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

GB/T 25428-2025

Replacing GB/T 25428-2015

**Petroleum and natural gas industries - Drilling and production
equipment - Drilling and well-servicing structures**

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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 25428-2015 "Drilling and Workover Equipment for the Oil and Gas Industry - Drilling Rigs and Bases", and is consistent with... Compared with GB/T 25428-2015, apart 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) Some terms and definitions have been changed (see Chapter 3, Chapter 3 of the.2015 edition), and "second-floor platform," "clearance height," and "permitted use strength" have been added. The terms and definitions for "degree," "heave," and "qualified personnel" are revised (see 3.7, 3.10, 3.13, 3.27, and 3.33), and the term "tower-type derrick" is removed. Height of lightweight derrick without rope; Height of lightweight derrick with rope (see 3.16 in the.2015 edition);
- c) A new chapter on "Technical Requirements" has been added, and the content regarding Structural Security Levels (SSL) has been revised and incorporated (see Chapter 5,.2015). Chapter 6 of the edition);
- d) The relevant content of "Design Loads" has been changed (see Chapter 6, and Chapters 7 and 8 of the.2015 edition);

- e) The requirements for materials and welding were changed and integrated into quality control, while the purchaser's requirements for inspection and rejection were removed (see...). Chapter 7 (Chapters 9-11 in the.2015 edition);
- f) A new chapter on "Experimentation and Verification" has been added (see Chapter 8);
- g) The "signature" requirements have been changed (see Chapter 9, Chapter 5 of the.2015 edition);
- h) Changed the requirements for manufacturer-saved files (see 10.1.1, 12.1 in the.2015 version); added a diagram showing the location of mobile devices (see...). Figure 6);
- i) A new chapter on "Storage, Packaging and Transportation" has been added (see Chapter 11);
- j) The requirements for impact testing and weld evaluation have been changed (see Appendix A, Appendix A of the.2015 edition). 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 and is under the jurisdiction of the National Technical Committee on Standardization of Petroleum Drilling Equipment and Tools (SAC/TC96). This document was drafted by: Baoji Petroleum Machinery Co., Ltd., China Oilfield Services Limited, and China National Petroleum Corporation Offshore Engineering Co., Ltd. Engineering Co., Ltd., Exploration and Development Research Institute of China National Petroleum Corporation, Sichuan Petroleum Drilling Engineering Co., Ltd. Sichuan Kete Testing Technology Co., Ltd., Sinopec Fourth Machinery Petroleum Machinery Co., Ltd., Nanyang Second Machinery Petroleum Equipment Group Co., Ltd. Sichuan Honghua Petroleum Equipment Co., Ltd., Shandong Gaoyuan Gas Equipment Co., Ltd., and Lanzhou Lanshi Petroleum Equipment Engineering Co., Ltd. The main drafters of this document are. Hou Min, Chen Degang, Wei Peijing, Zhao Shunqiang, Cao Xiaoyu, Shan Zhengfeng, Xu Binrong, Han Ruijing, and Yang Xiuju. Li Yahui, Zheng Hao, Zhou Yonglin, Lei Zheng, Wang Wenchao, Jia Tao, Yu Lijun, Yang Qionghua, Chen Xianqiu, Zhao Tao, Yang Jianping, Zhang Youhui. This document was first published in.2010, revised for the first time in.2015, and this is the second revision. Oil and gas industry drilling and production equipment Drilling and workover derricks and bases

1 Scope

GB/T 25428-2025 is the Chinese national standard covering the derrick and its substructure - the rated hook load and setback capacity, the wind and the combined loading, the fabrication and the inspection of a structure that is erected and dismantled dozens of times in its life. It replaces GB/T 25428-2015. It was issued on 2 December 2025 and has been in force since 1 July 2026, replacing GB/T 25428-2015. The document is under the responsibility of the Standardization Administration of China. 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 technical requirements, design, quality control, and testing procedures for derricks and bases used in drilling and well workover operations in the oil and gas industry. Inspection, marking, documentation, storage, packaging and transportation. This document applies to all new steel tower derricks and portable derricks (including cable-stayed portable derricks and workover rig portable derricks). The design, manufacture, testing, and inspection of the base.

Note. This document provides two product specification levels, PSL1 and PSL2. PSL1 includes the practices currently commonly practiced in the manufacturing industry, and PSL2 includes all the practices of PSL1. There are requirements and additional requirements.

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 229 Metallic materials Charpy impact test method

GB/T 2970 Ultrasonic Testing Methods for Thick Steel Plates

GB/T 9445 Qualification and Certification of Nondestructive Testing Personnel

GB/T 19190 Drilling and hoisting equipment for the oil and gas industry

GB/T 23505 Drilling rigs and workover rigs for the oil and gas industry

GB 50009 Load Code for Building Structures

GB 50011 Code for Seismic Design of Buildings

GB 50017 Standard for Design of Steel Structures

GB 50135 Standard for Design of Tall Structures

GB 50205 Standard for Acceptance of Construction Quality of Steel Structures

GB 50661 Code for Welding of Steel Structures SY/T 5170 Steel Wire Rope for Oil and Gas Industry SY/T 6666 Recommended practices for the selection and maintenance of steel wire ropes for the oil and gas industry SY/T 10030 Recommended Practices for Planning, Design and Construction of Offshore Fixed Platforms. Working Stress Design Method ISO.19901-