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

GB/T 22281.1-2008

**Condition monitoring and diagnostics of machines -- Data
processing, communication and presentation -- Part 1: General
guidelines**

机器的状态监测和诊断 数据处理、通信和表达 第1部分：总则

(English Translation)

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Appendix A (informative) Machinery Information Management Open Systems Alliance (MIMOSA) Specification

A.1 Overview

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Reference

Foreword

GB/T 22281/ISO 13374 "state machine monitoring and diagnostic data processing, communication and expression" consists of four parts.

--- Part 1. General;

--- Part 2. Data processing requirements;

--- Part 3. Communication requirements;

--- Part 4. express requirements.

This part of GB/T 22281/ISO 13374 "state machine monitoring and diagnostic data processing, communication and expression," Part 1.

This part identical with ISO 13374-1:2003 "state machine monitoring and diagnostic data processing, communication and presentation - Part 1.

General "(in English).

Technical content and composition and structure of this part of ISO 13374-1:2003 "state machine monitoring and diagnostic data processing, communication and tables of Part 1. General "(in English) is consistent, we made the following editorial changes.

--- The "ISO 13374-1:2003" to "GB/T 22281 Part 1 or GB/T 22281 in this section";

--- Remove the ISO 13374-1:2003 Foreword, according to China's national standard for redrafting the foreword;

--- Which has been translated into national standards with international standards in this standard appears renumbered national standard number, and the corresponding national standard International standard version uses quasi-placed in parentheses after the number of national standards, ease of use and access. International standard unconverted Quasi reserved.

Appendix A of this section is an informative annex.

This part is proposed by China Machinery Industry Federation.

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

This section is drafted. Beijing Machinery Industry Automation Research Institute.

Introduction

In the absence of extensive integration, the current machine condition monitoring and diagnostics for the preparation of a variety of computer software programs, also can not plug that way data exchange with or easy to run. It would be difficult to integrate various systems, and it is difficult to provide a machine for the user Unified view state. GB/T 22281 aims to provide the basic requirements of a number of open software specifications, so there is no specific platform or in the case of hardware protocols, machine condition monitoring data and information can be processed by various software packages, transfer and display.

Extensible Markup Language (XML) is the World Wide Web Consortium (W3C) is a project to develop the specification is currently the responsibility of the XML Working Group management. XML is a Standard Generalized Markup Language (SGML) (see GB/T 14814-1993 [1]) written in a common format for Definition describes the different types of electronic document structure. Version 1.0 specification was accepted in 1998 by the W3C, and became a W3C "Recommended Standard Quasi. "Became a W3C Recommendation means that the specification can be a long-term change, and helps network interoperability, and has been adopted W3C scrutiny of all members; these members support the academic, research and industry wide adoption of this specification. This specification by Provide a more flexible and adaptable information identification method, thereby enhancing the functionality of the network.

GB/T 22281.1-2008/ISO 13374-1:2003 the state machine monitoring and diagnostics Data processing, communication and presentation - Part 1. General

1 Scope

GB/T 22281 Part 1 is related to data processing machine condition monitoring and diagnostic information, communication and expression aspects of software compliance Fan General.

Note: GB/T 22281 in the subsequent sections (in preparation) the description of the data processing, communication and expression of specific aspects of the software specifications.

2.1 Overview

To explain the data from the machine monitoring activities, the need for the data processing and analysis. Should determine the utilization of various techniques Possible failure causes and severity, and proactive proof of these technologies to provide reasonable operation and maintenance activities.

Successful implementation of condition monitoring is recommended as shown in manual or automated data processing and information flow shown. Data stream from the top opening Beginning, eventually converted into actions taken by operations and maintenance personnel. At the top of the monitor configuration data for a variety of specialized equipment monitoring sensors.

Data collected from the recommendations of this information flow process, we need the data from the previous processing block moves to the next processing block, and the need to Collection or from an external system to an external system sends additional information. Similarly, as the evolution of the data information, the need for a standard display technologies and More simplified chart illustrates the format. Traffic data collection process from the beginning to the complex task of prognosis until the warning of the report and recommendations Measures (these reports and recommend measures for monitoring the

process itself may contain improvements) so far.

1 block of data processing and information flow

2.2.1 Machine state evaluation processing block

Evaluation of machine state can be divided into six different hierarchical processing block. The first three processing blocks associated with a particular technology, based on the specific skills required Art signal processing and data analysis capabilities. The following are some of the most common mechanical condition monitoring and diagnostic techniques.

--- Shaft displacement monitoring;

--- Bearing vibration monitoring;

GB/T 22281.1-2008/ISO 13374-1:2003