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

GB/T 31923.2-2015

**Iron ores for blast furnace feedstocks -- Determination of
low-temperature reduction-disintegration indices by static
method -- Part 2: Reduction with CO and N₂**

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(English Translation)

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Foreword

GB/T 31923 "for blast furnace iron ore RDI static test" is divided into two parts.

--- Part 1. reaction with CO, CO₂, H₂ and N₂ in;

--- Part 2. the reaction with CO and N₂.

This section GB/T Part of 231,923.

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

This section uses redrafted Law Amendment uses ISO 4696-2:2007 "for blast furnace iron ore RDI static test Part 2 of the reaction with CO and N₂ "(in English).

This part of ISO 4696-2:2007 technical differences and the reasons are as follows.

--- On normative references, this part has been adjusted technical differences, in order to adapt our technical conditions, the adjusted situation Focus is reflected in the status of Chapter 2, "Normative references", the specific adjustments are as follows.

(A) with a modified adoption of international standards of GB/T 6003.1 replaces ISO 3310-1 (see 6.7);

(B) with a modified adoption of international standards of GB/T 6003.2 replaces ISO 3310-2 (see 6.7);

(C) equivalent adoption of international standards GB/T 10322.1 instead of ISO 3082 (see 5.1);

(D) using identical with international standards GB/T 10322.7 instead of ISO 4701 (see 8.4);

(E) equivalent adoption of international standards GB/T 20565 replaces ISO 11323 (see Chapter 3).

This part is proposed by the China Iron and Steel Association.

This part of the National Iron ore and direct reduced iron Standardization Technical Committee (SAC/TC317) centralized.

This section is drafted. Shougang Corporation, Anshan Kexiang Instrument Co., Ltd., Shangyu Hongxing Machinery Instrument Manufacturing Co.

1 Scope

GB/T 31923 provisions of this part of the blast furnace with iron ore being tested method of reducing CO and N₂ after chalking degree test strip the main pieces of low temperature reduction similar to the blast furnace area.

This section applies to lump ore, sinter and pellets of low RDI static test.

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.

GB/T 6003.1 Test sieves - Technical requirements and testing - Part 1. Test sieves of metal wire braid (GB/T 6003.1-2012, ISO 3310-1:2000, MOD) GB/T 6003.2 Test sieves - Technical requirements and testing - Part 2. Test sieves of perforated metal plate (GB/T 6003.2-2012, ISO 3310-2:1999, MOD) GB/T 10322.1 iron ore sampling and sample preparation method (GB/T 10322.1-2014, ISO 3082:2009, IDT) GB/T 10322.7 ore particle size distribution by sieving (GB/T 10322.7-2004, ISO 4701:1999, IDT) GB/T 20565 term iron ore and direct reduced iron (GB/T 20565-2006, ISO 11323:2002, IDT)

3 Terms and definitions

Terms and definitions GB/T 20565 apply to this document defined.

Principle 4

Test samples of a certain size range, the reducing gas in a fixed bed of 550 °C with CO and N₂ composition isothermal reduction 30min.

The test sample after reduction drummed 900r. And then sieved with a square hole sieve of 2.8mm. Reduction degradation index (RDI) of the calculated value After the test sample with -2.8mm quality and reducing the percentage ratio of the total mass of the test sample before the drum representation.

5.1 Sampling and sample preparation

Sampling and sample preparation according to GB/T 10322.1 performed.

Pellet size range is 10.0mm ~ 12.5mm.

Sinter and lump ore particle size range is 16.0mm ~ 20.0mm.

Dry screening sample volume of at least 2kg.

Before the preparation of the test sample, the sample should be dried to constant weight at $105\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$ oven and cooled to room temperature.