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

GB/T 32488-2026

Replacing GB/T 32488-2016

**Ductile iron pipes and fittings - Seal coats for cement mortar
linings**

球墨铸铁管和管件 水泥砂浆内衬密封涂层

(English Translation)

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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 supersedes GB/T 32488-2016 "Cement Mortar Lining Sealing Coating for Ductile Iron Pipes and Fittings" and is consistent with GB/T 32488-Compared to 2016, aside from structural adjustments and editorial changes, the main technical changes are as follows.

---The scope has been changed (see Chapter 1, Chapter 1 of the 2016 edition);

---Terms and definitions for ductile iron, pipes, fittings, and type testing have been removed (see 3.1, 3.2, 3.4, and 3.7 in the 2016 edition);

---The general principle of technical requirements has been changed to process (see 4.1, 2016 version 4.1);

---Material requirements have been removed (see section 4.2 of the 2016 version);

---Appearance requirements have been changed (see 4.2, 4.3 in the 2016 version);

---Added requirements for short-term sealing performance testing after hydrostatic cycling test (see 5.4);

- Added verification rules (see Chapter 7);
- The identifier has been removed (see Chapter 7 of the 2016 edition);
- The test method for electromagnetic thickness gauges has been removed (see C.2.5 and C.4 in the 2016 edition);
- The method for testing the thickness of the sealant coating using a micrometer has been changed (see C.4, 2016 edition of C.4);
- The method for testing the thickness of the sealant coating using the weight and area method has been changed (see C.5, 2016 edition of C.5);
- The grading guidelines for adhesion testing have been revised (see D.3.6, 2016 edition of D.3.6);
- The requirements for watertight materials have been changed (see E.2.1, 2016 edition of E.2.1).
- The requirements for airtight sealing materials have been changed (see E.2.3, 2016 version of E.2.3);
- Add detailed requirements for the base plate and cover plate (see E.3);
- A diagram of a short-term sealing device has been added (see Figure E.1);
- The pipe length requirements for the hydrostatic circulation test have been changed (see G.3, 2016 edition of G.3);
- Added test temperature requirements to the hydrostatic cycling test procedure (see G.4.1);
- The depressurization rate has been increased in the hydrostatic cycling test procedure (see G.4.5);
- Added requirements for the appearance of the sealing layer after the hydrostatic cycling test (see G.4.7).

This document is modified to adopt ISO 16132:2024 "Cement mortar lining and sealing coating for ductile iron pipes and fittings".

Compared with ISO 16132:2024, this document has undergone many structural adjustments. A comparison table of the structural numbering changes between the two documents is provided.

See Appendix A.

This document differs significantly from ISO 16132:2024 in several technical aspects. The relevant clauses are indicated in vertical margins.

Straight lines (|) are marked. A summary of these technical differences and their reasons

can be found in Appendix B.

The following editorial changes have been made to this document.

---The requirements for specific countries have been removed (see section 5.1 of ISO 16132:2024);

---The note in the clause on the calculation of the thickness of the sealing coating using a test film has been deleted (see D.4.2 of ISO 16132:2024).

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Iron and Steel Association.

This document is under the jurisdiction of the National Steel Standardization Technical Committee (SAC/TC183).

1 Scope

This document specifies the technical requirements and types of sealing coatings applied to the cement mortar lining of ductile iron pipes and fittings in the factory.

Test requirements, test methods and inspection rules.

This document applies to the cement mortar lining sealing coating of ductile iron pipes and fittings used for conveying drinking water and irrigation water, and to manufacturers and customers.

Other uses agreed upon between households.

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 5750.4 Standard Examination Methods for Drinking Water - Part 4: Sensory Characteristics and Physical Indicators GB/T 10807-2006 Determination of hardness of flexible foam polymeric materials (indentation method) (ISO 2439:1997, IDT) GB/T 13295 Ductile iron pipes, fittings and accessories for water and gas (GB/T 13295-2019, ISO 2531:2009, MOD) GB/T 17457 Cement mortar lining for ductile iron pipes and fittings (GB/T 17457-2019, ISO 4179:2005, MOD) GB/T 22592 General Rules for Determination of pH Value of Water Treatment Agents (GB/T 22592-2008, ISO 10523:1994, NEQ) GB/T 31586.2