
**Iron ore and direct reduced iron —
Vocabulary**

Minerais de fer et minerais de fer pré-réduits — Vocabulaire



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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
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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.

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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.

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ISO 11323 was prepared by Technical Committee ISO/TC 102, *Iron ore and direct reduced iron*.

This third edition cancels and replaces the second edition (ISO 11323:2002), which has been technically revised.

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Iron ore and direct reduced iron — Vocabulary

1 Scope

This International Standard gives the definitions for terms used in TC 102 standards for sampling, sample preparation, moisture and particle size analysis and physical testing of iron ore and direct reduced iron. Some specific analytical terms used in the relevant International Standards are also included.

2 Normative references

The following reference documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the reference document (including any amendments) applies.

ISO 565:1990, *Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings*

ISO 3310-1:2000, *Test sieves — Technical requirements and testing — Part 1: Test sieves of metal wire cloth*

ISO 3310-2:1999, *Test sieves — Technical requirements and testing — Part 2: Test sieves of perforated metal plate*

3 Natural and processed iron ore

3.1

iron ore

any rocks, minerals or aggregates of minerals, natural or processed, from which iron can be produced commercially

NOTE The principal ferrous minerals occurring in iron ore either singly or severally are the following:

- a) red, brown and specular hematites, martite and maghemite;
- b) magnetite;
- c) hydrated iron oxides, including goethite, limonite and limnite;
- d) iron carbonates, including siderite or chalybite, ankerite and other mixed carbonates;
- e) roasted iron pyrites or pyrite cinders;
- f) ferrites (e.g. calcium ferrite) occurring sometimes in natural ores, but mainly in fluxed pellets and sinters.

Also included are manganiferous iron ore and concentrates that contain not more than 8 % manganese by mass (dry basis after heating to 105 °C).

Excluded are finely ground ferrous minerals used for pigments, glazes, dense medium suspension and other materials not related to iron- and steel-making.

3.2

natural iron ore

ores as extracted from mines and not subjected to any processes of beneficiation other than sizing

NOTE Such ores are also called direct shipping ores or run-of-mine ores.