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**Intelligent services - Predictive maintenance - Data definition
and interfaces**

智能服务 预测性维护 数据定义与接口

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Foreword

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1.Structure and Drafting Rules of Standardization Documents". Drafting. 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 China Machinery Industry Federation. This document is under the jurisdiction of the National Technical Committee on Standardization of Industrial Process Measurement, Control and Automation (SAC/TC124). This document was drafted by: the 10th Research Institute of China Electronics Technology Group Corporation and the Comprehensive Technology and Economic Research Institute of Instrumentation and Meter of the Machinery Industry. Shenyang Aircraft Design Institute of Aviation Industry Corporation of China, Chengdu Moore Global Test Technology Co., Ltd., and CRRC Changchun Railway Vehicles Co., Ltd. Limited Liability Company, Chengdu Tian'ao Measurement and Control

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Predictive maintenance is a new maintenance model. Compared to traditional preventive maintenance and other maintenance methods, it can reduce the risks associated with blind repairs. While reducing high maintenance costs, this approach can effectively reduce downtime caused by equipment failures, thereby improving equipment reliability and safety. This is particularly beneficial for... This is even more urgent and important for China's manufacturing industry during this critical period of digital transformation. Driven by relevant

national policies and technologies such as the Industrial Internet, big data, and artificial intelligence, theoretical research and development in the field of predictive maintenance have been progressing rapidly. Enterprise practices are rapidly evolving, and standards systems are constantly being improved. However, there is a lack of predictive maintenance data definitions and interface standards, which is a problem within the industry's predictive maintenance systems. Inconsistent data definitions and inconsistent data interfaces exist during the construction and application of the predictive maintenance system, leading to problems at different levels within the system. Poor interoperability, high integration costs, long system development cycles, and significant difficulties in interconnecting predictive maintenance systems with other information systems greatly hinder the system's effectiveness. This has severely limited the widespread application of predictive maintenance models. This document aims to establish a unified definition and interface standard for predictive maintenance data. Accurate, forming an open and scalable predictive maintenance system application model and ecosystem. Intelligent service predictive maintenance Data Definition and Interface

1 Scope

GB/T 47230-2026 is the Chinese national standard covering the data a predictive maintenance service needs - the condition measurements and their context, the asset and its history, the health indicators and the predictions, with the interfaces between the machine, the platform and the maintenance system. First edition, 17,000 words, in force since 1 September 2026. It was issued on 27 February 2026 and has been in force since 1 September 2026, as a first edition. The document is under the responsibility of the China Machinery Industry Federation. This page is published from the official record of the 2026 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 general rules, data interface, and data definition requirements for predictive maintenance in intelligent services. This document applies to the construction, implementation, and application of predictive maintenance systems, as well as the design and development of related software and hardware.

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 2900.99 Reliability of Electrical Engineering Terminology

GB/T 11457 Terminology for Information Technology Software Engineering

GB/T 40571-2021 General requirements for intelligent service predictive maintenance

3 Terms and Definitions

The terms and definitions defined in GB/T 2900.99, GB/T 11457, and GB/T 40571-2021, as well as the following terms and definitions, apply to this document.

3.1 intelligent service A service that can automatically identify users' explicit and implicit needs and proactively, efficiently, safely, and environmentally friendly meet those needs. [Source: GB/T 40571-2021, 3.3]

3.2 Maintenance, whether continuous or intermittent, is carried out based on observed conditions to monitor, diagnose, or predict the condition of structures, systems, or components. Item indicators. [Source: GB/T 40571-2021, 3.5]

4. Abbreviations The following abbreviations apply to this document.