

## Overview

This standard is about applying condition monitoring techniques to an engineering component or asset.

You will need to be able to monitor components and assets to determine their condition. You are then expected, if necessary, to take appropriate actions whilst adhering to health and safety legislation, regulations and safe working practices.

In the context of this standard, your responsibility is to interpret and work within given specifications, using techniques and making variations to achieve the best possible result. In some cases, you may still be expected to refer to others for final authorisation, even though you remain responsible for identifying and implementing decisions.

Who this standard is for:

This standard is for condition monitoring practitioners.

## Performance criteria

### *You must be able to:*

1. work safely at all times, complying with health, safety, environmental and other relevant legislation, regulations, guidelines and local rules or procedures
2. ensure that the work environment, material, tools and condition monitoring equipment and instrumentation are suitably prepared for the work activities to be undertaken
3. obtain and interpret the required information and specifications using drawings and other relevant sources
4. correctly set up the condition monitoring equipment and check for calibration
5. determine the correct use, care and security of relevant tools and equipment you use
6. obtain and adhere to the relevant specifications including method statements
7. carry out the condition monitoring activities
8. ensure that the collected sample or measurement is representative, sufficient and not spurious
9. adjust the monitoring instrumentation to assist in diagnosis
10. record and review the samples or measurements and take appropriate actions
11. remove and retain any faulty components for further investigation, where appropriate
12. report immediately any findings that indicate the asset is in a dangerous condition
13. ensure the work area is reinstated deal promptly and effectively with problems within your control and report those that have been and those that cannot be solved

## Knowledge and understanding

### *You need to know and understand:*

1. relevant legislative, regulatory and local requirements or procedures and safe working practices
2. preparation and reinstatement requirements in respect of the work area, material, and equipment, and the possible consequences of incorrect actions in these areas
3. relevant engineering drawings, related specifications, quality standards and manufacturers' information
4. what constitutes normal performance and condition standards of specific assets and abnormal performance and fault types
5. the condition monitoring techniques and **monitoring activities** that are being used
6. monitoring equipment settings, operation and care
7. correct use of specified **sample collection or measurement points**
8. specified sampling intervals and what influences these periods
9. the types of disruption which can occur during monitoring and measures taken to minimise disruption
10. understand how taking data from un-specified collection points impacts on the outcomes
11. authorised procedures relating to checking the calibration of equipment in accordance with required codes or standards
12. quality control systems and documentation procedures
13. the correct use of relevant tools and equipment and your individual responsibility for the use, care, and security of those you use your responsibilities with regard to reporting lines and procedures in your working environment

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## Glossary