



Australian Government

PMBPROD339E Produce steel cord-reinforced conveyor belts

Release: 1

PMBPROD339E Produce steel cord-reinforced conveyor belts

Modification History

Release 1. Unit code and title changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBPROD339 Produce reinforced conveyor belts.

Application

This unit describes the skills and knowledge required to operate the press for steel cord-reinforced conveyor belt production.

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

The unit principally refers to how intermittent press operations consolidate the rubber belt covers and the steel cord internal reinforcement fed from the creel rack operational unit.

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 – Conveyor Belt Manufacturing

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 work 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, quality and production management 1.6 Identify waste management strategies to collect excess, discarded or nonconforming materials to be disposed of, recycled or

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	reprocessed according to workplace procedures
2. Perform belt press line pre-production tasks	2.1 Verify equipment requirements against job specifications 2.2 Set production process according to equipment and job specifications, and adjust process to optimise output based on selected materials 2.3 Set up and adjust equipment production line settings to meet job specifications 2.4 Verify materials are correct against job specifications 2.5 Set up date, batch and materials markings according to workplace procedures 2.6 Undertake other pre-startup checks according to equipment specifications and workplace procedures
3. Operate and make adjustments to belt press line	3.1 Start up and operate belt press line, and make adjustments to settings to meet job specifications 3.2 Ensure process is operating according to equipment specifications and workplace procedures 3.3 Following checking and test to assess if output meets job specifications and quality standards, and apply strategies for managing nonconforming outputs 3.4 Maintain continuity of process to support production 3.5 Prepare press line for next cycle according to equipment instructions and workplace procedures 3.6 Accurately complete logs and records 3.7 Apply waste management strategies according to workplace procedures 3.8 Clean, adjust and lubricate equipment according to equipment instructions and workplace procedures 3.9 Pause or stop machine cycle in normal and abnormal circumstances according to workplace procedures
4. Shut down machine	4.1 Determine type of shutdown and process to be followed from equipment instructions and workplace procedures 4.2 Shut down equipment according to equipment instructions 4.3 Complete equipment and work area clean-up and post-production adjustments according to equipment specifications and workplace

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	procedures 4.4 Put guards, locks and notices in place to prevent inadvertent startup 4.5 Accurately complete workplace shutdown documentation 4.6 Clean and clear work area after shutdown in readiness for next startup
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 actions 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 conveyor belt 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 PMBPROD339 Produce reinforced conveyor belts.

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 PMBPROD339E Produce steel cord-reinforced conveyor belts

Modification History

Release 1. Unit code and title changed. Application changed. Elements and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed. Supersedes and is equivalent to PMBPROD339 Produce reinforced conveyor belts.

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 steel cord-reinforced conveyor belts at least once to meet job specifications.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- the functions of belt press line equipment and ancillary equipment
- the principles of operation of belt press line equipment and ancillary equipment
- mechanical, hydraulic, pneumatic, electrical and electronic principles that affect machine operation
- reinforced belt manufacturing process and phases of the cycle
- types of materials and their characteristics
- typical quality standards required at each stage of production
- key variables that may affect product quality and production output, including:
 - operating temperatures and pressures
 - cycle time
 - width and thickness
 - surface finish/appearance
 - production rate
 - product integrity and general conformance to specification
- typical and atypical process and product problems, including early warning signs, possible causes and corrective actions
- the distinguishing characteristics of causes of problems as being either based on the properties of materials or caused by process variables
- 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

Companion Volume implementation guides are found in VETNet –

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