

COGPEM41 - SQA Unit Code FP79 04

Interpret detailed mechanical information from technical sources



Overview

This unit is about your competence in interpreting information from drawings, diagrams and technical manuals. You will be required to ensure the information is accurate, up to date and contains all the data. You will also be required to identify and deal with any problems that may arise. This unit deals with the following:

- 1 Interpret detailed mechanical information from technical sources

During this work you must take account of the relevant worksite operational requirements, procedures and safe working practices AS THEY APPLY TO YOU.

Previous Version:

This unit is a contextualised version of a unit produced by the OSC Eng Engineering Competence Standards which was Originally Designated ECS 1.12

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Performance criteria

- You must be able to:*
- P1 use up-to-date, accurate and relevant information on technical requirements
 - P2 ensure that the information contains all essential data
 - P3 identify and interpret the required details
 - P4 identify and deal promptly and effectively with any problems occurring with the requirements and their interpretation

Knowledge and understanding

You need to know and understand:

- K1 you must have a working knowledge and understanding of the information and document systems that relate to the maintenance of mechanical plant and equipment
- K2 you must have a working knowledge and understanding of the document care and control procedures in line with the company and manufactures procedures
- K3 you must have a working knowledge and understanding of the specification structure and content
- K4 you must have a working knowledge and understanding of the conventions, symbols and abbreviations as used within the oil and gas, chemicals manufacturing and petroleum industries. This could include: British Standards, Codes of Practice, International Standards, company specific, manufacture specific
- K5 you must have a working knowledge and understanding of the standards and regulations that relate to the maintenance of mechanical plant and equipment
- K6 you must have a working knowledge and understanding of your responsibilities with regard to the reporting lines and procedures in your environment

Additional Information

Scope/range related to performance criteria

- 1 The level and extent of responsibility will involve you being responsible for ensuring that the source information is obtained from the latest version. In some cases you may be expected to refer to others when checking the data even though you remain responsible for the final product.
- 2 The complexity of technical detail could include:
 - 2.1 Pneumatic schematics
 - 2.2 Process & instrumentation diagrams (P&ID's)
 - 2.3 Hydraulic schematics
- 3 The technical problems and issues will vary from solving simple single line diagrams to more complex drawings and specifications provided by the manufacture.
- 4 The use and interpretation of information
- 5 The type and complexity of technical sources

Scope/range related to knowledge and understanding

The Knowledge and Understanding levels expressed indicate the minimum level of knowledge and understanding sufficient to perform your role in a manner that would normally be associated with the minimum acceptable performance of a competent person undertaking your role.

The expression "working knowledge and understanding" indicates you are able to:

- 1 Identify and apply relevant information, procedures and practices to your usual role in your expected working environments needing only occasional recourse to reference materials
- 2 Describe, in your own words, the principles underlying your working methods. This does not mean the ability to quote "Chapter and verse". Rather you must know what supporting information is available, how and where to find it and from whom to seek further guidance and information confirm any additional required detail
- 3 Interpret and apply the information obtained to your role, your working practice and in your expected working environment

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Suite Process Engineering Maintenance

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