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**Integration of informatization and industrialization management
systems-Classification and application guidelines for
production equipment operation control information models**

信息化和工业化融合管理体系 生产设备运行管控信息模型分类与应用指南

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Foreword

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Introduction

With the deep integration of new generation information technology and manufacturing, the value of industrial information models is becoming increasingly apparent, helping enterprises Various innovative development models such as collaborative interaction in R&D design, dynamic optimization of production and manufacturing, and remote control of operation and maintenance services have become a driving force for manufacturing.

The key factor for high-quality development of the industry.

Production equipment is the basic carrier of manufacturing activities and the core asset of manufacturing enterprises. Its operation and management level directly affects the production, Under the background of continuous improvement in the digitalization, networking and intelligence of production equipment, the operation of production equipment The level of information management and application in production control activities determines to a certain extent the effectiveness of the production equipment asset value.

Scientific management, model building and efficient application of production equipment operation control information have become the key to promoting the steady improvement of production equipment operation control level.

An effective means of upgrading.

The production equipment operation control information model refers to a model that abstractly expresses and organizes the information related to the production equipment operation control.

It is mainly used to standardize the description of information entities, entity attributes and relationships between entities involved in production equipment operation control activities.

It plays an important supporting role in the production planning and scheduling, process route planning and equipment operation and maintenance of the industry.

The classification and application of production equipment operation control information models are carried out to support the coordinated interaction and Efficient utilization will help enterprises improve their digital operation and control capabilities of production equipment and accelerate digital transformation and high-end development.

Management system integrating informatization and industrialization Classification and application of production equipment operation control information model Application Guide

1 Scope

This document gives the functional architecture of production equipment operation control, and provides the main types and descriptions of the production equipment operation control information model.

Rules, specific definitions and application guidance.

This document is applicable to manufacturing enterprises to classify and apply production equipment operation control information models, and to carry out production equipment research and development.

It provides reference and basis for equipment manufacturers, manufacturing enterprises, technical service providers, scientific research institutes, etc. for manufacturing, application management and operation maintenance.

2 Normative references

GB/T 23021-2022

GB/T 23022-2022

3 Terms and definitions

The terms and definitions defined in GB/T 23021-2022, GB/T 23022-2022 and the following apply to this document.

3.1 Information model

An organizational framework for defining, describing, and relating given information resources, covering information entities, entity attributes, and relationships between entities. System network.

[Source. GB/T 33863.1-2017, 3.2.12, modified]

3.2 information entity

The basic unit in the information model that exists objectively and has unique semantics, used to represent specific things in the real world or abstract concepts in human thinking. Elephant concept.

3.3 Production equipment operation control

In order to ensure that the production equipment operates stably and efficiently under the specified working conditions, a series of management measures and control methods are adopted to Activities that systematically plan, organize, coordinate and control all aspects of