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

GB/T 13465.3-2014

Replacing GB/T 13465.3-2002

**Test method of impermeable graphite materials-Part 3:
Compressive strength**

不透性石墨材料试验方法 第3部分：抗压强度

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Foreword

GB/T 13465 "impervious graphite material testing method" is divided into 10 parts.

- Part 1. General Mechanical tests;
- Part 2. flexural strength;
- Part 3. Compressive strength;
- Part 4. the impact strength;
- Part 5. phenolic adhesive shrinkage;
- Part 6. Hydraulic Blasting graphite tube;
- Part 7. weight gain and fill porosity;
- Part 8. Adhesive shear strength;
- Part 9. Adhesive tensile strength;
- Part 10. tensile strength. This part of GB/T 13465 Part 3. This section drafted in accordance with GB/T 1.1-2009 given rules. This Part replaces GB/T 13465.3-2002 "impervious graphite material compressive strength test method", and GB/T 13465.3-2002 Compared to the main technical changes are as follows:
 - Increased impervious graphite bulk compression sample size ($\Phi 25\text{mm} \pm 0.1\text{mm}$) x ($25\text{mm} \pm 0.1\text{mm}$) of;
 - Preparation and loading speed test when the sample was revised. This part is proposed by the China Petroleum and Chemical Industry Association. This part of the National Non-metallic chemical equipment Standardization Technical Committee (SAC/TC162) centralized. This section is drafted. Tianhua Institute of Chemical Machinery and Automation Ltd., Guangzhou City Special Pressure Equipment Inspection and Research Institute, Nantong planet graphite Equipment Co., Ltd., Nantong Jingtong Graphite

Equipment Co., Ltd. Shanghai Branch Graphite Products Co., Ltd. Pan. The main drafters of this section. Zhou Jie, Li Maodong, Liu Xiaodong, Wang Yu Hang, the People of Chinese, Zhang Branch, Xin morning, Li-hua, Ye Weiwen. This part of the standard replaces the previous editions are.

--- GB/T 13465.3-1992, GB/T 13465.3-2002. Impermeable graphite materials - Test methods Part 3. Compressive strength

1 Scope

GB/T 13465.3-2014 is the Chinese national standard on test method of impermeable graphite materials-part 3: compressive strength, in the field of chemical technology. 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 3 September 2014 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 March 2015. Classification: ICS 71.120, CCS G94. 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 GB/T 13465 specifies the test device when measuring the compressive strength of impermeable graphite material used, samples, test procedures and Results calculated. This section applies to impervious graphite material compressive strength measured.

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 13465.1 impermeable graphite materials - Test methods - Part 1. General Mechanical tests

3 Terms and Definitions

GB/T 13465.1 defined and the following terms and definitions apply to this document.

3.1 Compressive strength compressivestrength It can withstand the limit load value Found on impervious graphite material per unit area.

4 Instruments and equipment

Instruments and equipment shall comply with the relevant provisions of GB/T 13465.1 of.

5 Sample

5.1 Sampling, sample preparation and processing method according to GB/T 13465.1 of the relevant provisions.

5.2 Sample size.

a) block material. ($\phi 45\text{mm} \pm 0.1\text{mm}$) $\times$ ($45\text{mm} \pm 0.1\text{mm}$) or ($\phi 25\text{mm} \pm 0.1\text{mm}$) $\times$ ($25\text{mm} \pm 0.1\text{mm}$);

b) graphite tube. diameter, wall thickness deviation according to product specifications and regulations, a height equal to the outer diameter of the tube;

c) an adhesive casting parts. ($\phi 25\text{mm} \pm 0.1\text{mm}$) $\times$ ($25\text{mm} \pm 0.1\text{mm}$).

5.3 Compression parallel to the surface of the sample bias $\leq 0.05\text{mm}$.

5.4 specimen surface roughness $R_a \leq 3.2\mu\text{m}$.

5.5 each sample at least five.

6 Test procedure

6.1 material, adhesive cast member Measurement. measured along the axial direction of the sample 3, measured at each of mutually perpendicular diameters of the 1, take the resulting data 6