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

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**Industrial internet platforms - Digital management of production
safety - Part 1: General principles**

工业互联网平台 安全生产数字化管理 第1部分：总则

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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 is Part 1 of GB/T 46884 "Digital Management of Safe Production on Industrial Internet Platforms". GB/T 46884 has been... The following sections were published.

1.General Provisions;

2.Petrochemical Industry. 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 Ministry of Industry and Information Technology of the People's Republic of China. This document is under the jurisdiction of the

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With the deep integration of new-generation information technologies, represented by the Industrial Internet, with industry, the level of inherent safety in industrial production has been significantly improved. The integration of the Industrial Internet with safe production is a crucial guarantee for achieving an advanced industrial base and a modernized industrial

chain, and is essential for eliminating safety hazards. A fundamental solution is an important support for industrial restructuring and transformation and upgrading. Currently, my country's practice of digital management of safe production based on the Industrial Internet is still in the exploratory stage. Although there are a few successful pilot cases, The industry suffers from narrow application scope and insufficient industrial interconnection capabilities. Furthermore, significant differences between industries mean there are no common experiences to follow and no standard pathways. Issues such as availability. This document presents a unified architecture for digital management of safe production based on an industrial internet platform, which can improve the digital management of safe production. From a theoretical perspective, this paper presents a new approach to decouple and reconstruct key safety production scenarios using digital elements. (GB/T 46884 "Industrial Internet of Things") The "Internet-based Digital Management of Safe Production" aims to provide relevant enterprises with digital management services for safe production based on an industrial internet platform. The basic idea and framework aim to improve the application level of industrial internet technology in the digital management of safe production, and to provide enterprises with industrial internet capabilities for safe production. This lays the foundation for the standardization and normalization of the network platform construction, and is planned to consist of 10 parts.

1.General Provisions. The purpose is to provide a basic framework for digital management of safe production based on an industrial internet platform, and to stipulate... Key application scenarios and digital elements of digital management for safe production based on industrial internet platforms.

2.Petrochemical Industry. The aim is to provide data on safe production in the petrochemical industry based on an industrial internet platform. The basic framework of digital management is defined, and the key application scenarios for digital management of safe production in the petrochemical industry are specified.

3.Mining and Processing Industry. The aim is to provide digital data on safe production in the mining and processing industry based on an industrial internet platform. The basic framework of digital management is defined, and the key application scenarios for digital management of safe production in the mining and beneficiation industry are specified.

4.Oil and Gas Storage and Transportation Industry. The aim is to provide insights into the oil and gas storage and transportation industry based on industrial internet platforms. The basic framework for digital management of safe production is defined, specifying key scenarios for digital management of safe production in the oil and gas storage and transportation industry. Application development.

5.Civil Explosives Industry. The aim is to provide safety guidelines for the civil explosives industry based on an industrial internet platform. The basic framework of digital management for production is defined, and key application scenarios for digital management of safe production in the civil explosives industry are specified. Construction.

6.The Steel Industry. The aim is to provide a framework for digital management of safe production in the steel industry based on an industrial internet platform. The basic framework specifies the key application scenarios for digital management of safe production in the steel industry.

7.Non-ferrous Metals Industry. The aim is to provide data on safe production in the non-ferrous metals industry based on an industrial internet platform. The basic framework of digital management is defined, and the key application scenarios for digital management of safe production in the non-ferrous metals industry are specified.

8.Building Materials Industry. The aim is to provide a framework for digital management of safe production in the building materials industry based on an industrial internet platform. The basic framework specifies the key application scenarios for digital management of safe production in the building materials industry.

9.Fireworks and Firecrackers Industry. The aim is to provide data on safe production in the fireworks and firecrackers industry based on an industrial internet platform. The basic framework of digital management is established, and key application scenarios for digital management of safe production in the fireworks and firecrackers industry are defined.

1 Scope

GB/T 46884.1-2025 is the Chinese national standard covering how production safety is managed through an industrial internet platform - the general part: the hazards and risks to be monitored, the data collected from plant and people, the alerting and the responsibilities, on which the sector-specific parts build. Part 1 of the series, first edition, published together with Part 2 on the petrochemical and chemical industry. It was issued on 31 December 2025 and has been in force since 31 December 2025, as a first edition. The document is under the responsibility of the Ministry of Industry and Information Technology. 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 provides a basic framework for digital management of safe production based on an industrial internet platform, and specifies the procedures for such management. Key application scenarios and digital elements of digital management for safe production in Taiwan. This document applies to the development of "Industrial Internet Safety Production" digital management capabilities across various manufacturing industries, and is applicable to relevant sectors. The industry has revised the evaluation standards for digital management of production safety, as well as the supervision, consultation, service, review, research, and management of digital management of production safety. And planning, etc.