

Overview

This standard identifies the competencies you need to work efficiently and effectively in the engineering workplace, 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. 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.

Performance criteria

You must be able to:

1. access and accurately interpret all relevant work instructions and information
2. work safely at all times and in accordance with all relevant legislation, guidelines, policies, procedures and protocols
3. ensure you are prepared to carry out the work safely in accordance with organisational requirements
4. deal promptly and effectively with any problems within your control and report those which cannot be solved
5. identify and minimise hazards and risk in the workplace
6. complete work activities safely in accordance with organisational requirements
7. complete and store all relevant documentation in accordance with organisational requirements
8. prepare the work area to carry out the engineering activity
9. obtain all necessary consumables, tools or equipment and check that they are in a safe and usable condition
10. ensure finished products or resources are stored in the appropriate location on completion of the activities
11. contribute to and communicate opportunities for improvements to working practises, processes and/or procedures
12. develop and maintain effective working relationships with colleagues and others
13. review personal development and training as appropriate to the job role

Knowledge and understanding

You need to know and understand:

1. the current legislation, guidelines, policies, procedures and protocols which are relevant to your work practice and to which you must adhere
2. the scope and limitations of your own competence, responsibilities and accountability as it applies to your job role
3. how to access and interpret all relevant work instructions and information
4. specific procedures for reporting issues which are beyond your competence, responsibilities and accountability
5. the duty to report any acts or omissions that could be unsafe/detrimental to you or others
6. the hazards and risks which may arise during the execution of your work role and how you can minimise these
7. the range of work activities for which you are responsible
8. how to complete and safely store all relevant documentation in accordance with organisational requirements
9. the correct use of any equipment and PPE to protect the health and safety of you and your colleagues
10. the planning and preparation required to carry out the engineering activity
11. the procedure for ensuring that all documentation relating to the work being carried out is available and current, prior to starting the activity
12. the procedure that should be followed if documentation received is incomplete and/or incorrect
13. the procedure for ensuring all tools and equipment are available and safe to use prior to undertaking the activity, and suitable for the intended purpose
14. the checks to be carried out to ensure tools and equipment are in full working order, prior to undertaking the activity
15. the action that should be taken if tools and equipment are not in full working order
16. the checks to be carried out to ensure all materials and resources required are correct and complete, prior to undertaking the activity
17. the action that should be taken if materials/resources do not meet the requirements of the activity
18. the information and/or documentation require to confirm with others that the

activity has been completed

19. the measures that can be put into place to reduce waste
20. how waste materials and/or products are transferred, stored and disposed of
21. where tools and equipment should be stored and located and the importance of returning all tools and documentation to their designated areas on completion of work activities
22. the importance of taking responsibility for identifying and suggesting improvements to working practices
23. the procedures for making suggestions for improvements
24. what the benefits are to you and the organisation if improvements can be identified and implemented
25. the importance of developing and maintaining effective working relationships within the workplace
26. the procedures to deal with and report any problems that can affect working relationships
27. the difficulties that can occur in working relationships and how to resolve them
28. why it is important to be open, honest and report any errors or mistakes
29. the regulations that affect how you should be treated at work
30. the importance of respect, diversity and inclusion in the workplace
31. the benefits of continuous personal development and the training opportunities that are available to you in the workplace
32. the importance of regularly reviewing your training and development
33. the need to adhere to timescales set for work, whilst maintaining appropriate quality standards, and the implications if these are not kept
34. the reason for informing others of the activities which may have an impact on their work
35. when to act on your own initiative and when to seek help and advice from others
36. the importance of leaving the work area in a safe condition on completion of the work activities

Scope/range

1. Prepare to carry out the work activity, ensuring all of the following, as applicable to the work to be undertaken:
 - the work area is free from hazards and suitably prepared for the activities to be undertaken
 - any required safety procedures are implemented
 - any necessary personal protection equipment (PPE) is obtained and is in a usable condition
 - tools and equipment required are obtained and checked that they are in a safe and useable condition
 - all necessary drawings, specifications and associated documentation is obtained
 - work instructions and information are obtained and understood
 - the correct materials, components or resources are obtained
 - 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:
 - returning tools and equipment to the designated location
 - returning drawings and work instructions to the designated location
 - disposing of waste materials in line with organisational and environmental requirements
 - completing all necessary documentation accurately in accordance with organisational requirements
 - identifying, where appropriate, any unusable tools, equipment, components or other resources
 - storage arrangements for work are appropriate
 - ensuring the work area is left in a clean, tidy and safe condition

3. Communicate opportunities for improvements to working practises, processes and/or procedures for two of the following:
 - working practices
 - working methods
 - waste
 - energy utilisation
 - time
 - cost
 - equipment performance or condition
 - engineering designs
 - quality
 - safety
 - tools and equipments
 - supplier relationships
 - communication
 - customer service
 - training and development
 - teamwork
 - other specific opportunity

4. Identify and deal with problems affecting the work activity, to include two of the following:
 - materials
 - job specification
 - time
 - scale
 - tools and equipment
 - quality
 - safety
 - drawings
 - people
 - work activities or procedures
 - other (to be specified)

5. Maintain effective working relationships, to include two of the following:
 - colleagues within own working group
 - line management
 - people outside your normal working group
 - senior management
 - external contacts

6. Review personal development and training objectives to include one of the following:

- dual or multi-skilling
- understanding of company working practices, procedures, plans and policies
- training on new equipment/technology
- increased responsibility
- environmental impacts
- using feedback and advice to improve your personal development and performance objectives
- providing information about your work progress and expectations towards identified objectives
- contribute to improvements on work processes
- continued professional development (CPD) activities
- adaptable to organisational change
- other specific requirements

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Relevant Occupations Engineer, Engineering, Engineering and Manufacturing Technologies

Suite Aeronautical Engineering Suite 2, Aeronautical Engineering Suite 3, Automotive Engineering Suite 3, Composite Engineering Suite 2, Composite Engineering Suite 3, Electrical and Electronic Engineering Suite 3, Engineering Woodworking, Pattern and Model Making Suite 3, Fabrication and Welding Engineering Suite 3, Fabrication and welding suite 3, Marine Engineering Suite 2, Marine Engineering Suite 3, Non Destructive Testing, Smart Metering, Wind Turbines, Engineering Technical Support Suite 2, Engineering Technical Support Suite 3, Engineering Maintenance Suite 3, Engineering Maintenance and Installation Suite 2, Engineering Toolmaking Suite 3, Installation and Commissioning Suite 3, Mechanical Manufacturing Engineering Suite 2, Mechanical Manufacturing Engineering Suite 3, Advanced Manufacturing, Semiconductor Manufacturing

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