



Australian Government

PMBPROD306E Prepare and start equipment for production

Release: 1

PMBPROD306E Prepare and start equipment for production

Modification History

Release 1. Unit code changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBPROD306 Prepare and start equipment for production.

Application

This unit describes the skills and knowledge required to prepare and start a machine, from a powered off state to producing the 'first-off' product and handing over operation to a machine operator working under supervision.

This unit applies to an experienced technician working alone or as part of a team.

The unit principally refers to large or complex machinery; however, the procedures covered in this unit are universal.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

Nil

Competency Field

Production – Generic

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Plan equipment requirements	1.1 Identify requirements from job specifications 1.2 Identify equipment and processes required for production and upstream and downstream operations from job specifications 1.3 Perform pre-operational checks including checking for and controlling hazards 1.4 Identify and check emergency stops, guards and controls 1.5 Identify checks and testing processes required for equipment, materials and quality to meet job requirements
2. Perform pre-startup	2.1 Restore all power to machine and ancillary equipment according

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
tasks	to equipment specifications 2.2 Start up ancillary equipment and set temperature and other controllers according to equipment specifications 2.3 Set up and adjust equipment settings to meet equipment and job specifications 2.4 Charge, purge and clean machine according to equipment instructions
3. Start up machine and hand over to operator	3.1 Check and load correct raw material to meet job specifications 3.2 Start up and operate equipment, and make adjustments to settings to meet job specifications 3.3 Follow checking and testing processes to assess if output will meet job specifications and quality standards 3.4 Balance core and ancillary production line equipment, and upstream and downstream equipment to meet job specifications and quality standards 3.5 Describe particular requirements for machine adjustments, materials characteristics, quality specifications and key production stages to operator based on equipment and job specifications 3.6 Pause or stop machine in normal and abnormal circumstances according to workplace procedures
4. Anticipate and solve problems	4.1 Recognise existing or potential process control variances and their causes 4.2 Determine, prioritise and implement remedial and preventative actions based on identified issues and causes 4.3 Monitor process control variances and corrective actions taken until resolved 4.4 Accurately maintain records and logbooks

Foundation Skills

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

- Numeracy skills to interpret technical information and equipment readings.
- Reading skills to interpret specifications and workplace procedures.

- Writing and oral communication skills to record and report on equipment operations.

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

Unit Mapping Information

Supersedes and is equivalent to PMBPROD306 Prepare and start equipment for production.

Links

Companion Volume implementation guides are found in VETNet – -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=932aacef-7947-4c80-acc6-593719fe4090>

Assessment Requirements for PMBPROD306E Prepare and start equipment for production

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- prepare and start equipment for production at least once to meet job specifications.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- the functions and applications of analogue controls, digital controls, and microprocessor-based process controls
- the structure, functions and principles of operation of equipment, machine components and ancillary equipment
- the functions of and readings from measuring instruments, including one or more of:
 - thermocouples
 - pyrometers
 - transducers
 - thermometers
 - pressure gauges
 - vacuum gauges
 - flow meters
- the purpose and operation of safety interlocks and systems, including:
 - limit switches
 - machine guards
- the criteria for overall process/equipment readiness for the process or equipment being used
- production workplace sequences and materials demand
- typical quality standards required at each stage of production
- key equipment variables that may affect product quality and production output
- typical and atypical equipment-based problems, including early warning signs, possible causes and corrective actions
- organisational procedures relevant to the work environment or job role, including procedures for the emergency shutdown of equipment

- hazards that may arise in the job or work environment, and:
 - their possible causes
 - potential consequences
 - appropriate risk controls.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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