

Producing products by processing

Overview

This standard covers the skills and knowledge you will need to carry out processing operations on materials or products which involves using a pre-defined sequence of events that changes the physical appearance or properties of the material or product. Examples of this could be heat treatment, photo process operations, distillation, or mixing of materials.

This will involve producing products by processing according to defined operating procedures. You will be expected to monitor and control the processing operation, minimising any waste, making adjustments within the limits of your permitted authority and ensuring that the completed components are to the required specification. Meeting production targets will be an important issue and your production records must show consistent and satisfactory performance.

Your responsibilities will require you to comply with organisational policy and procedures for the processing activities undertaken, and to report any problems with the processing activities that you cannot personally resolve, or are outside your permitted authority the appropriate people.

You will be expected to work to instructions, with minimum supervision, taking personal responsibility for your actions and for the quality and accuracy of the work that you produce. You will also be expected to complete any necessary documentation accurately and legibly.

Your underpinning knowledge will be sufficient to provide a sound basis for your work, and will enable you to adopt an informed approach to applying the required work instructions and processing procedures. You will have an understanding of the processing used, and its application, and will know about the equipment, materials and consumables in adequate depth to provide a sound background for carrying out the activities, making allowable adjustments when required, to ensure that the required specification is achieved.

You will understand the safety precautions required when working with the processing tools and equipment. You will be required to demonstrate safe working practices throughout, and will understand the responsibility you owe to yourself and others in the workplace.

This standard on producing products by processing involves:

1. working with minimum supervision
2. performing the processing operation
3. monitoring and controlling the processing operation

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4. making adjustments within your permitted authority
5. reporting unsolvable problems, or problems that you are not responsible for, to the appropriate person
6. completing any necessary documentation
7. working in ways which maintain the safety of yourself and others

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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, directives and guidelines
 - P2 obtain and follow the correct job instructions and any relevant processing procedure and quality specifications
 - P3 follow the pre-defined sequence of events at all times
 - P4 use the correct tools, equipment and materials to further the process
 - P5 perform the processing operation according to instructions and safe operating procedures
 - P6 monitor and control the processing operation and identify any faults, variations or problems that occur
 - P7 make any necessary adjustments within your permitted authority
 - P8 report any problems that you cannot solve or are outside your permitted authority to the appropriate person
 - P9 minimise any waste during the processing operation
 - P10 produce processed products which comply with the processing specification and quality requirements
 - P11 work to achieve your production targets
 - P12 complete documentation in accordance with organisational procedures (or requirements)

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Knowledge and understanding

You need to know and understand:

- K1 the relevant health and safety requirements of the work area in which you are carrying out the processing operations
- K2 the specific safe working practices, processing procedures and environmental regulations that need to be observed
- K3 the hazards associated with carrying out the processing operations and how can they be minimised
- K4 what actions need to be taken in case of emergencies
- K5 what personal protective equipment (PPE) needs to be used during the processing activities and where can it be obtained
- K6 how to obtain the necessary job instructions, operating procedures and processing specifications that are used, and how to interpret them
- K7 what tools and equipment are used for the processing operations undertaken and how to check that they are in a safe and usable condition
- K8 why it is important to follow the pre-determined sequence of events in the processing operation
- K9 what the consequences are of not following the pre-determined sequence of events in the processing operation
- K10 the specific processing operations to be performed
- K11 how to perform the processing operation to achieve the required specification
- K12 what methods can be used to minimise waste during processing operations
- K13 what faults, problems or variations can occur in the processing operation
- K14 how to identify faults, problems or variations in the processing operation
- K15 what allowable adjustments can you make to achieve specification in the processing operation
- K16 why it is important to report faults, variations or problems that are outside your permitted authority and or you cannot solve immediately
- K17 how to monitor and check the quality of the processed products, against the required quality standards
- K18 what documentation may need to be completed, and why it is important to complete it accurately and legibly
- K19 what your responsibilities are with regard to the reporting lines and procedures in your working area
- K20 who the appropriate people are and what are their responsibilities within your working area

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Additional Information

Scope/range related to performance criteria

You must be able to:

1. Follow the relevant processing procedures and safety requirements to include **all** of the following:
 - 1.1. health and safety regulations
 - 1.2. processing equipment / tool operating instructions
 - 1.3. safe working practices
 - 1.4. job instructions
 - 1.5. company standards and procedures
2. Perform processing operations using **one** of the following methods:
 - 2.1. hand processing operations
 - 2.2. fully automated machine processing operations
 - 2.3. manually operated machine processing
 - 2.4. combined processing operations
3. Carry out checks of the processed products to include the following:
 - 3.1. completeness of processing operations and **two** other checks from the following:
 - 3.2. appearance of product
 - 3.3. quantity
 - 3.4. freedom from contamination
 - 3.5. volume
4. Make permitted adjustments to solve production faults, variations or problems related to **two** of the following:
 - 4.1. quality
 - 4.2. accuracy
 - 4.3. material utilisation
 - 4.4. operational safety
 - 4.5. manufacturing changes
 - 4.6. productivity
5. Report problems that you cannot solve and or are outside your permitted authority to the appropriate person to include **one** of the following:
 - 5.1. supervisor
 - 5.2. team leader
 - 5.3. quality control
6. Work to achieve production targets for **both** of the following:
 - 6.1. output
 - 6.2. quality

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