

# COGPPRO11

## Unit 11: Prepare to Start Up a Machine-Based Production Process within Polymer Processing and Related Operations



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### Overview

This unit is for those with responsibility for preparing to start up a machine-based production process to meet processing and production requirements. It is suitable for process operators who work within an organisational context that provides them with procedures to work to and criteria for making decisions and taking actions. The process operation may relate to continuous or batch production and may be a primary or secondary operation.

This unit deals with the following:

1. Prepare for the production process
2. Prepare equipment for the production process
3. Select and prepare materials for the production process
4. Having sound knowledge of the materials for processing operation

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, legislation and guidelines** in accordance with company procedure
  - P2 Confirming and agree **work operations** with colleagues and agreeing the allocation of work to achieve production requirements in
  - P3 Organise and **prepare** your work area to be free from potential hazards to process materials efficiently and safely and to meet operational requirements
  - P4 Select and prepare **equipment** to process materials effectively and safely to meet **production requirements**
  - P5 Complete equipment safety checks in accordance with organisational procedures
  - P6 Identify equipment **faults** and take appropriate action to deal with these
  - P7 Integrate **equipment** operation to maximise output without compromising safety or quality
  - P8 Adjust **equipment** settings to be within set tolerances
  - P9 Identify materials and their characteristics in preparation for processing operations
  - P10 Adjust material temperature settings to be within set parameters and melt specification in accordance with the manufacturers recommended specifications
  - P11 Identifying and responding to problems and difficulties when preparing for a processing operation
  - P12 Identify any deviance from set tolerances and report these promptly to the **relevant people**
  - P13 Safely dispose of waste materials in accordance with organisational and legal requirements
  - P14 Check and prepare materials to conform to **specification**
  - P15 Identify non-conforming **materials** and move these to the designated isolation area and report to the appropriate person
  - P16 Identify **variances** in material supply and promptly report these to the appropriate person
  - P17 Assemble and **load** materials in the correct sequence for processing
  - P18 Complete and maintain records required for monitoring production, quality and product identification accurately and legibly in accordance with organisational requirements
  - P19 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 records 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 Who are the **relevant personnel**
- K13 Where to find production requirements and how to interpret these
- K14 The importance of agreeing work allocations to meet production requirements and how to do this
- K15 The importance of current, accurate and complete **information** about production requirements and how to ensure mutual understanding of and commitment to these
- K16 The processing and ancillary equipment needed for the process operation
- K17 The importance of preparing equipment to meet production requirements and how to do this
- K18 The equipment settings required for the process, what tolerances apply and who to notify of deviancies from the set tolerances
- K19 What safety devices and guards are required, what are their specific functions and what safety checks should be carried out on them
- K20 What materials are required and how to obtain them
- K21 Why it is important to understand the type of material being processed, their characteristics and properties
- K22 Where to locate and interpret information relating to the type of material and any significant arrangements from the material safety data sheet
- K23 The significance of product labelling and product codes for material

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- identification
- K24 The importance of meeting the required material **specification** and the implications of not doing so
  - K25 What preparations are required to meet the material specification
  - K26 The importance of checking material supply, the consequences of different sorts of **variances** and who to report **variances** to
  - K27 How to identify **non-conforming** materials and the implications of not doing this
  - K28 Where non-**conforming** materials should be placed and who they should be reported to
  - K29 The potential effects of using materials out of sequence and how to prevent this from happening
  - K30 The requirements and procedures for loading materials
  - K31 The different types of documentation that is required

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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:** incomplete procedures, imprecise instructions, inaccurate information, damage, wear, malfunction
3. **Hazards** and control measures: waste, spillage, obstructions, hazardous materials. personal protective equipment
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. **Production requirements:** processing specification, product specification, production schedule, rate of production
7. **Information** to include: resources, safety, production output, quality of output, communication using oral and written
8. **Prepare** process: cleaning, setting up, service connections, ancillary connections
9. **Equipment:** processing equipment, ancillary equipment, test equipment
10. **Faults:** damage, wear, malfunction, breakage
11. Remedial **action:** isolating defective equipment, requesting specialist assistance
12. **Relevant people:** co-workers, supervisors, technician, manager, Quality Assurance person, Team leader
13. **Specification** information: type and grade of materials, quantity, quality
14. **Non-conforming** materials: incorrect grade, contaminated, inadequately prepared
15. **Variances:** over supply, under supply

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