

ICS 73.060
CCS D 43

YS

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

YS/T 358.12-2012

**Methods for chemical analysis of tantalite, columbite
concentrate. Part 12: Determination of water content.
Gravimetric method**

**钽铁、铌铁精矿化学分析方法 第12部分：湿存水量的测定重量法
(English Translation)**

Issued on: January 1, 1970

Implemented on: January 1, 1970

Issued by: Ministry of Industry and Information Technology

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Foreword

YS/T 358 "iron tantalum, niobium, iron ore chemical analysis method" includes 12 parts.

- Part 1. tantalum, niobium determining the amount of paper colored layer gravimetric method
- Part 2. Determination of titanium dioxide content of the double security for DAM spectrophotometry
- Part 3. Determination of silicon dioxide content and weight of molybdenum blue spectrophotometric method
- Part 4. Determination of the amount of tungsten trioxide Thiocyanate spectrophotometric
- Part 5. Determination of uranium by inductively coupled plasma atomic emission spectrometry
- Part 6. thorium oxide content - Inductively coupled plasma atomic emission spectrometry
- Part 7. Determination of iron content by inductively coupled plasma atomic emission spectrometry
- Part 8. Determination of the amount of ferrous dichromate method
- Part 9. Determination of antimony content by inductively coupled plasma atomic emission spectrometry
- Part 10. Determination of tin content potassium iodate titration
- Part 11. Determination of the amount of manganese atomic absorption spectrometry
- Part 12. hygroscopic water - Gravimetric method this section YS/T Part 12 358.

The non-ferrous metal part by the National Standardization Technical Committee (SAC/TC243) centralized.

This section is drafted. Ganzhou Nonferrous Metallurgy Research Institute, Jiujiang Tantalum Niobium limited liability company, Conghua Tantalum-Niobium smelter.

1 Scope

This method specifies tantalum iron, determination of the content of water in the wet ferro-niobium concentrate.

This method is suitable for iron, tantalum, niobium iron ore in measured hygroscopic water. Measurement range. 0.10 to 5.00%.

2 Method summary

The sample was 105 °C ~ 110 °C drying, with the reduction method to calculate wet storage level.

3 Instrument

Ovens.

4 Sample

Samples should be placed in a sealed container, isolated from the air.

5.1 Sample

Weighed 100.0g sample (4), accurate to 0.001g.

5.2 Determination of the number of Two independent measurement averaged.

5.3 Determination

A sample (5.1) is placed in advance at 105 °C ~ 110 °C drying to constant weight weighing dish. In a thermostatic oven at 105 °C ~ 110 °C Drying 2h. Removed, placed in the dryer cooled to room temperature weigh, and repeatedly drying to constant weight.

NOTE: Before weighing dish containing a sample to be dried in the oven thermostat 1h. Removed, placed in a drying dish. Cool to room temperature (about 30min), weighed, and is repeated Row to constant weight.

Calculation results of the analysis of 6 the content of water in the trap wet wet mass fraction $w(H_2O)$ and its value is expressed in%, according to equation (1).

$w(H_2O) =$

(M1-m2)

(M1-m0) x

100 (1)