



**Australian Government**

# **PMBPROD285 Operate computer controlled equipment**

**Release: 1**

# **PMBPROD285 Operate computer controlled equipment**

## **Modification History**

Release 1. Supersedes and is equivalent to PMBPROD285A Operate computer controlled equipment

## **Application**

This unit of competency covers the skills and knowledge required to operate computer controlled equipment or process as typically used to make machined products that meet precise specifications.

This unit of competency applies to operators who are required to carry out start-up procedures, operate machine/process to specification, monitor machine/process operation, and recognise routine and non-routine problems and take appropriate action.

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**

Production

## **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.

- |   |                                              |     |                                                                            |
|---|----------------------------------------------|-----|----------------------------------------------------------------------------|
| 1 | <b>Obtain job instructions</b>               | 1.1 | Identify work requirements from production plan or request                 |
|   |                                              | 1.2 | Check product, materials and equipment meet requirements for job           |
|   |                                              | 1.3 | Recognise requirements which may not be in accordance with usual practice  |
|   |                                              | 1.4 | Ask questions of appropriate person to confirm unusual practice            |
|   |                                              | 1.5 | Ensure housekeeping is to requirements                                     |
|   |                                              | 1.6 | Identify hazards associated with the job and take appropriate action       |
|   |                                              |     |                                                                            |
| 2 | <b>Start up equipment, to procedures</b>     | 2.1 | Complete pre-start checks as required                                      |
|   |                                              | 2.2 | Start equipment as required                                                |
|   |                                              |     |                                                                            |
| 3 | <b>Operate computer controlled equipment</b> | 3.1 | Select and verify installed program is in accordance with job instructions |
|   |                                              | 3.2 | Operate computer controlled equipment to procedures                        |
|   |                                              | 3.3 | Identify and report malfunction                                            |
|   |                                              | 3.4 | Check production samples for compliance to specification                   |
|   |                                              | 3.5 | Make adjustments to remedy faults and non-conformity as required           |
|   |                                              | 3.6 | Shut down equipment as required                                            |
|   |                                              |     |                                                                            |
| 4 | <b>Monitor machine/process</b>               | 4.1 | Monitor tool wear                                                          |
|   |                                              | 4.2 | Replace preset tools and adjust tool offsets in program as                 |

required

- |   |                                                  |     |                                                                               |
|---|--------------------------------------------------|-----|-------------------------------------------------------------------------------|
| 5 | <b>Respond to routine problems to procedures</b> | 5.1 | Recognise known faults that occur during the operation                        |
|   |                                                  | 5.2 | Identify and take action on causes of routine faults                          |
|   |                                                  | 5.3 | Log problems as required                                                      |
|   |                                                  | 5.4 | Identify non-routine process and quality problems and take appropriate action |

## 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, equipment and production processes 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
- standard operating procedures (SOPs)
- safe work method statements (SWMS)
- formulae/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:

- numerical control (NC) machine/process
- computer numerical control (CNC) machine/process

- robot-operated machine/process
- 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
- rotational equipment or vibration
- high temperatures
- 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.

**Routine problems**

Routine problems must be resolved by applying known solutions.

Routine problems are predictable and include one or more of:

- machine malfunction
- tool wear
- cutting errors.

Known solutions are drawn from one or more of:

- procedures
- training
- remembered experience.

Non-routine problems must be reported according to according to relevant procedures.

## **Unit Mapping Information**

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## **Links**

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