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

GB/T 22393-2015

**Condition monitoring and diagnostics of machines -- General
guidelines**

(English Translation)

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Foreword

This Standard is drafted according to the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 22393-2008 "Condition monitoring and diagnostics of machines - General guidelines" and GB/T 20471-2006 "Condition monitoring and diagnostics of machines - General guidelines on using performance parameters".

Main difference between this Standard and GB/T 22393-2008 are as follows.

- In the Instruction, DESCRIBE the current situation of condition monitoring and diagnostics, as well as current international standards and corresponding China's national standards;
- In the Normative reference, ADD ISO 13379-1 and ISO 13381-1;
- MODIFY and SUPPLEMENT "Figure 1 - Condition monitoring procedure flowchart";
- ADD "Figure 2 - System factors influencing condition monitoring";

- ADD "9.2 Quality of measurements";
- In "9.4 Diagnosis and prognosis", ADD the contents of "The possibility of carrying out diagnosis depends on the machine type, configuration, and operating conditions.", etc.
- In "10 Determine maintenance action", ADD the typical decision type;
- Machines listed in Annex A and examples of fault(s) and relevant measurement parameter(s) or technique(s) of each machine type (9 types) given in Annex B.

This Part of contents is identical to GB/T 20471-2006.

Main differences between this Standard and GB/T 20471-2006 is as follows.

- MERGE the Annex A, Annex B and Annex C of edition 2006 INTO this Standard, as the Annex A, Annex B and Annex C of this Standard, without content change.

This Standard uses translation method to identically adopt ISO 17359.2011 "Condition monitoring and diagnostics of machines - General guidelines" (English version).

China's national standards that are identical to the international documents normatively referenced in this Standard are as follows.

- GB/T 2298-2010 Mechanical vibration, shock and condition monitoring - Vocabulary (ISO 2041.2009, IDT)
- GB/T 20921-2007 Condition monitoring and diagnostics of machines - Vocabulary (ISO 13372.2004, IDT)
- GB/T 22394.1-2015 Condition monitoring and diagnostics of machines - Data interpretation and diagnostics techniques - Part 1. General guidelines (ISO 13379-1.2012, IDT)
- GB/T 27313.1-2009 Condition monitoring and diagnostics of machines - Prognostics - Part 1. General guidelines (ISO 13381-1.2004, IDT)

This Standard is proposed and shall be under the jurisdiction of National Technical Committee on Mechanical Vibration, Shock and Condition Monitoring of Standardization Administration Of China (SAC/TC 53).

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The previous edition of the standards replaced by this Standard are as follows.

- GB/T 22393-2008;
- GB/T 20471-2006.

Condition monitoring and diagnostics of machines -
General guidelines

1 Scope

This Standard sets out guidelines for the general procedures to be considered when setting up a condition monitoring programme for machines and includes references to associated standards required in this process.

This Standard applies to all machines.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2041 Mechanical vibration, shock and condition monitoring - Vocabulary

ISO 13372 Condition monitoring and diagnostics of machines - Vocabulary

ISO 13379-1 Condition monitoring and diagnostics of machines - Data interpretation and diagnostics techniques - Part 1. General guidelines

ISO 13381-1 Condition monitoring and diagnostics of machines - Prognostics - Part

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 2041, ISO

13372 and the following apply.

3.1

equipment

Machine or group of machines including all machine or process control components.

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