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

GB/T 46848.7-2025

**Technical product documentation - Product design data
management requirements - Part 7: Check and issue**

技术产品文件 产品设计数据管理要求 第7部分：签审与发放

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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 7 of GB/T 46848 "Requirements for the Management of Product Design Data in Technical Product Documentation". GB/T 46848 has been... The following sections were published.

1.General Provisions;

2.Numbering Principles;

3.Basic Procedures;

4.Access Control;

5.Document Management;

6.Product Structure Management;

7.Approval and Issuance;

8.Change Management;

9.Storage and Maintenance. 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 Technical Product Documentation (SAC/TC146). This document was drafted by: XCMG Construction Machinery Co., Ltd., China Machinery Productivity Promotion Center Co., Ltd., and Beijing Digital Plaza. Science & Technology

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With the gradual application and promotion of 3D computer-aided design (CAD) technology, and the application of model-defined design (MBD) technology in manufacturing... Within enterprises, 3D digital models have gradually replaced 2D engineering drawings, becoming the core data carrier in the product development process. This shift... This change not only reflects the evolution of technological forms, but also signifies a profound transformation in product design methodologies and management models. Because 3D models are crucial in technological information... The data management and document control methods differ significantly from the traditional two-dimensional model in terms of information expression, data organization structure, and collaborative management. The process also faces systemic restructuring. To adapt to the development approach centered on 3D digital models, this system addresses the bottlenecks in product design data management within a 3D environment. The problem is to promote the popularization and engineering application of model-based definition technology, support the digital transformation and upgrading of my country's manufacturing industry, and formulate... GB/T 46848 "Requirements for the Management of Product Design Data in Technical Product Documentation". GB/T 46848 is based on the entire lifecycle of product design data. The management process is planned to consist of nine parts.

1.General Provisions. The purpose is to stipulate the general rules for the classification, compilation, archiving, copyright, and protection of product design data. It serves as the foundation and framework for the entire series of standards.

2.Numbering Principles. The purpose is to define the general principles, basic requirements, and numbering methods for product design data files. This method ensures the consistency and traceability of data file identification.

1 Scope

GB/T 46848.7-2025 is the Chinese national standard covering the signing and release of design data - the checks performed before release, the electronic signatures and their evidential weight, and the controlled distribution of what has been released. It is one of the seven parts of GB/T 46848 issued together, a first edition, and it belongs with the PLM system requirements of GB/T 47688-2026. It was issued on 31 December 2025 and has been in force since 1 April 2026, as a first edition. 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 basic principles, general requirements, detailed requirements, and distribution methods for product design data approval and review. and issuance requirements. This document applies to the approval and distribution of product design data, including two-dimensional drawings, three-dimensional models, product EBOMs, and design technical documents.

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 26099.1-2010 General Rules for 3D Modeling of Mechanical Products Part

3 Terms and Definitions

The terms and definitions defined in GB/T 46848.1 apply to this document.

4 Basic Principles of Product Design Data Approval

4.1 The information presented during the approval process should be complete and clear, with specific requirements as follows:

- a) Appropriate file templates should be defined according to different file types;
- b) Ensure that the location for filling in the signature/approval information in the document template remains fixed and that the signature/approval information is complete;
- c) When signing and approving electronically, ensure the accuracy of the electronic signature printing location, and that the signer's name and date are complete and clear.

4.2 The definition of authority and responsibility in the approval process should be clear, and the specific requirements are as follows:

- a) Ensure that the roles of the signatories remain unchanged at each stage of the same document review process;
- b) Approval should be carried out step by step according to the prescribed procedures and authorized scope. Generally, one person can only sign off on one item, and approval should not be bypassed to a higher level.

c) During the electronic approval process, permission settings should be configured to prevent approvers from modifying the approved object, but they can still access it through other means. Visual browsing software is used for annotation and commenting.

4.3 The approval process should be closed-loop, with specific requirements as follows:

- a) Review and approval comments should be provided in an appropriate manner;
- b) The written expression of the review comments should be clear, accurate, and unambiguous;
- c) The review and approval task should be submitted on time. Based on the feedback, the content of the reviewed document should be revised promptly and resubmitted for review. Until the data is approved and released.