



Australian Government

PMBPROD316E Produce blown film

Release: 1

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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 PMBPROD316 Produce blown film.

Application

This unit describes the skills and knowledge required to operate, control and optimise blown film equipment and processes typically used to produce industrial and consumer packaging.

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

The unit principally refers to the practical skills to operate blown film equipment, as well as the ability to supervise and manage all aspects of film extrusion production and downstream production for one or more production lines.

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 – Blown Film

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. Prepare the workplace	1.1 Identify materials required, including additives, 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, quality and production management

Elements Elements describe the essential outcomes.	Performance Criteria Performance criteria describe the performance needed to demonstrate achievement of the element.
	1.6 Perform housekeeping tasks to support work to be undertaken 1.7 Identify waste management strategies to collect excess, discarded or nonconforming materials to be disposed of, recycled or reprocessed according to workplace procedures
2. Perform pre-production tasks	2.1 Verify equipment requirements against job requirements 2.2 Set production process according to equipment and work specifications, and adjust process to optimise output based on selected materials 2.3 Set up and adjust blown film production line equipment settings according to equipment and job specifications 2.4 Verify materials are correct against job specifications 2.5 Set up date, batch and materials markings according to equipment specifications and workplace procedures 2.6 Complete other pre-startup checks according to equipment specifications and workplace procedures
3. Operate blown film line equipment	3.1 Start up and operate blown film line equipment, and make adjustments to settings to meet job specifications 3.2 Ensure process is operating according to equipment specifications and workplace procedures 3.3 Follow checking and testing processes to assess if output meets job specifications and quality standards including product thickness, and apply strategies for managing nonconforming outputs 3.4 Maintain continuity of process to support production 3.5 Work efficiently to minimise scrap and trim according to workplace procedures 3.6 Clean work area, and clean, adjust and lubricate equipment, according to equipment specifications and workplace procedures 3.7 Pause or stop equipment in normal and abnormal circumstances according to workplace procedures
4. Shut down equipment	4.1 Shut down equipment according to equipment instructions and workplace procedures 4.2 Complete equipment clean-up and post-production adjustments according to equipment instructions and workplace procedures 4.3 Put guards, locks and notices in place to prevent inadvertent startup

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	4.4 Accurately complete workplace shutdown documentation
5. Anticipate and solve process control variances	5.1 Recognise existing or potential process control variances and their causes 5.2 Determine, prioritise and implement remedial and preventative actions based on identified issues and causes 5.3 Monitor process control variances and corrective action taken until resolved 5.4 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 blown film production.

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 PMBPROD316 Produce blown film.

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 PMBPROD316E Produce blown film

Modification History

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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:

- produce blown film at least once to meet job specifications.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- the functions of blown film equipment and ancillary equipment
- the principles of operation of blown film equipment and ancillary equipment
- mechanical, hydraulic, pneumatic, electrical and electronic principles that affect machine operation
- blown film manufacturing processes and materials demand
- the criteria for overall process/equipment readiness for the process or equipment being used
- characteristics of polymer materials and their behaviour in relation to extrusion
- typical quality standards required at each stage of production
- key variables that may affect product quality and production output, including:
 - operating temperatures
 - melt temperatures
 - nip and winding speeds
 - nip roller settings
 - amperage
 - corona treatment settings
 - back pressures and currents
 - output rate
 - product thickness
 - slitters
 - trimmers
 - die gaps
 - product integrity and general conformance to specification

- typical and atypical process and product 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.

Links

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