



SLOVENSKI STANDARD
oSIST prEN 14361:2024
01-junij-2024

Aluminij in aluminijeve zlitine – Kemična analiza – Vzorčenje iz topljene kovine

Aluminium and aluminium alloys - Chemical analysis - Sampling from metal melts

Aluminium und Aluminiumlegierungen - Chemische Analyse - Probenahme von Metallschmelzen

Aluminium et alliages d'aluminium - Analyse chimique - Echantillonnage du métal fondu

Ta slovenski standard je istoveten z: prEN 14361

ICS:

77.040.30	Kemijska analiza kovin	Chemical analysis of metals
77.120.10	Aluminij in aluminijeve zlitine	Aluminium and aluminium alloys

oSIST prEN 14361:2024

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EUROPEAN STANDARD
NORME EUROPÉENNE
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prEN 14361

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ICS 77.120.10; 77.040.30

Will supersede EN 14361:2004

English Version

Aluminium and aluminium alloys - Chemical analysis - Sampling from metal melts

Aluminium et alliages d'aluminium - Analyse chimique
- Echantillonnage du métal fondu

Aluminium und Aluminiumlegierungen - Chemische
Analyse - Probenahme von Metallschmelzen

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.

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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

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European foreword

This document (prEN 14361:2024) 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 14361:2004.

EN 14361:2024 includes the following significant technical changes with respect to EN 14361:2004:

- application of the latest template from CEN
- textual addition to the scope to make it more accurate
- new Clause 4.3 regarding the size and coating ladle for sampling from liquid metal
- textual addition in title of Clause 4.6
- change in title of Clause 4.8
- additional text to Clause A.3.1.3
- additional text to Clause A.3.2.1
- additional text to Clause A.3.2.2
- change in title of Clause A.3.3
- additional text to Clause A.3.3.1
- additional text to Clause A.3.3.2
- additional text to Clause A.3.3.5
- additional text to Clause A.3.3.8

prEN 14361:2024 (E)**Introduction**

Melts of aluminium alloys are susceptible to segregation when solidifying. Cast products, therefore, have concentration gradients. Axial and radial segregation profiles affect the representative sampling from melts, cast products or laboratory samples. In the case of direct measurement of solid samples (e.g. spark optical emission spectrometric analysis S-OES, or X-ray fluorescence spectral analysis XRF) measuring signals are influenced by the morphology of solidification and cast structure of the sample.

This document provides requirements as well as recommendations for sampling from a melt to ensure correspondence between the average chemical composition of the cast material and the average composition of the test portion.

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