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Direct reduced iron and hot briquetted iron — Determination of metallic iron — Iron(III) chloride titrimetric method

Minerais de fer prééduits et fer briqueté à chaud — Dosage du fer métallique — Méthode titrimétrique au chlorure de fer(III)



Reference number
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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

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An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

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

ISO/TS 16878 was prepared by Technical Committee ISO/TC 102, *Iron ore and direct reduced iron*, Subcommittee SC 2, *Chemical analysis*.

This document is issued as a Technical Specification (according to the ISO/IEC Directives, Part 1, 3.1.1.1) as a "prospective standard for provisional application" in the field of direct reduced iron and hot briquetted iron because there is an urgent need for guidance on how standards in this field should be used to meet an identified need.

This document is not to be regarded as an "International Standard". It is proposed for provisional application so that information and experience of its use in practice may be gathered. Comments on the content of this document should be sent to Technical Committee ISO/TC 102, Subcommittee SC 2.

A review of this Technical Specification will be carried out not later than 3 years after its publication with the options of: extension for another 3 years; conversion into an International Standard; or withdrawal.

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Introduction

The determination of metallic iron has in the past been carried out by a method using bromine-methanol (ISO 5416). Due to the undesirability of using bromine, a method using iron(III) chloride has been developed. This method is also more likely than ISO 5416 to determine all relevant metallic iron.

As insufficient participants took part in the inter-laboratory test programme conducted to derive precision values for this method, the method cannot be used for referee purposes.