TNI	Pokyny na prípravu štandardných rutinných metód s vlnovo-disperznou röntgenovou fluorescenčnou spektrometriou	TNI CEN/TR 10377
		42 0609

Guidelines for the preparation of standard routine methods with wavelength-dispersive X-ray fluorescence spectrometry

Táto technická normalizačná informácia obsahuje anglickú verziu CEN/TR 10377:2023. This Technical standard information includes the English version of CEN/TR 10377:2023.

Táto technická normalizačná informácia bola oznámená vo Vestníku ÚNMS SR č. 09/23

Oznámením tohto dokumentu sa ruší TNI CR 10299 (42 0609) z júna 2003

137340

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2023

Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

TECHNICAL REPORT RAPPORT TECHNIQUE TECHNISCHER REPORT

CEN/TR 10377

June 2023

ICS 77.040.30

Supersedes CR 10299:1998

English Version

Guidelines for the preparation of standard routine methods with wavelength-dispersive X-ray fluorescence spectrometry

This Technical Report was approved by CEN on 12 June 2023. It has been drawn up by the Technical Committee CEN/TC 459/SC 2.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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Ref. No. CEN/TR 10377:2023 E

TNI CEN/TR 10377: 2023

CEN/TR 10377:2023 (E)

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European foreword

This document (CEN/TR 10377:2023) has been prepared by Technical Committee CEN/TC 459/SC 2 "Methods of chemical analysis for iron and steel", the secretariat of which is held by SIS.

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 CR 10299:1999.

In comparison with the previous edition, the following modifications have been made:

- Conversion of the document from a CEN Report (CR) to a Technical Report (TR);
- Title: reworded;
- Clause 1, "Purpose of the guideline" split in "Introduction" and "Scope";
- Definition 3.3, deleted;
- Definition 3.4, deleted;
- Definition 3.9, updated;
- Definition 3.10, updated;
- Definition 3.11, updated;
- Definition 3.12, updated;
- Renumbering of Clauses 2, 4, 5, 6, 7, 8, 9 and 10;
- Annex A updated and became "Bibliography";
- Annex B, became Annex A;
- Annex C, became Annex B;
- Annex D, became Annex C;
- Annex E, withdrawn.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

Introduction

X-ray Fluorescence Spectrometry (XRF) has been used for several decades as an important analytical tool for routine analysis. XRF is characterized by its speed and high precision over wide content ranges. Since the technique in most cases is used as a relative method, its limitations are often connected to the quality of the calibration samples.

The technique is well established and most of its physical properties are well known.

1 Scope

This document is intended to be used for the analysis of metals and alloys (namely steels), but it can also be applicable to other materials although the sample preparation techniques differ. The purpose of this document is to describe general concepts and the procedures for calibration and analysis by XRF.

2 Normative references

There are no normative references in this document.

koniec náhľadu – text ďalej pokračuje v platenej verzii STN