### BS ISO 18436-3:2012



**BSI Standards Publication** 

## Condition monitoring and diagnostics of machines — Requirements for qualification and assessment of personnel

Part 3: Requirements for training bodies and the training process

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The UK participation in its preparation was entrusted to Technical Committee GME/21/7, Mechanical vibration, shock and condition monitoring - Condition monitoring.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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### Condition monitoring and diagnostics of machines — Requirements for qualification and assessment of personnel -

### Part 3: Requirements for training bodies and the training process

Surveillance et diagnostic d'état des machines — Exigences relatives à la qualification et à l'évaluation du personnel —

Partie 3: Exigences relatives aux organismes de formation et au processus de formation



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 18436-3 was prepared by Technical Committee ISO/TC 108, *Mechanical vibration, shock and condition monitoring*, Subcommittee SC 5, *Condition monitoring and diagnostics of machines*.

This second edition cancels and replaces the first edition (ISO 18436-3:2008), which has been technically revised. It also incorporates the Amendment ISO 18436-3:2008/Amd. 1:2009.

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

- Part 1: Requirements for assessment bodies and the assessment process
- Part 2: Vibration condition monitoring and diagnostics
- Part 3: Requirements for training bodies and the training process
- Part 4: Field lubricant analysis
- Part 5: Lubricant laboratory technician/analyst
- Part 6: Acoustic emission
- Part 7: Thermography

The following part is under preparation:

- Part 8: Ultrasound
- The following part is planned:
- Part 9: 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, oil and wear debris analysis, acoustic and ultrasonic analysis, and electrical signature analysis. In many instances these technologies act as complementary condition monitoring 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 training programmes in the non-intrusive machine condition monitoring, diagnostic, and correction technologies. General requirements for training body personnel are contained in this part of ISO 18436. Specific requirements for personnel in condition monitoring and diagnostics are covered in other parts of ISO 18436.

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### Condition monitoring and diagnostics of machines — Requirements for qualification and assessment of personnel —

# Part 3: **Requirements for training bodies and the training process**

### 1 Scope

This part of ISO 18436 defines the requirements for bodies operating training programmes for personnel who perform machinery condition monitoring, identify machine faults, and recommend corrective action. Procedures for training of condition monitoring and diagnostics personnel are specified.

### 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 9000, Quality management systems — Fundamentals and vocabulary

ISO 13372, Condition monitoring and diagnostics of machines — Vocabulary

ISO 18436 (all relevant parts), Condition monitoring and diagnostics of machines — Requirements for qualification and assessment of personnel

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 9000 and the following apply.

### 3.1 administrative committee advisory committee committee advising a training body

3.2

### certificate of completion

written testimony of completion of training issued under the rules of a training programme

### 3.3

invigilator

person authorized by the training body to supervise examinations

#### 3.4

#### technical training committee

committee organized by a training body to direct the technical aspects of a training programme

### 3.5

#### trainer

person with relevant technical and personal qualifications who is entrusted with training candidates for qualification