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

GB/T 13242-2017

Replacing GB/T 13242-1991

**Iron ores - Low-temperature disintegration test - Method using
cold tumbling after static reduction**

铁矿石 低温粉化试验 静态还原后使用冷转鼓的方法

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 13242-1991 "iron ore cryogenic pulverization test static reduction after the use of cold drum method," the standard Quasi and GB/T 13242-1991 comparison, in addition to editorial changes, the main technical changes are as follows:

- Modify the test gas and purity requirements;
- Clear test equipment should use the mass flow controller to control gas flow and improve the gas control accuracy requirements;
- Increased the test temperature requirements. This standard is proposed by China Iron and Steel Association. This standard by the National Iron Ore and Direct Reduced Iron Standardization Technical Committee (SAC/TC317) centralized. This standard was drafted unit. Anshan City Branch Xiang Instrumentation Co., Ltd., Anshan Iron and Steel Co., Ltd.. The main drafters of this standard. Zhang Dapeng, Zhou Mingshun, Li Aijun, Yang Di light, Wen Yonghui, Zhang Jingxi, Yang Zhili. This standard replaces the standards previously issued as.
- GB/T 13242-1991. Iron ore crushing test after low-temperature static reduction Use a cold drum method Caution
- The use of this standard may involve certain hazardous materials, operations and equipment, but did not for all safety issues related to this Have made suggestions. Before using this standard is responsible for the use of appropriate safety and protection measures, and to ensure compliance with relevant state laws and regulations condition.

1 Scope

GB/T 13242-2017 is the Chinese national standard on iron ores - low-temperature disintegration test - method using cold tumbling after static reduction, in the field of mining and minerals. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification

calls it up - which in practice is how most foreign buyers meet it. It was issued on 14 October 2017 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 July 2018. Classification: ICS 73.060.10, CCS D31. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the test conditions for low-temperature pulverization of iron ore, test equipment, sample preparation, test procedures, the results of calculations and tests report. Note that the test method is characterized by a fixed bed, with CO, CO₂ and N₂ was mixed gas isothermal reduction, at room temperature with a drum Chalking test; the sample has a certain range of particle size. This standard applies to the reduction of pulverized index of iron ore (including natural iron ore, sinter, pellets, hereinafter referred to as iron ore) Determination of reduction powderization.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 6003.1 Test sieves - Technical requirements and testing - Part 1. Wire mesh sieve test sieves

GB/T 6003.2 Test sieves - Technical requirements and testing - Part 2. Metal perforated plate test sieves

GB/T 6005 test sieve wire mesh, perforated plate and the basic dimensions of the electroformed sheet sieve

GB/T 8170 rounded repair rules and limit values of the representation and judgment

GB/T 10322.1 Iron ore sampling and sample preparation methods

GB/T 20565 iron ore and DRI terms

3 Terms and definitions

GB/T 20565 defined and the following terms and definitions adapted to this document.

3.1 Reduction powder index reductiondisintegrationindex RDI After the reduction of iron ore through the drum after the test of the degree of chalking, respectively, after the drum test sieve obtained greater than 6.30mm, greater than 3.15mm and less than 500μm mass of the material after reduction and before the drum the total mass of the sample as a

percentage of the percentage, and respectively expressed as. RDI 6.3, RDI 3.15 and RDI-0.5.

4 Basic principles

Take 500g sample of particle size of 10.0mm ~ 12.5mm, in a fixed bed, at a temperature of 500 °C, with CO₂, CO, N₂ composition Of the reducing gas for static reduction.