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**NONFERROUS METALS INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

YS/T 231-2015

Tungsten concentrate
(English Translation)

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Table of Contents

Foreword...	3
1 Scope...	4
2 Normative references...	4
3 Requirements...	4
4 Test Methods...	5
5 Inspection rules...	6
6 Marks, package, transportation, storage and quality certificate...	7
7 Contents of the orders (or contracts)...	8

Foreword

This Standard is drafted according to the rules given in the GB/T 1.1-2009.

This Standard replaces YS/T 213-2007 "Tungsten concentrate".

Compared with YS/T 213-2007, the main changes of this Standard are as follows.

- ADJUST the chemical composition accordingly;
- REVISE the test methods and the inspection rules.

This Standard was proposed by and shall be under the jurisdiction of China National Standardization Technical Committee of Nonferrous Metals.

Drafting organizations of this Standard. Ganzhou Nonferrous Metallurgy Research Institute, Chenzhou Diamond Tungsten Products Co., Ltd, Hunan Shizhuyuan Nonferrous Metals Co., Ltd, China Molybdenum Co., Ltd (Luoyang).

1 Scope

This Standard specifies the requirements, test methods, inspection rules, marks, package, transportation, storage, quality certificate and orders (or contracts) for the tungsten concentrate.

This Standard applies to tungsten concentrate products selected in mine; it can be used for producing ammonium paratungstate, tungstic acid, ammonium metatungstate, tungsten oxide etc.

2 Normative references

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this standard.

GB/T 1480 Metallic powder - Determination of particle size by dry sieving

GB/T 4414 Methods of sampling and sample preparation of tungsten concentrates in bags

GB/T 6150 (All parts) Methods for chemical analysis of tungsten concentrates

GB/T 26019 Methods for chemical analysis of high impurity tungsten mineral - Determination of tungsten trioxide content - Twice separation and igniting gravimetric method

3.1 Product classification

According to mineral types, tungsten concentrate is divided into scheelite and wolframite; according to chemical composition, it is divided into total 14 types - premium grade, grade I, grade II, grade III, grade IV, grade V, mixed tungsten concentrate, and tungsten-slime. Mixed tungsten concentrate refers to the scheelite and wolframite - without strictly-separated tungsten concentrate. Tungsten-slime refers to tungsten products of which the granularity is less than 0.074 mm [The content (mass fraction) of WO_3 is 20%~40%], and the impurity contents are relatively high.

YS/T 231-2015

3.4 Granularity

The granularity of tungsten concentrate shall not be more than 9 mm (excluding the granularity of tungsten-slime). Users can negotiate with the suppliers if there are specific needs.

3.5 Appearance quality

Tungsten concentrate shall not be mixed up with other sundries.

4.1 The analysis methods of the tungsten concentrate's chemical composition shall be

done by the provisions in GB/T 6150 or GB/T 26019. The analysis methods of the elements that are not included in GB/T 6150 and GB/T 26019 shall be negotiated by the supplier and the buyer.

4.2 The determination of tungsten concentrate's moisture shall be done by the provisions in GB/T 6150.

4.3 The determination of tungsten concentrate's granularity shall be done by the provisions in GB/T 1480.

5.2 Batching

The products shall be inspected and accepted by batch. Products from the same batch are required to be mixed up uniformly. The weight of each batch shall not be YS/T 231-2015

more than 20 t. If there are specific requirements, the negotiation between the suppliers and the buyers is needed.

5.3 Inspection items

The chemical composition, moisture, granularity and appearance quality of each batch of products shall be inspected.

5.4 Sampling

The sampling of products and sample preparing shall be according to the provisions in GB/T 4414.

6.1 Marks

The bags of tungsten concentrate shall be marked with.

6.2 Package, transportation, storage

YS/T 231-2015

6.3 Quality certificate

A quality certificate shall be attached to each batch of products, which shall note.

7 Contents of the orders (or contracts)

The orders listed by this Stander shall include following contents.

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