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

GB 5682-1987

Replacing GB/T 5682-1995

**Ferroboron
(English Translation)**

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules.

This standard replaces GB/T 5682-1995 "iron boron" This standard GB/T 5682-1995 compared to, in addition to editorial changes, the main technical Surgery changes are as follows.

- Increasing the normative references;
- Adjust the chemical composition of low-carbon boron iron;
- Adjustment iron boron size requirements;
- Increased component analysis in Table 2.

The standard proposed by China Iron and Steel Association.

This standard by the national pig iron and ferroalloy Standardization Technical Committee (SAC/TC318) centralized.

This standard was drafted. boron alloy Liaoyang International Ltd., Metallurgical Industry Information Standards Institute.

1 Scope

This standard specifies the technical requirements for iron boron, test methods, inspection rules and packaging, storage and transportation, marking and certification.

This standard applies to steelmaking, casting and for amorphous, Nanocrystalline alloy, NdFeB alloys and other uses for the element boron-iron-boron added agent.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references,

the latest edition (including any amendments) applies to this document.

General provisions GB/T 3650 inspection, packing, storage and transportation, marking and certification of Determination of boron content GB/T 3653.1 Methods for chemical analysis of ferroboron alkali titration Determination of carbon content GB/T 3653.2 Methods for chemical analysis of ferroboron gas volumetric method GB/T 3653.3 iron boron chemical analysis of perchloric acid dehydration gravimetric method for the determination of silicon content GB/T 3653.4 almandine boron content - EDTA titration GB/T 3653.5 Determination of sulfur content iron boron chemical analysis of chromatographic separation barium sulfate gravimetric method GB/T 3653.6 iron boron chemical analysis of antimony phosphomolybdate blue spectrophotometric determination of phosphorus content GB/T 4010 alloy chemical analysis and preparation of samples Sampling and testing methods GB/T 13247 ferroalloy product particle size

3.1 Grades and chemical composition

3.1.1

ferroboron different boron, carbon and impurity elements, divided into 12 grades, chemical composition shall comply with the requirements in Table 1.

Table 1 Grades and chemical composition

Grade category

Chemical composition (mass fraction) /% C Si Al SP no greater than Low Carbon
FeB22C0.05 21.0 ~ 25.0 0.05 1.0 1.5 0.010 0.050 FeB20C0.05 19.0 ~