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

GB/T 46437-2025

Plastic-dipped composite steel pipes for industrial piping

工业管道用浸塑复合钢管

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Table of Contents

1.Scope	1
2 Normative References	1
3.Terms and Definitions	1
4.Classification and Codes	2
5.Order Details	2
6.Manufacturing Process	2
7 Technical Requirements	3
9.Inspection Rule	11
27 Appendix K (Normative) Method for Determining Shear Strength	28

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. Please note that the content of 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). This document was drafted by: Shandong Shanghe Power Technology Co., Ltd., China Petroleum Materials Co., Ltd., Shandong Nuclear Power Co., Ltd., and Zhejiang Jinhua Power Co., Ltd. Zhou Pipeline Industry Co., Ltd., Shandong Shanghe New Material Technology Co., Ltd., State Nuclear Power Demonstration Power Plant Co., Ltd., Shandong Electric Power Engineering Consulting Institute Co., Ltd., China Nuclear Industry No.

23 Construction Co., Ltd., Handan Zhengda Pipe Group Co., Ltd., Qinghai Huahui Haohang Pipe Industry Technology Co., Ltd. Limited Liability Company, Metallurgical Industry Information and Standards Research Institute. The main drafters of this document are: Zhang Ran, Zhai Guixin, Liu Fei, Yu Binjie, Li Ying, Cao Feng, Song Xupeng, Ma Yuwei, Zhang Hongshun, Wang Xiaoling, and Li Qi. Tian Juan, He Chi, Wu Aimin, Shi Wenhua, Xu Yaqian, Ling Yanrui, Yang Zhen, Xi Jinhui, Wang Yuanzhi, Liu Jianxiang, Zhang Xianglong, Wang Xin, Liu Xiaobao, Guo Yong, Liu Tong, Zheng Xinwen, Ma Shishuai, Xue Jianzhong. Plastic-coated composite steel pipes for industrial pipelines

1 Scope

GB/T 46437-2025 is the Chinese national standard covering the steel pipe lined and coated by dipping in molten plastic - the coating thickness and its adhesion, the holiday testing that must find any bare metal, the temperature and chemical limits of the lining, and the joints, which is where a lined pipe is usually defeated. It is the cheap alternative to stainless steel in corrosive service, so long as the joints are right. First edition, under the China Iron and Steel Association. In force from 1 May 2026. Issued on 31 October 2025, it has been in force since 1 May 2026.

This document specifies the classification and designation, ordering details, manufacturing process, technical requirements, and testing procedures for plastic-coated composite steel pipes and fittings used in industrial pipelines. Methods, inspection rules, packaging, marking, quality certificate, transportation and storage. This document applies to plastic-coated composite steel pipes (hereinafter referred to as plastic-coated pipes) used in pipelines in industries such as nuclear power, thermal power, chemical, pharmaceutical, municipal, and shipbuilding. And pipe fittings.

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 241 Hydraulic test method for metal tubes

GB/T 2102 Acceptance, Packaging, Marking and Quality Certificate of Steel Pipes

GB/T 3091 Welded steel pipes for low-pressure fluid transportation

GB/T 4956 Measurement of Non-Magnetic Coating Thickness on Magnetic Substrates - Magnetic Method

GB/T 8163 Seamless steel pipes for conveying fluids

GB/T 8923.1 Visual assessment of surface cleanliness of steel before coating - Part

1.Uncoated steel Rust level and treatment level of the surface and the steel surface after complete removal of the original coating.

GB/T 9124.1 Steel pipe flanges - Part 1: PN series

GB/T 9124.2 Steel pipe flanges - Part

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 baseassembly Steel pipes, pipe fittings, flanges, or combinations thereof.

3.2 plastic-dipped A composite process that allows plastic powder to adhere evenly to the heated substrate (3.1) surface and has a certain shear strength and thickness.

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