ECIMPSM03
Carry out planned maintenance procedures on mechanical plant and equipment to meet operating requirements

Overview

This standard is about carrying out planned maintenance procedures on engineering construction mechanical plant and equipment.

You will need to be able to carry out planned maintenance activities in the specified sequence and in an agreed timescale 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, selecting 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.

This standard is for

This standard is for mechanical maintenance technicians.

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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 legislation, regulations, guidelines and local rules or procedures

P2 ensure that the **work environment, assets**, equipment and materials are suitably prepared for the activities to be undertaken

P3 follow maintenance procedures to carry out the required work within the relevant area of responsibility

P4 carry out maintenance activities in the specified sequence in an agreed timescale

P5 report any instance where the maintenance activities cannot be fully met or where there are identified defects outside the planned scope of work

P6 complete maintenance records accurately and pass them to the appropriate person

P7 **reinstate the work area**

P8 deal promptly and effectively with **problems** within your control and report those that cannot be solved

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Knowledge and understanding

You need to know and understand:

K1 relevant legislative, regulatory and local requirements or procedures and safe working practices

K2 preparation and reinstatement requirements in respect of the work area, material, and equipment, and the possible consequences of incorrect actions in these areas

K3 **maintenance procedures** and related specifications and where these are kept or how to access them

K4 understand the tools and techniques used to carry these out

K5 maintenance records and related documentation procedures

K6 your responsibilities for ensuring care and security of tools and equipment used

K7 your responsibilities with regard to reporting lines and procedures in your working environment

Additional Information

Scope/range

Work environment

Typical work environments could include:

1 at height
2 confined spaces
3 controlled operational and offshore installations
4 designated work areas
5 engineering construction sites
6 existing plants and structures
7 fabrication workshops
8 nuclear sites
9 onshore and offshore installations
10 potential explosive atmospheres
11 shafts
12 shipyards
13 tunnels
14 working inside plant and systems
15 working on access structures (scaffold)

Assets

This term could include:

1 components of process systems
2 compressors
3 engines
4 heat exchangers
5 HVAC systems
6 pumps
7 pressure vessels
8 protection devices
9 rotating equipment and tools
10 transmission systems
11 turbines

Reinstate the work area

This term could include:

1 returning the work area to a safe condition
2 correctly disposing of waste materials
3 storage of re-usable materials, consumables and equipment in accordance with appropriate procedures
4 completion of all necessary documentation

Problems

The types of problems could include identifying errors in:

1 incorrect replacement components
2 the maintenance procedure(s)
3 related documentation
4 related drawings

Maintenance procedures

Typical procedures could include the following activities:

1 checking and adjusting mechanical/hydraulic/pneumatic movements/components
2 checking tensions
3 checking outputs
4 cleaning
5 condition based (vibration/temperature/pressure)
6 inspection for damage/wear/corrosion/movement/excessive fit tolerances
7 lubricating
8 recording data
9 replacement of regularly changed `lifed' components (bearings/filters, charts, etc)
10 replacement of worn/damaged/corroded components
11 replenishment/checking levels of consumables
12 safety limits checks
13 tightening of connections/fasteners

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