

STN	Oceľ a železo Stanovenie obsahu chrómu Potenciometrická alebo vizuálna titračná metóda (ISO 4937: 2024)	STN EN ISO 4937 42 0543
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Steel and iron - Determination of chromium content - Potentiometric or visual titration method (ISO 4937:2024)

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 03/25

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EN ISO 4937

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English Version

**Steel and iron - Determination of chromium content -
Potentiometric or visual titration method (ISO 4937:2024)**

Aciers et fontes - Détermination du chrome - Méthode
par titrage potentiométrique ou visuel (ISO
4937:2024)

Stahl und Eisen - Bestimmung des Chromgehalts -
Potentiometrische oder visuelle Titrationsmethode
(ISO 4937:2024)

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EN ISO 4937:2024 (E)

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European foreword

This document (EN ISO 4937:2024) has been prepared by Technical Committee ISO/TC 17 "Steel" in collaboration with Technical Committee CEN/TC 459/SC 2 "Methods of chemical analysis for iron and steel" the secretariat of which is held by SIS.

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International Standard

ISO 4937

Steel and iron — Determination of chromium content — Potentiometric or visual titration method

*Aciers et fontes — Détermination du chrome — Méthode par
titrage potentiométrique ou visuel*

**Second edition
2024-12**

ISO 4937:2024(en)



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ISO 4937:2024(en)**Foreword**

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This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 1, *Methods of determination of chemical composition*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 459/SC 2, *Methods of chemical analysis for iron and steel*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 4937:1986), which has been technically revised.

The main changes are as follows:

- introduction of an optional electrode;
- re-assessment of the precision data;
- re-confirmation of upper limit of vanadium content in test portions for visual titration.

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Steel and iron — Determination of chromium content — Potentiometric or visual titration method

1 Scope

This document specifies a method for the determination of chromium in steel and iron by potentiometric or visual titration.

The method is applicable to chromium contents between 0,25 % (mass fraction) and 35 % (mass fraction). If vanadium is present, the visual titration is applicable only to test portions containing less than 3 mg of vanadium.

NOTE The visual titration can be applicable to test portion containing between 3 mg and 6 mg of vanadium.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 385, *Laboratory glassware — Burettes*

ISO 648, *Laboratory glassware — Single-volume pipettes*

ISO 1042, *Laboratory glassware — One-mark volumetric flasks*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 14284, *Steel and iron — Sampling and preparation of samples for the determination of chemical composition*

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