</u>

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## Foreword

This document (prEN 683-2:2005) 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 CEN Enquiry.

This document will supersede EN 683-2:1996.

EN 683 comprises the following parts under the general title "Aluminium and aluminium alloys — Finstock":

- Part 1: Technical conditions for inspection and delivery
- Part 2: Mechanical properties
- Part 3: Tolerances on dimensions and form

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#### 1 Scope

This European Standard prEN 683-2:2004 specifies the mechanical properties of wrought aluminium and aluminium alloy finstock.

The chemical composition limits of these materials are specified in EN 573-3, unless otherwise agreed between supplier and purchaser.

The designations of wrought aluminium and aluminium alloys and the temper designations used in this standard are specified in EN 573 Parts 3 and 4 and the temper designation are defined in EN 515.

NOTE Some of the products listed in the present standard can be subject to patent or patent applications, and their listing herein does not in any way imply the granting of a licence under such patent right.

CEN/TC 132 affirms 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 shall be removed from the corresponding standard.

#### 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 683-1, Aluminium and aluminium alloys — Finstock — Part 1: Technical conditions for inspection and delivery.

EN 10002-1, Metallic materials — Tensile testing — Part 1: Method of test at ambient temperature.

SIST EN 683-2:2007

https://standards.iteb.ai/catalog/standards/sist/c4b7aa12-b29d-49fb-85a0-095cce875f24/sist-en-683-2-2007 3 Tensile testing

The selection and number of specimens and test pieces shall be as specified in EN 683-1.

Tensile testing shall be carried out according to EN 10002-1 noting the following :

— applies to gauges between 60  $\mu$ m and 400  $\mu$ m ;

— test pieces shall be either parallel-sided (see Figure 1) or with shoulders and a reduced parallel section.

Parallel sided test pieces shall be prepared using a double bladed cutter or guillotine (see Figure 2) or a precision ground sample shear of "punch and die" construction.

Shouldered test pieces shall have a similar sample shear or can be machined in packs using a milling-type cutter.

Parallel sided test pieces shall have a width of  $(15 \pm 0,1)$  mm and a gauge length of  $(50 \pm 1)$  mm or  $(100 \pm 1)$  mm.

Shouldered test pieces shall be in accordance with EN 10002-1.

During the part of the test to determine proof stress, the strain rate shall not exceed 10 MPa/s. The strain rate can then be increased until rupture but it shall not exceed 50 % of the gauge length per minute.