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

GB/T 15076.8-2008

Replacing GB/T 15076.8-1994

**Methods for chemical analysis of tantalum and niobium -
Determination of carbon and sulphur contents**

钽铌化学分析方法 碳量和硫量的测定

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Foreword

GB/T 15076 "Methods for chemical analysis of tantalum and niobium" is divided into 16 parts.

--- GB/T 15076.1 Methods for chemical analysis of tantalum and niobium, tantalum and niobium - Determination of the amount of

--- Determination of GB/T 15076.2 Methods for chemical analysis of tantalum and niobium and tantalum niobium content

--- Determination of GB/T 15076.3 chemical analysis of tantalum and niobium copper content

--- Determination of GB/T 15076.4 chemical analysis of tantalum and niobium iron content

--- GB T 15076.5 Methods for chemical analysis of molybdenum, tantalum, niobium and tungsten contents - / Determination

--- GB/T 15076.6 chemical analysis of tantalum and niobium and tantalum silicon content

--- GB/T 15076.7 chemical analysis of tantalum and niobium and niobium determination of phosphorus content Determination

--- GB/T 15076.8 Methods for chemical analysis of tantalum and niobium carbon and sulfur content

--- Determination of GB/T 15076.9 chemical analysis of tantalum and niobium and tantalum iron, chromium, nickel, manganese, titanium, aluminum, copper, tin, lead and zirconium quantity

--- Determination of GB/T 15076.10 chemical analysis of tantalum and niobium and niobium iron, nickel, chromium, titanium, zirconium, aluminum and manganese contents

--- GB/T 15076.11 chemical analysis of tantalum and niobium and niobium arsenic, antimony, lead, tin and bismuth contents

--- Determination of GB/T 15076.12 chemical analysis of tantalum and niobium and tantalum of phosphorus content Determination

--- GB/T 15076.13 chemical analysis of tantalum and niobium tantalum nitrogen content

1 Scope

GB/T 15076.8-2008 is the Chinese national standard on methods for chemical analysis of tantalum and niobium - determination of carbon and sulphur contents, in the field of metallurgy. 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 31 March 2008 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 September 2008. Classification: ICS 77.120.99, CCS H14. 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 section provides tantalum, niobium determination of carbon and sulfur content. This section applies to tantalum, niobium determination of carbon and sulfur content. Measuring range. C. 0.0006% ~ 0.5%; S. 0.0006% ~ 0.05%.

2 Principle of the method

Sample combustion in oxygen or carbon dioxide, carbon monoxide and sulfur dioxide in a high frequency induction furnace, carbon monoxide is converted into catalytic furnace Carbon dioxide, sulfur dioxide and carbon dioxide generated in the detected infrared cell.

3 Materials

3.1 tungsten tin flux (less than 0.0002% carbon content, sulfur content less than 0.0002%).

3.2 Ceramic crucible. a muffle furnace at 1000 °C ~ 1100 °C in burning at least 4h.

3.3 Oxygen. purity of greater than 99.995%.

3.4 Argon. purity of greater than 99.99%.

3.5 Standard substance. Series steel standard material.

4 Instrument

High-frequency infrared carbon and sulfur analyzer. Instrument sensitivity is not less than 0.01 μ g/g.

5 Sample

5.1 Sample size Samples can be massive, chips or powder form, in which massive, clastic particle size should be uniform.

5.2 sample preparation requirements To avoid overheating the sample processing, do not allow any coolant. Not allowed to touch the processed samples to prevent contamination.
Step

6 Analysis

6.1 Warm up To fully preheated before instrumental analysis, so that the indicators of the instrument reaches the set value.

6.2 Instrument Leak The use of the instrument or other auxiliary equipment leak detection program to determine the instrument without leakage phenomenon.

6.3 Instrument Calibration Calibration standard substance (3.5), make the analysis value within the allowable fluctuation range of the standard values.

6.4 blank analysis Blank blank instrument should be stable and not more than 0.0002%.

6.5 Sample Analysis

6.5.1 Sample Weigh 0.5g sample, accurate to 0.0001g.