

STN	Oceľ a liatina Stanovenie obsahu vanádu Potenciometrická titračná metóda (ISO 4947: 2020)	STN EN ISO 4947 42 0519
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Steel and cast iron - Determination of vanadium content - Potentiometric titration method (ISO 4947:2020)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Steel and cast iron - Determination of vanadium content - Potentiometric titration method (ISO 4947:2020)

Acier et fonte - Détermination des teneurs en
vanadium - Méthode par titrage potentiométrique (ISO
4947:2020)

Stahl und Gusseisen - Bestimmung des Vanadium-
Gehaltes - Potentiometrisches Titrierverfahren (ISO
4947:2020)

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EN ISO 4947:2020 (E)

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European foreword

This document (EN ISO 4947:2020) 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.

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of an identical text or by endorsement, at the latest by January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

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INTERNATIONAL STANDARD

ISO 4947

Second edition
2020-06

Steel and cast iron — Determination of vanadium content — Potentiometric titration method

*Acier et fonte — Détermination des teneurs en vanadium — Méthode
par titrage potentiométrique*



Reference number
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ISO 4947:2020(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 1, *Methods of determination of chemical composition*.

This second edition cancels and replaces the first edition (ISO 4947:1986), which has been technically revised. The main changes compared to the previous edition are as follows:

- introduction of an optional electrode;
- re-assessment of precision data.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Steel and cast iron — Determination of vanadium content — Potentiometric titration method

1 Scope

This document specifies a potentiometric titration method for the determination of vanadium in steel and cast iron.

The method is applicable to vanadium contents between 0,04 % (mass fraction) and 2 % (mass fraction).

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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