



Australian Government

PMBPROD377E Splice fabric ply conveyor belts

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 PMBPROD377 Splice fabric ply conveyor belts.

Application

This unit describes the skills and knowledge required to splice multiple-ply textile-reinforced conveyor belts (fabric ply belts). Belts may be new or existing and work may be conducted onsite, in a workshop or at an offsite repair facility.

This unit applies to an experienced technician working alone or as a member of a team, or team leader and supervisor.

The unit principally applies to the technician understanding and applying their theoretical and technical knowledge to the highly specialised splicing techniques for multilayer textile fibre-reinforced rubber conveyor belts.

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 Belts

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 and check requirements including direction of travel from job specifications 1.2 Identify equipment and processes required for production from job specifications 1.3 Identify key variables that may affect quality of splice 1.4 Perform pre-operational checks including checking for and controlling hazards 1.5 Design time-efficient and economical work plans that achieve

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	quality standards while minimising downtime and materials wastage 1.6 Identify waste management strategies to collect excess, discarded or nonconforming materials to be disposed of, recycled or reprocessed according to workplace procedures
2. Prepare fabric ply splice	2.1 Isolate equipment and conveyor systems to prepare for splicing 2.2 Restrain belt or belt ends to ensure movement does not occur during splice 2.3 Mark out splice according to splice specifications 2.4 Cut belt ends to meet steps or patterns specifications 2.5 Strip and remove belt covers and carcass material according to equipment instructions 2.6 Prepare and finish belt surfaces in readiness for bonding 2.7 Cut and lay-up splice using materials according to job specifications 2.8 Place conveyor belt identification (brand) on belt according to requirements
3. Check fabric ply splice	3.1 Vulcanise fabric ply conveyor belt to meet specifications 3.2 Conduct post-vulcanisation quality checks on finished splice 3.3 Inform customer when belt is ready for use, or prepare belt for storage or delivery, according to job specifications
4. Conduct housekeeping	4.1 Clean, inspect and store tools and equipment used according to equipment instructions and workplace procedures 4.2 Clean equipment and work area according to equipment instructions and workplace procedures 4.3 Dispose of waste or recycle according to workplace procedures 4.4 Accurately complete workplace 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

Foundation Skills

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

- Numeracy skills to interpret specifications and measure dimensions and angles for cutting of belt ends.
- Reading skills to interpret job and equipment specifications and workplace procedures.
- Writing and oral communication skills to record and report on splicing operation and process control variances.

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 PMBPROD377 Splice fabric ply 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 PMBPROD377E Splice fabric ply conveyor belts

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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 of competency, and demonstrated the ability to:

- splice fabric ply conveyor belts to meet job specifications, for at least one of the following splices:
 - lapped
 - stepped
 - saddle
 - buff-off
 - finger
 - sawtooth.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- the function of conveyor systems and relevant isolation procedures
- size, shape and orientation of steps to form the overlap multiply splice
- resultant tensile strength of spliced fabric belt
- products, materials and material characteristics for the splice and cover
- typical quality standards required at each stage of the splicing process
- key variables that may affect the quality of the splice, including one or more of:
 - belt condition
 - belt location
 - degree and nature of any damage to belt
 - weight of the belt
 - forces acting on the conveyor belt
 - environmental conditions
 - tensioning systems
 - gradient of belt
 - belt strength rating

- typical and atypical belt process, equipment and materials problems, including early warning signs, possible causes and corrective actions.
- organisational procedures relevant to the work environment or job role
- 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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