

ICS 77.080.10
CCS H 41



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 20932-2025

Replacing GB/T 20932-2007

Pig-irons - Definition and classification

生铁 定义与分类

(English Translation)

Issued on: October 31, 2025

Implemented on: May 1, 2026

Issued by: State Administration for Market Regulation

Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and Definitions

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document replaces GB/T 20932-2007 "Definition and Classification of Pig Iron". Compared with GB/T 20932-2007, except for structural adjustments and...

Aside from editorial changes, the main technical changes are as follows.

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2007 edition);
- b) The definition of the term "pig iron" has been changed (see Chapter 3, Chapter 3 of the 2007 edition);
- c) The classifications of "steelmaking pig iron" and "foundry pig iron" have been changed; "molten reduced pig iron," "hydrogen-rich pig iron," "direct reduced pig iron," and "pig iron containing..." have been added.

Classification of "vanadium-titanium pig iron" and "nickel-containing pig iron" (see 4.1, 2007 edition 4.1);

- d) Chemical composition analysis methods have been added (see 4.3);
- e) Added "Inspection Rules" (see Chapter 5);
- f) A "Certificate of Quality" has been added (see Chapter 6).

This document is modified to adopt ISO 9147:1987 "Definition and classification of pig iron".

Compared with ISO 9147:1987, this document has undergone many structural adjustments. A comparison table of the structural numbering changes between the two documents can be found here.

Appendix A.

This document differs significantly from ISO 9147:1987 in several technical aspects. The relevant clauses are indicated in vertical single-line format on the outer margin.

The lines (|) are marked. A summary of these technical differences and their reasons can be found in Appendix B.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Iron and Steel Association.

This document is under the jurisdiction of the National Technical Committee on Standardization of Pig Iron and Ferroalloys (SAC/TC318).

1 Scope

This document defines pig iron, and specifies its classification, inspection rules, and quality certificate.

This document applies to both non-alloy and alloy pig iron; other types of pig iron can refer to this document for further information.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 223.3 Chemical Analysis Methods for Iron and Steel Alloys II. Determination of Phosphorus Content by Antipyrine-Methane Phosphomolybdic Acid Gravimetric Method
GB/T 223.5 Determination of Acid-Soluble Silicon and Total Silicon Content in Iron and Steel - Reduced Molybdate Spectrophotometric Method
GB/T 223.12 Chemical Analysis Methods for Iron and Steel Alloys - Sodium Carbonate Separation-Diphenylcarbazide Spectrophotometric Determination of Chromium
GB/T 223.13 Chemical Analysis Methods for Iron and Steel Alloys - Determination of Vanadium Content by Ferrous Ammonium Sulfate Titration
GB/T 223.14 Chemical Analysis Methods for Iron and Steel Alloys - Determination of Vanadium Content by Tantalum Reagent Extraction Spectrophotometry
GB/T 223.17 Chemical Analysis Methods for Iron and Steel Alloys II. Determination of Titanium Content by Antipyrine Methane Spectrophotometric Method
GB/T 223.26 Determination of molybdenum content in iron and steel and their alloys - Thiocyanate spectrophotometric method
GB/T 223.43 Determination of Tungsten Content in Iron and Steel and Alloys by Gravimetric and Spectrophotometric Methods
GB/T 223.59

Determination of phosphorus content in iron and steel and their alloys - Bismuth-phosphomolybdenum blue spectrophotometric method and antimony-phosphomolybdenum blue spectrophotometric method GB/T 223.60
Determination of silicon content in iron and steel and alloys by gravimetric method GB/T 223.61
Chemical Analysis Methods for Iron and Steel and Alloys - Determination of Phosphorus Content by Ammonium Phosphomolybdate Titration Method GB/T 223.63
Determination of Manganese Content in Iron and Steel and Alloys - Sodium (Potassium) Periodate Spectrophotometric Method GB/T 223.64
Determination of Manganese Content in Iron and Steel and Alloys by Flame Atomic Absorption Spectrometry GB/T 223.68
Chemical Analysis Methods for Iron and Steel Alloys - Determination of Sulfur Content by Potassium Iodate Titration after Combustion in Tubular Furnace GB/T 223.71
Chemical Analysis Methods for Iron and Steel Alloys - Determination of Carbon Content by Gravimetric Method After Combustion in Tubular Furnace GB/T 223.76
Chemical Analysis Methods for Iron and Steel Alloys - Determination of Vanadium by Flame Atomic Absorption Spectrometry GB/T 223.79
Determination of Multiple Elements Content in Iron and Steel by X-ray Fluorescence Spectrometry (Conventional Method) GB/T 223.84
Determination of Titanium Content in Iron and Steel and Alloys - Diantipyrine Methane Spectrophotometric Method GB/T 20066
Sampling and Sample Preparation Methods for the Determination of Chemical Composition of Steel and Iron GB/T 20123
Determination of Total Carbon and Sulfur Content in Iron and Steel - Infrared Absorption Method After Combustion in a High-Frequency Induction Furnace (Conventional Method) GB/T 31924
Determination of Nickel Content in Nickel-Containing Pig Iron - Gravimetric Method for Dimethylglyoxime GB/T 32784
Determination of Nickel, Iron, and Chromium Content in Pig Iron - Ammonium Persulfate-Ferrous Ammonium Sulfate Titration Method GB/T 38441
Determination of Chromium, Copper, Magnesium, Manganese, Molybdenum, Nickel, Phosphorus, Tin, Titanium, Vanadium and Silicon in Pig Iron and Cast Iron - Inductively Coupled Plasma Physics Sub-emission spectroscopy GB/T 43899
Determination of Multi-Element Content in Pig Iron by Spark Discharge Atomic Emission Spectrometry (Conventional Method)

3 Terms and Definitions

The following terms and definitions apply to this document.