

ICS 25.040.40

CCS N 19



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

GB/T 44407-2024

**Intelligent service-Predictive maintenance-Requirement of
virtual maintenance system**

智能服务 预测性维护 虚拟维护系统技术要求

Issued on: August 23, 2024

Implemented on: March 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

Table of Contents

Preface	III
1 Scope	1
2 Normative references	1
3 Terms and Definitions	1
4 Workflow	2
5 System Framework	2
6 Infrastructure Requirements	3
6.1 Modeling Development Tools	3
6.2 Interactive Devices	3
6.3 Network Communication	3
6.4 System Interface	4
6.5 Security Management	4
7 Data requirements	4
7.1 Data Management	4
7.2 Prototype Data	4
7.3 Environmental data	4
7.4 Operator Model Data	5
7.5 Process Data	5
7.6 Safety related data	5
8 Modeling requirements	5
8.1 Model Management	5
8.2 Prototype Modeling	5
8.3 Environmental Modeling	6
8.4 Operator Modeling	6
8.5 Process Modeling	6
8.6 Security Factor Modeling	7
9 System Function Requirements	7
9.1 Maintenance Management and Solution Planning	7
9.2 Maintenance plan verification and optimization	8
9.3 Maintenance capability training	9
References	10

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

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This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee for Standardization of Industrial Process Measurement, Control and Automation (SAC/TC 124).

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Smart Services Predictive Maintenance Technical requirements of virtual maintenance system

1 Scope

This document specifies the workflow, system framework, infrastructure requirements, data requirements, and other aspects of the virtual maintenance system in intelligent service predictive maintenance.

Requirements, modeling requirements, system function requirements, etc.

This document applies to the design, development, use and maintenance of virtual maintenance systems.

2 Normative references

GB/T 40571-2021

3 Terms and definitions

The terms and definitions defined in GB/T 40571-2021 and the following apply to this document.

3.1 virtual maintenance system

A system that implements virtual maintenance by using virtual maintenance hardware and virtual reality or augmented reality technology.

3.2 virtual maintenance

The process of performing maintenance analysis and simulation on the object model formed by maintenance modeling.

Note. It includes one or more maintenance sequence planning, maintenance path planning and maintenance process simulation, etc., which can realize maintenance plan inspection,

optimization and maintenance capabilities Purpose of training.

3.3 virtual maintenance model

The three-dimensional digital model required to carry out virtual maintenance activities on the object.

Note. Includes virtual maintenance prototype model, virtual maintenance environment model, virtual operator model, safety factor model, etc.

3.4 virtual maintenance environment model

Relevant environment models required for virtual maintenance.

Note. It usually includes maintenance tool model, maintenance space model, maintenance flow information, temperature and humidity environment model, safety inspection environment model, etc.

3.5 virtual maintenance prototype

Dedicated to virtual maintenance simulation, it can support computer simulation of physical objects for maintainability engineering design and analysis.

3.6 Maintenance strategy planning

When performing virtual maintenance operations on maintenance objects, maintenance levels, maintenance resources, maintenance environment, etc. are comprehensively considered to formulate maintenance plans. Strategy.