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

GB/T 35926-2025

Replacing GB/T 35926-2018

**Technical specification for the cementing of impervious
graphite**

不透性石墨粘结耐蚀作业技术规范

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB/T 35926-2018 "Technical Specification for Bonding Operations of Impermeable Graphite". Compared with GB/T 35926-2018, except for... Aside from structural adjustments and editorial changes, the main technical changes are as follows:

- a) The definitions of the terms "impermeable graphite" and "graphite binder" have been changed, and the terms "graphite bonding," "bonding process evaluation," and "determination" have been added. Meaning (see 3.1, 3.2, 3.3, 3.4; 3.2 in the 2018 edition);
- b) The "Process Evaluation Principles" have been revised, adding "Changes in Adhesive Grade", "Changes in Adhesive Manufacturer", and "Curing Temperature or Time". "Changes in spacing" and "increased joint design clearance" (see 4.2, 2018 edition 4.2);
- c) Specific requirements for "graphite component bonding operations" have been added (see 6.2.1, 6.2.2, and 6.2.3);
- d) The requirement for "curing time of bonded graphite elements" has been changed (see 6.3.1, 4.5.1 of the 2018 version);
- e) The content of "Graphite Component Pressure Test" has been modified, and "Pneumatic Test", "Pressure Gauge Used in Pressure Test", and "Judgment of Pressure Test Results"

have been added. The requirements for "fixed" (see 7.3b-d),
5.3 of the.2018 edition);

f) The requirements for "Graphite Component Bonding Procedure" have been modified. The "Referenced Standards" in the table have been changed to "Implementation Standards," and a new specification for graphite component bonding has been added. The process should include the following. the bonding of graphite pressure vessels containing media with extremely or highly hazardous toxicity. Procedures (see Appendix A,.2018 edition);

g) The requirements for "bonding test specimens" and "acceptance criteria" in "bonding process evaluation" have been changed (see C.2.1.1, C.2.1.2, C.2.1.3). C.3.3, C.4.2 (F.2.1, F.3.3, F.4.2 in the.2018 edition);

h) The requirement for a "permeability coefficient test" has been added (see C.2.1.2, C.5.1, C.5.2);

i) Change "Technical Conditions for Adhesives" to "Technical Requirements and Related Contents for Adhesives" (see Appendix F, Appendix D of the.2018 edition);

1 Scope

GB/T 35926-2025 is the Chinese national standard covering bonding graphite to graphite - the surface preparation, the resin cement and its cure schedule, and the strength and tightness of a joint that has to survive the same acid as the parts it joins. It replaces GB/T 35926-2018. It was issued on 2 December 2025 and has been in force since 1 July 2026, replacing GB/T 35926-2018. The document is under the responsibility of the China Petroleum and Chemical Industry Federation. This page is published from the official record of the 2025 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the evaluation process, materials, bonding, curing procedures, inspection and acceptance, as well as marking, storage, and other aspects of bonding processes for impermeable graphite components. Storage, etc. This document applies to the design and application of bonding impermeable graphite elements in the following graphite devices.

---Maximum working pressure not exceeding

---Design temperature range. -70°C to 400°C. This document does not apply to the following graphite containers.

---Graphite equipment in nuclear power plants;

--- Casting graphite equipment.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 13465.1 Test methods for impermeable graphite materials - Part

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 impervious graphite Graphite materials that are impermeable to liquids and gases at the current industrial level (i.e., under relatively low pressure and temperature conditions).

Note. Common types include impregnated graphite, compression molding (including extrusion and die molding) graphite, cast graphite, and composite graphite. [Source: GB/T 21432-2021, 3.5, with modifications]

10 Tensile strength

GB/T 21432 Pressure Vessels Made of Graphite

GB/T 30071 Fine-particle, high-density special graphite products

HG/T 2370 Technical Conditions for Chemical Equipment Made from Impermeable Graphite

YB/T 2818 Graphite Blocks YB/T 4088 Graphite Electrode