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**General technical requirements for manufacturing equipment
intellectualization**

制造装备智能化通用技术要求

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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.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

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General technical requirements for intelligent manufacturing equipment

1 Scope

This document specifies the technical requirements and evaluation requirements for intelligent manufacturing equipment.

This document is applicable to the design, optimization, transformation and evaluation of intelligent manufacturing equipment.

2 Normative references

GB/T 17178.1-1997

GB/T 30976.2

IEC 61158

IEC 61158

IEC 61784

IEC 61784

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Equipment used in the design, production/manufacturing, management and service processes to complete specific manufacturing process (procedure) operations.

Note. Includes manufacturing equipment hardware, embedded software and intelligent software, etc.

3.2 Intellectualization

The object (device, equipment or terminal) has the ability to analyze and judge objective things reasonably, act purposefully and effectively handle the surrounding environment.

The state or process of being able to respond to environmental matters.

Note. The intelligent capabilities of manufacturing equipment are represented by intelligent features and are actually reflected through specific intelligent functions.

3.3 Services, etc

It can complete predetermined functions and tasks and exhibit various characteristics similar to human intelligence (such as reasoning and learning).

Note. Intelligent features are divided into intelligent perception, monitoring and diagnosis, adaptation and optimization, interaction and collaboration, interconnection and integration, digital modeling and simulation, and data and information

3.4 Intelligent functionintelligent function

The specific functions implemented by the manufacturing equipment (3.1) under the intelligent features (3.3).

Note. This includes the functions of the equipment itself, or the functions achieved with the help of intelligent technology and its intelligent auxiliary system.