

ICS 87.020
CCS G 51



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

GB/T 31817-2025

Replacing GB/T 31817-2015

**Specification for protective coating of wind power equipment
against corrosion**

风力发电设施防护涂装技术规范

Issued on: December 2, 2025

Implemented on: July 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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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 31817-2015 "Technical Specification for Protective Coating of Wind Power Generation Facilities" and is consistent with GB/T 31817-2015. Compared to previous versions, aside from structural adjustments and editorial changes, the main technical changes are as follows:

- a) The scope has been changed (see Chapter 1, Chapter 1 of the.2015 edition);
- b) Terms and definitions have been changed (see Chapter 3, Chapter 3 of the.2015 edition);

- c) The classification has been changed (see Chapter 4, Chapter 4 of the.2015 edition, Appendix A);
- d) The basic requirements for painting contractors have been removed (see section 5.1 of the.2015 edition);
- e) The coating system requirements have been changed (see 5.1, Appendix A, Appendix B, 5.3 of the.2015 edition);
- f) The painting process requirements have been changed (see 5.2, 5.4 in the.2015 edition);
- g) The test methods for coating materials have been changed (see 6.1, Appendix A, Appendix B, Appendix B of the.2015 edition);
- h) The testing methods for the coating system have been changed (see 6.2, 6.1 in the.2015 edition);

1 Scope

GB/T 31817-2025 is the Chinese national standard covering painting a wind turbine - the corrosivity categories from inland to offshore splash zone, the surface preparation and the coating systems for tower, nacelle, blades and foundation, the leading-edge erosion that ruins blades, and the repair at height. At 26,000 words. It replaces GB/T 31817-2015, written before China's offshore fleet existed at scale. It was issued on 2 December 2025 and has been in force since 1 July 2026, replacing GB/T 31817-2015. 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 classification, requirements, inspection rules, and acceptance procedures for protective coatings used on onshore and offshore wind power facilities, and describes the corresponding... Experimental methods. This document applies to the initial and maintenance coating of protective coatings for onshore and offshore wind power facilities. This document does not apply to the initial coating and maintenance coating of concrete substrates and fireproof parts of wind power generation facilities.

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 1040.1 Determination of tensile properties of plastics - Part

3 Test conditions for films and sheets

GB/T 1724-2019 Determination of grinding fineness of paints, varnishes and printing inks

GB/T 1725 Determination of nonvolatile matter content in paints, varnishes and plastics

GB/T 1727-2021 General methods for preparing paint films

GB/T 1728 Determination of drying time of paint film and putty film

GB/T 1732 Test method for impact resistance of paint film

GB/T 1741 Test method for resistance to mildew in paint films

GB/T 1766 Rating Method for Aging of Paint and Varnish Coatings

GB/T 1768 Determination of abrasion resistance of paints and varnishes - Rotating rubber grinding wheel method

GB/T 1865 Paints and varnishes - Artificial weathering and artificial radiation exposure - Filtered xenon arc radiation

GB/T 3186 Sampling of raw materials for paints, varnishes and paints and varnishes

GB/T 5206 Paints and Varnishes. Terms and Definitions

GB/T 5210 Paints and varnishes - Pull-off adhesion test

GB 6514 Safety Regulations for Painting Operations. Safety of Painting Processes and Ventilation

GB/T 6682 Specifications and test methods for water used in analytical laboratories