



SLOVENSKI STANDARD

SIST EN 14361:2025

01-maj-2025

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: **EN 14361:2025**

ICS:

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

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en,fr,de

EUROPEAN STANDARD

EN 14361

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ICS 77.040.30

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English Version

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

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

Aluminium und Aluminiumlegierungen - Chemische
Analyse - Probenahme von Metallschmelzen

This European Standard was approved by CEN on 3 February 2025.

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European foreword

This document (EN 14361:2025) 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of an identical text or by endorsement, at the latest by September 2025, and conflicting national standards shall be withdrawn at the latest by September 2025.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14361:2004.

EN 14361:2025 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 4.3 regarding the size and coating of the sampling ladle for sampling from liquid metal
- textual addition in title of 4.6
- change in title of 4.8
- additional text to A.3.1.3
- additional text to A.3.2.1
- additional text to A.3.2.2
- change in title of A.3.3
- additional text to A.3.3.1
- additional text to A.3.3.2
- additional text to A.3.3.5
- additional text to A.3.3.8

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EN 14361:2025 (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 analysis of solid samples (e.g. spark optical emission spectrometric analysis S-OES, or X-ray fluorescence spectrometric 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 the correspondence between the average chemical composition of the cast material and the average composition of the test portion.

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