

Overview

This standard is for people who maintain electrical systems (ac/dc) and equipment.

The person carrying out this work must be able to carry out maintenance activities in accordance with procedures ***and*** the current versions of the appropriate industry standards and regulations, the specification; industry recognised working practices, the working environment and the natural environment.

They must understand and apply the correct methods and procedures for the maintenance of electrical systems and equipment, including:

- routine and non-routine maintenance
- the identification and use of the correct instruments
- how to identify and locate faults
- how to rectify the faults that are identified, located and diagnosed
- the completion of the relevant documentation
- the recording of relevant data and information.

Performance criteria

You must be able to:

1. obtain clear and detailed information about the electrical system and equipment to be maintained from relevant:
 - sources of information
 - documentation
2. confirm a programme of work with the relevant people in accordance with organisational procedures
3. advise the relevant people clearly and accurately about the potential disruption and consequences of carrying out the maintenance activity
4. determine and obtain the resources required, as relevant, to undertake the maintenance activity
5. select the instruments to be used
6. confirm that the instruments are fit for purpose and have a current calibration certificate
7. identify the correct means of electrical isolation prior to commencing the maintenance activity
8. complete safe isolation as and when required to ensure the safe maintenance of electrical cables, conductors and/or wiring system and the associated equipment, accessories and components
9. comply with industry practices and organisational procedures to ensure the co-ordination of site services and the activities of other trades affected by the maintenance activity
10. carry out maintenance activity
11. repair, remove, replace and/or maintain in accordance with industry practices:
 - electrical cables, conductors and/or wiring systems

Maintain electrical systems and equipment

- equipment, accessories and components
12. ensure, if the maintenance activity cannot be completed immediately, the safety of the relevant:
- electrical cables, conductors and/or wiring systems
 - equipment, accessories and components
13. complete the specified maintenance activity in accordance with industry recognised methods and practices
14. inspect and test, as appropriate and in accordance with industry recognised methods and practices the repaired, replaced and/or maintained:
- electrical cables, conductors and/or wiring system
 - equipment, accessories and components
15. provide clear and accurate information to relevant people about the electrical system and equipment in terms of:
16. hand over to the customer/client
- any variations to the original system and/or its equipment
 - customer/client acceptance of the completed work in accordance with organisational procedures
 - relevant documentation being completed and recorded in the appropriate information systems in accordance with organisational procedures

Knowledge and understanding

You need to know and understand:

1. the operation, applications, advantages and limitations of different electrical systems
2. how to obtain clear and detailed information about the electrical system and equipment to be maintained from relevant:
 - sources of information
 - documentation
3. the organisational procedures and industry practices when carrying out the maintenance activity for:
 - advising the relevant people about the potential disruption and consequences
 - confirming a programme of work with the relevant people
 - ensuring the coordination of site services and the activities of other trades affected
4. how to determine and obtain the resources required to undertake the maintenance activity
5. how to select the instruments to be used
6. how to confirm that the instruments are fit for purpose and have a current calibration certificate
7. the correct procedures for safe isolation
8. the techniques for the maintenance of electrical systems and equipment including how to identify, locate, diagnose and rectify faults
9. how to repair, remove, replace and maintain, in accordance with industry practices:
 - electrical cables, conductors and/or wiring system
 - equipment, accessories and components
10. how to ensure, if the maintenance activity cannot be completed immediately, the

Maintain electrical systems and equipment

safety of the relevant:

- electrical cables, conductors and/or wiring system
- equipment, accessories and components

11. the methods and processes to inspect and test, as appropriate and in accordance with industry practices the repaired, replaced and/or maintained:

- electrical cables, conductors and/or wiring system
- equipment, accessories and components

12. how to provide clear and accurate information to relevant people about the electrical system and equipment in terms of:

- hand over to the customer/client
- any variations to the original system and/or its equipment
- customer/client acceptance of the completed work in accordance with organisational procedures
- relevant documentation being completed and recorded in the appropriate information systems in accordance with organisational procedures

BSEET09

Maintain electrical systems and equipment



Scope/range related to performance criteria