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Nickels, ferronickels and nickel alloys — Standards for the determination of chemical composition

National foreword

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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 155, *Nickel and nickel alloys*.

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.

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TECHNICAL REPORT **ISO/TR 4644:2021**

Nickels, ferronickels and nickel alloys — Standards for the determination of chemical composition

1 Scope

This document lists the International Standards which are currently available for the determination of the chemical composition of nickels, ferronickels and nickel alloys (see Clause 4).

It provides details on the range of application and gives the principle of the method described in each International Standard (see Clause 5).

Annex A shows graphical representations of the content ranges of the methods listed in this document:

— Figure A.1 represents the fields of application of the methods available for the three kinds of matrixes;

— Figure A.2 gives the content ranges of the methods for nickels;

— Figure A.3 gives the content ranges of the methods for ferronickels;

— Figure A.4 gives the content ranges of the methods for nickel alloys.

Annex B provides a bilingual key of the abbreviated terms used in the figures given in Annex A.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
referee method
stoichiometric method or a method calibrated against pure metals or stoichiometric compounds, which is used for certification analysis or in case of arbitration

Note 1 to entry: Due to a lack of accuracy or to a low number of laboratories having participated in the related validation tests, some stoichiometric methods or methods calibrated against pure metals or stoichiometric compounds cannot be taken as “referee methods”. They are published as Technical Specifications or Technical Reports.

[SOURCE: CEN/TR 10261:2018, modified — Note 1 to entry has been added.]

3.2
routine method
method calibrated against reference materials, certified reference materials or against standard solutions commercially available that is widely used for control purposes (day-to-day analysis)

Note 1 to entry: By agreement, routine methods can be used for any commercial and/or arbitration purposes.

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