
Overview

This standard identifies the competencies you need to work efficiently and effectively in the work place, in accordance with approved procedures and practices. Prior to undertaking the engineering activity, you will be required to carry out all necessary preparations within the scope of your responsibility. This may include preparing the work area and ensuring that it is in a safe condition to carry out the intended activities, ensuring you have the appropriate job specifications and instructions, and ensuring that any tools, equipment, materials and other resources required are available and in a safe and usable condition.

On completion of the engineering activity, you will be required to return your immediate work area to an acceptable condition before recommencing further work requirements. This may involve placing completed work in the correct location, returning and/or storing any tools and equipment in the correct area, identifying any waste and/or scrapped materials and arranging for their disposal, and reporting any defects or damage to tools and equipment used.

In order to be efficient and effective in the workplace, you will also be required to demonstrate that you can create and maintain effective working relationships with colleagues and line management. You will be expected to review objectives and targets for your personal development and make recommendations and communicate any opportunities for improvements that could be made to working practises and procedures.

Your responsibilities will require you to comply with health and safety requirements, organisational policy and procedures for the engineering activities undertaken, and to report any problems with the activities, tools or equipment that you cannot personally resolve, or are outside your permitted, authority to the relevant people. Working with minimal supervision you will be expected to take personal responsibility for your own actions and for the quality and accuracy of the work that you carry out.

Your underpinning knowledge will provide a good understanding of your work, and will provide an informed approach to working efficiently and effectively in an engineering environment. You will understand the need to work efficiently and effectively, and will know about the areas you need to consider when preparing and tidying up the work place, how to recommend improvements, deal with problems, maintain effective working relationships and agree your development objectives and targets, in adequate depth to provide a sound basis for carrying out the activities safely and correctly.

You will understand the safety precautions required when carrying out

SEMMAN3-03 - SQA Unit Code FR0T 04

Working efficiently and effectively in engineering

engineering activities. You will be required to demonstrate safe working practices throughout, and will understand the responsibility you owe to yourself and others in the workplace.

SEMMAN3-03 - SQA Unit Code FR0T 04

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Performance criteria

- You must be able to:*
- P1 work safely at all times, complying with health and safety and other relevant regulations and guidelines
 - P2 prepare the work area to carry out the engineering activity
 - P3 check there are sufficient supplies of materials and/or consumables and that they meet work requirements
 - P4 ensure completed products or resources are stored in the appropriate location on completion of the activities
 - P5 tidy up the work area on completion of the engineering activity
 - P6 deal promptly and effectively with problems within your control and report those that cannot be resolved
 - P7 contribute to and communicate opportunities for improvements to working practises and procedures
 - P8 maintain effective working relationships with colleagues
 - P9 review personal training and development as appropriate to the job role

SEMMAN3-03 - SQA Unit Code FR0T 04

Working efficiently and effectively in engineering

Knowledge and understanding

You need to know and understand:

- K1 the safe working practices and procedures to be followed whilst preparing and tidying up your work environment
- K2 the correct use of any equipment to protect the health and safety of you and your colleagues
- K3 the procedure for ensuring that all documentation relating to the work being carried out is available and current, prior to starting the activity
- K4 the action that should be taken if documentation received is incomplete and/or incorrect
- K5 the procedure for ensuring all tools and equipment are available prior to undertaking the activity
- K6 the checks to be carried out to ensure tools and equipment are in full working order, prior to undertaking the activity
- K7 the action that should be taken if tools and equipment are not in full working order
- K8 the checks to be carried out to ensure all materials and resources required are correct and complete, prior to undertaking the activity
- K9 the action that should be taken if materials/resources do not meet the requirements of the activity
- K10 whom to inform when the work activity has been completed
- K11 the information and/or documentation require to confirm with others that the activity has been completed
- K12 what materials, resources, equipment and tools can be re-used
- K13 how any waste materials and/or products are transferred, stored and disposed of
- K14 where tools and equipment should be stored and located
- K15 the importance of making recommendations to improving working practises
- K16 the procedures and format for making suggestions for improvements
- K17 what the benefits are to you and the organisation if improvements can be identified and implemented
- K18 the importance of maintaining effective working relationships within the workplace
- K19 the procedures to deal with and reporting any problems that can affect working relationships
- K20 the difficulties that can occur in working relationships and how to resolve them
- K21 the regulations that affect how you should be treated at work (such as Equal Opportunities Act, Race, Disability and Sex Discrimination, Working Time Directive)
- K22 the benefits of continuous personal development
- K23 the training opportunities that are available in the workplace
- K24 the importance of reviewing your training and development
- K25 with whom to discuss training and development issues

SEMMAN3-03 - SQA Unit Code FR0T 04

Working efficiently and effectively in engineering

K26 the extent of your own responsibility and whom you should report to if you have any problems that you cannot resolve

SEMMAN3-03 - SQA Unit Code FR0T 04

Working efficiently and effectively in engineering

Additional Information

Scope/range related to performance criteria

- You must be able to:*
1. prepare to carry out the engineering activity, ensuring **all** of the following, as applicable to the work to be undertaken:
 - 1.1 the work area is free from hazards and suitably prepared for the activities to be undertaken
 - 1.2 any required safety procedures are implemented
 - 1.3 any necessary personal protection equipment (PPE) is obtained and is in a usable condition
 - 1.4 tools and equipment required are obtained and checked that they are in a safe and useable condition
 - 1.5 all necessary drawings, specifications and associated documentation is obtained
 - 1.6 job instructions are obtained and understood
 - 1.7 the correct materials, components or resources are obtained
 - 1.8 storage arrangements for work are appropriate
 - 1.9 appropriate authorisation to carry out the work is obtained
 2. complete work activities, to include **all** of the following as applicable to the work undertaken:
 - 2.1 returning tools and equipment
 - 2.2 returning drawings and work instructions
 - 2.3 arranging for the safe disposal of waste materials
 - 2.4 completing all necessary documentation accurately and legibly
 - 2.5 identifying, where appropriate, any unusable tools, equipment, components or other resources
 3. make recommendations for improving **two** of the following:
 - 3.1 working practises
 - 3.2 working methods
 - 3.3 quality
 - 3.4 safety
 - 3.5 tools and equipment
 - 3.6 supplier relationships
 - 3.7 internal communication
 - 3.8 customer service
 - 3.9 training and development
 - 3.10 teamwork
 - 3.11 other specific opportunity
 4. deal with problems affecting the engineering process, to include **two** of the following:
 - 4.1 materials
 - 4.2 job specification

SEMMAN3-03 - SQA Unit Code FR0T 04

Working efficiently and effectively in engineering

- 4.3 timescales
- 4.4 tools and equipment
- 4.5 quality
- 4.6 safety
- 4.7 drawings
- 4.8 people
- 4.9 activities or procedures
- 5. maintain effective working relationships, to include **two** of the following:
 - 5.1 colleagues within own working group
 - 5.2 line management
 - 5.3 people outside your normal working group
 - 5.4 external contacts
- 6. review personal development objectives and targets, to include **one** of the following:
 - 6.1 dual or multi-skilling
 - 6.2 understanding of company working practices, procedures, plans and policies
 - 6.3 training on new equipment/technology
 - 6.4 increased responsibility
 - 6.5 other specific requirements

SEMMAN3-03 - SQA Unit Code FR0T 04

Working efficiently and effectively in engineering

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Suite

- AERONAUTICAL ENGINEERING SUITE 3 2008
- AERONAUTICAL ENGINEERING SUITE 3 2009
- AUTOMOTIVE ENGINEERING SUITE 3 2008
- Composite Engineering Suite 3
- ELECTRICAL AND ELECTRONIC ENGINEERING SUITE 3 2004
- ENGINEERING MAINTENANCE SUITE 3 2008
- ENGINEERING TECHNICAL SUPPORT SUITE 3 2009
- ENGINEERING TOOLMAKING SUITE 3 2005
- ENGINEERING WOODWORKING, PATTERN AND MODEL MAKING SUITE 3 2002
- Fabrication and Welding Suite 3
- INSTALLATION AND COMMISSIONING SUITE 3 2003
- MARINE ENGINEERING SUITE 3
- MATERIALS PROCESSING AND FINISHING SUITE 3 2003
- MECHANICAL MANUFACTURING ENGINEERING SUITE 3 2008
- MATERIALS PROCESSING AND FINISHING SUITE 3
- METAL PROCESSING AND ALLIED OPERATIONS SUITE 3
- ELECTRICAL AND ELECTRONIC ENGINEERING SUITE 3

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SEMMAN3-03 - SQA Unit Code FR0T 04

Working efficiently and effectively in engineering

company practices and procedures