

Condition monitoring and diagnostics of machines — Requirements for training and certification of personnel —

**Part 1: Requirements for certifying
bodies and the certification process**

ICS 03.100.30; 17.160

National foreword

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The UK participation in its preparation was entrusted by Technical Committee GME/21, Mechanical vibration and shock, to Subcommittee GME/21/7, Condition monitoring, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

Cross-references

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Summary of pages

This document comprises a front cover, an inside front cover, the ISO title page, pages ii to v, a blank page, pages 1 to 12, an inside back cover and a back cover.

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Condition monitoring and diagnostics of machines — Requirements for training and certification of personnel —

Part 1: Requirements for certifying bodies and the certification process

*Surveillance et diagnostic d'état des machines — Exigences relatives à
la formation et à la certification du personnel —*

*Partie 1: Exigences relatives aux organismes de certification et au mode
opérateur de certification*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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ISO 18436-1 was prepared by Technical Committee ISO/TC 108, *Mechanical vibration and shock*, Subcommittee SC 5, *Condition monitoring and diagnostics of machines*.

ISO 18436 consists of the following parts, under the general title *Condition monitoring and diagnostics of machines — Requirements for training and certification of personnel*:

- *Part 1: Requirements for certifying bodies and the certification process*
- *Part 2: Vibration condition monitoring and diagnostics*

The following parts are under preparation:

- *Part 3: Requirements for training bodies*
- *Part 4: Lubrication management and analysis*
- *Part 5: Thermography*
- *Part 6: Diagnostics and prognostics*
- *Part 7: Condition monitoring specialists.*

Introduction

Condition monitoring and diagnostics of machines are integral parts of an effective maintenance programme. Non-intrusive technologies used in condition monitoring and fault diagnosis include vibration, infrared thermography, lubrication, oil analysis, acoustic and ultrasonic analysis, and electric current analysis. In many instances these technologies act as complimentary condition-analysis tools. The skills and expertise of the practitioners performing the measurements and analysing the data are critical to the effective application of these technologies.

This part of ISO 18436 defines the requirements for bodies operating certification systems in the non-intrusive machine condition monitoring, diagnostic, and correction technologies. General requirements for certification body personnel are contained in this part of ISO 18436. Specific requirements for personnel in condition monitoring and diagnostics will be contained in subsequent parts of ISO 18436.