



Australian Government

PMBPREP303 Set up equipment for continuous operation

Release: 1

PMBPREP303 Set up equipment for continuous operation

Modification History

Release 1. Supersedes and is equivalent to PMBPREP303C Set up equipment for continuous operation

Application

This unit of competency covers the skills and knowledge required to set up equipment for and trial a continuous production run. It applies to standard production processes and processes that are essentially continuous in nature.

This unit of competency applies to experienced operators and those in similar roles who are required to interpret specifications in order to set up equipment and components for efficient workflow, produce first-off sample and make adjustments to the process and procedures, as appropriate, and inform operators about correct procedures for the run.

This unit of competency applies to an individual working alone or as part of a team or group and working in liaison with other shift team members, team leader and supervisor, as appropriate.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Preparation

Unit Sector

Not applicable

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

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| 1 | Identify production requirements | 1.1 | Read specifications and standard operating procedures (SOPs) for production run and equipment |
| | | 1.2 | Identify materials required |
| | | 1.3 | Note production control requirements for production and warm up time, pressure(s), speed(s), temperature(s) and product specifications |
| | | 1.4 | Note key stages in the process for quality checks |
| | | 1.5 | Identify equipment and components required |
| | | 1.6 | Check assembly requirements for items of production and downstream equipment or specialised componentry to ensure efficient work flow will occur |
| 2 | Set up equipment | 2.1 | Check work area to ensure adequate space for the process |
| | | 2.2 | Place equipment and components in required configuration |
| | | 2.3 | Install guards, warning devices and cut-offs as required |
| | | 2.4 | Check all connecting components and services for integrity and effectiveness |
| | | 2.5 | Check dies/moulds/jigs as required for suitability for production requirements |
| | | 2.6 | Place SOPs and quality procedures in appropriate work stations |
| | | 2.7 | Check work area for operator ergonomic efficiency, access and egress requirements |

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| 3 | Explain process to operators when required | 3.1 Explain particular requirements for machine adjustments, materials characteristics, quality specifications and key production stages to the operator |
| | | 3.2 Explain standard operating procedures and work health and safety (WHS) issues. |
| | | 3.3 Identify and explain appropriate contingency strategies for process faults, quality, WHS issues, materials supply or quality machine malfunctions |
| | | 3.4 Encourage operators to ask questions and clarify procedures |
| 4 | Produce first-off production sample(s) | 4.1 Start process following SOPs |
| | | 4.2 Observe product quality through process and compare to standards |
| | | 4.3 Compare machine setting ranges to documented requirements |
| | | 4.4 Use observations of the process outcomes to fine tune the settings and other production variables |
| | | 4.5 Check final product for the required standards |
| | | 4.6 Compare SOPs with actual production run and note variances |
| 5 | Fine tune the process | 5.1 Use information collected during trial to modify workplace documentation, including SOPs, machine settings and process instructions |
| | | 5.2 Obtain appropriate advice and permission where variations are outside of quality or specification range |
| | | 5.3 Advise operators of variations to process and document as required |

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Regulatory framework The latest version of all legislation, regulations, industry codes of practice and Australian/international standards, or the version specified by the local regulatory authority, must be used.

Applicable legislation, regulations, standards and codes of practice include:

- health, safety and environmental (HSE) legislation, regulations and codes of practice relevant to the workplace, manual handling and hazardous materials
- Australian/international standards relevant to the materials being used and products being made
- any relevant licence and certification requirements.

All operations to which this unit applies are subject to stringent HSE requirements, which may be imposed through state/territory or federal legislation, and these must not be compromised at any time. Where there is an apparent conflict between performance criteria and such requirements the legislative requirements take precedence.

Procedures All operations must be performed in accordance with relevant procedures.

Procedures are written, verbal, visual, computer-based or in some other form, and include one or any combination of:

- emergency procedures
- work instructions
- SOPs
- safe work method statements (SWMS)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

Tools and equipment Tools and equipment include one or more of:

- hand carts and trolleys
- hoists/lifting equipment not requiring any special permits or licences

- basic hand tools required for opening of material packaging
- material loading equipment used for loading of raw materials.

Additional tools and equipment will be selected as required from:

- relevant personal protective equipment (PPE).

Hazards

Hazards must be identified and controlled. Identifying hazards requires consideration of:

- weight, shape, volume of materials to be handled
- hazardous products and materials
- sharp edges, protrusions or obstructions
- slippery surfaces, spills or leaks
- heat, smoke, dust, vapours or other atmospheric hazards
- electricity
- gas
- gases and liquids under pressure
- structural hazards
- equipment failures
- machinery, equipment and product mass
- other hazards that might arise.

Non-routine problems

Non-routine problems must be resolved by applying operational knowledge to develop new solutions, either individually or in collaboration with relevant experts, to:

- determine problems needing action
- determine possible fault causes
- develop solutions to problems which do not have a known solution
- follow through items initiated until final resolution has occurred
- report problems outside area of responsibility to designated person.

Non-routine problems are unexpected problems or variations of previous problems and include one or more of:

- variations in materials
- faulty components
- machine malfunction
- variation in product
- contamination of materials
- processing problems.

Operational knowledge includes one or more of:

- procedures
- training
- technical information such as journals, engineering specifications
- remembered experience
- relevant knowledge obtained from appropriate people.

Unit Mapping Information

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Links

MSA Training Package Implementation Guides - <http://mskills.org.au/training-packages/info/>