

COGPPRO26

Unit 26: Maintain the Condition of Process Equipment within Polymer Processing and Related Operations



Overview

This unit is for those with responsibility to maintain the condition of process equipment with the candidate's responsibility limited to working within a detailed specification and following clearly defined procedures under both operational and non-operational conditions. In some cases, the candidate may still be expected to refer to others for final authorisations, even though responsibility for identifying and implementing decisions remains with the candidate.

Relevant factors which, when present individually or in combination, define the unit and describe relevant applications. The assets to be maintained are single technology and/or most components are robust. The maintenance procedures to be followed are pre-defined, clearly specified and can be readily implemented.

This unit deals with the following:

1. Remove components from process equipment
2. Replace process equipment components
3. Establish compliance with specifications for processing

During this work you must take account of the relevant worksite operational requirements, procedures and safe working practices as they apply to you.

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Performance criteria

You must be able to:

- P1 Work safely at all times, complying with health and safety, environmental and other relevant regulations, legislations and guidelines
- P2 Establish, and where appropriate, mark component orientation for re-assembly
- P3 Ensure that any stored energy or substances are released safely and correctly
- P4 **Remove** the required **components** using approved tools and techniques
- P5 Take suitable precautions to prevent damage to components, tools and equipment during removal
- P6 Check the condition of the **removed** components and record those that will require replacing
- P7 Label and store the **removed** components in an appropriate location
- P8 Store or discard the **removed** components in accordance with approved procedures
- P9 Maintain documentation in accordance with organisational requirements
- P10 Obtain all the required components and ensure that they are in a suitable condition for replacement and fit for purpose
- P11 Ensure that any replacement components used meet the required specification
- P12 Take adequate precautions to prevent damage to components, tools and equipment during replacement
- P13 Replace the components in the correct sequence using appropriate tools and techniques
- P14 Make any necessary settings or adjustments to the components to ensure they will function correctly
- P15 Follow and make appropriate use of the specifications for the **product or asset** being checked
- P16 Use all the correct tools and inspection equipment and check that they are in useable condition
- P17 Carry out the **checks** in an appropriate sequence using approved methods and procedures
- P18 Identify and assess any defects or variations from the specifications and take appropriate action
- P19 Report completion of compliance activities in line with organisational procedures
- P20 Deal with **problems** within your responsibility and report any you cannot deal with in accordance with company procedures

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Knowledge and understanding

You need to know and understand:

- K1 The specific organisational health, safety and environmental policies and other **regulations, legislation and guidelines** for your work area and why they are important
- K2 The different types potential **hazards**, how they can be minimised and the action to take in the event of a work area hazard
- K3 What the workplace procedures are for reporting potential **hazards** you are unable to deal with
- K4 When, which and how personal protective equipment should be used
- K5 The importance of checking equipment, how to do this and to whom you should report defects
- K6 What risks are associated with the working environment
- K7 What risk control measures are in place and how to comply with them
- K8 Where to find **work procedures** and production requirements and how to interpret these
- K9 What sort of documents are kept and how to complete them and the implications of not maintaining them accurately and legible
- K10 The importance of disposing of waste **materials** safely and how to do this
- K11 The sorts of **problems** that might occur and who you should report these to
- K12 The purpose and importance of **quality assurance** checks, and when and how these should be carried out
- K13 The procedures to follow in the event of emergencies or hazardous occurrences
- K14 Your responsibilities for your own safety and that of your colleagues
- K15 Where to locate maintenance schedules and related specifications
- K16 How to interpret the maintenance schedules and specifications
- K17 Which methods should be used during maintenance and adjustment
- K18 What the adjustment sequence is
- K19 What resources are available for maintenance and which are used for different maintenance and adjustment procedures
- K20 What the basic care and operating requirements are of maintenance equipment
- K21 What maintenance authorisation procedures apply
- K22 What the limits of your responsibility and authority are
- K23 Where to locate engineering drawings and related specifications that are approved by your company for the equipment involved
- K24 How to interpret drawings and specifications
- K25 What component removal and replacement methods and techniques to use
- K26 What equipment and materials are used during component removal and

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- replacement, and compliance checking
- K27 What components you may have to remove and replace, and their functions
- K28 Where the components are located in the equipment
- K29 How to handle components throughout the process
- K30 What types of defects can occur in components and how to recognise them
- K31 What labelling conventions to use when storing components
- K32 Where to store components for re-use
- K33 How to use tools and equipment for component removal, replacement and compliance checking
- K34 Who to report to and what reporting methods to use

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Additional Information

Glossary

1. **Regulations/Legislation/Guidelines:** organisational procedures and guidelines, Work place Policies, Health, safety and environmental requirements and regulations relevant to the work and work area being carried out
2. **Problems:** those you can deal with yourself by simple adjustments to the system, those which require specialist engineering/maintenance support, services, equipment, materials, products; incomplete procedures, imprecise instructions, inaccurate information, damage, wear, malfunction, variances in material supplies, non-conforming materials or products
3. **Hazards** and control measures: waste, spillage, obstructions use of tools, hazardous materials. personal protective equipment, equipment, lifting and moving items
4. **Materials:** raw materials, part-processed materials, re-processed materials, finished products, process related materials, e.g. packaging, processing equipment and waste materials
5. **Operating Procedures/Work Procedures:** Work instructions, Method Statements, Standard Operating Procedures
6. **Remove(d) components/equipment:** Removing process equipment of a typical type: Structural, Mechanical, Electrical, Tooling
7. **Removal procedures:** Simple removal operations determined by the company
8. **Quality assurance** that will be determined by: The nature of the equipment being maintained, company policy, company national or international standards

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