

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

Part 2: Vibration condition monitoring and diagnostics

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National foreword

This British Standard reproduces verbatim ISO 18436-2:2003 and implements it as the UK national standard.

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

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Part 2: Vibration condition monitoring and diagnostics

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

Partie 2: Surveillance des vibrations et diagnostic d'état des machines



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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 18436-2 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

Vibration analysis using measurements to monitor condition and diagnose faults in machinery has become a key activity in predictive maintenance programmes for most industries. Other non-intrusive technologies including infrared thermography, acoustic emission, lubricant analysis and motor current analysis, are used as complementary condition analysis tools. Those in the manufacturing industry who have diligently and consistently applied these techniques have experienced a return on investment far exceeding their expectations. However, the effectiveness of these programmes depends on the capabilities of individuals who perform the measurements and analyse the data.

This part of ISO 18436 defines the requirements against which personnel in the non-intrusive machine condition monitoring and diagnostics technologies associated with vibration analysis are to be certified and the methods of testing such personnel. Conformity assessment for certification in vibration analysis will be performed by a body accredited to the requirements of ISO 18436-3.

