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

GB/T 22281.2-2011

**Condition monitoring and diagnostics of machines -- Data
processing, communication and presentation -- Part 2: Data
processing**

机器的状态监测和诊断 数据处理、通信和表达 第2部分：数据处理

(English Translation)

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Foreword

GB/T 22281 "state machine monitoring and diagnostic data processing, communication and expression," or have plans to release the following sections.

--- Part 1. General;

--- Part 2. Data processing;

--- Part 3. Communication requirements.

This section GB/T 22281 Part 2.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with ISO 13374-2:2008 "state machine monitoring and diagnostic data processing, communication and expression Part 2. Data Processing "(in English).

Consistency correspondence between this part of international documents and normative references of our files are as follows.

State GB/T 22281.1-2008 machine monitoring and diagnostic data processing, communication and presentation - Part 1. General (ISO 13374-1:2003, IDT) this part of the technical content and composition structure and ISO 13374-2:2008 "state machine monitoring and diagnostic data processing, communication and tables of Part 2. Data Processing "(in English) is consistent only where needed, made a few editorial changes.

--- The "ISO 13374-2" to "GB/T 22281 Part 2 or GB/T 22281 in this section";

--- Remove the ISO 13374-2:2008 Foreword, according to China's national standard for redrafting the foreword;

--- Which has been translated into national standards with international standards in this section appears renumbered number of national standards, international standards unconverted Reserved;

--- Increase in Appendix B Table B.1, Table B.2 and Table B.3, will B.2.2, B.3.2 and B.4.2 words were placed in the table in for easy viewing.

This part is proposed by China Machinery Industry Federation.

This part of the automation systems and integration by the National Standardization Technical Committee (SAC/TC159) centralized.

This section is responsible for drafting unit. Beijing Machinery Industry Automation Research Institute.

Participated in the drafting of this section. Tsinghua University.

Introduction

Currently the machine condition monitoring and diagnostics (CMD) prepared by a variety of computer software systems, if not further integration work for, it can not conveniently exchange data or to plug and play operation. It would be difficult to integrate various systems, and it is difficult for the user to mention for a unified view of the state of the machine. GB/T 22281 Part 1 object to the first part 3 is to provide a number of open CMD the basic requirements for software architecture, so that in the absence of dedicated hardware platform or protocol of the case, CMD information can be through a variety of soft Package to process, transmit and display.

The state machine monitoring and diagnostics Data processing, communication and expression Part 2. Data Processing

1 Scope

This section GB/T 22281 details the open condition monitoring and diagnostics (Condition monitoring and diagnostics, CMD) requires reference information model architecture and the need to comply with the reference processing model. Software designers need information model and at Mathematical model, in order to fully describe all the data processing requirements. This section GB/T 22281 helps interoperability CMD system.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

State GB/T 22281.1-2008 machine monitoring and diagnostic data processing, communication and presentation - Part 1. General (ISO 13374-1:2003, IDT) ISO/IEC 14750:1999 Information technology - Open Distributed Processing - Interface Definition Language

3.1 Overview

An information architecture describes a given system or application. All objects and their characteristics (or attributes), features data class Type, object-relational data, reference data and documents. CMD an open information architecture specification shown in Figure 1 should be described Five contents of each layer.

Figure 1 CMD information architecture level