PMBPROD265 Operate portable vulcanising equipment
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Modification History
Release 1. Supersedes and is equivalent to PMBPROD265C Operate portable vulcanising equipment

Application
This unit of competency covers the skills and knowledge required to operate portable vulcanising equipment and ancillary equipment that is integral to the process.

This unit of competency applies to operators who are required to plan the curing job, set up equipment and materials, conduct vulcanising operations, assess the finished work, 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 Identify work requirements for vulcanising operations

   1.1 Identify the job and vulcaniser characteristics and product quality outcomes required

   1.2 Obtain specifications relevant to the material being vulcanised

   1.3 Identify and obtain equipment and materials required for the vulcanising process
1.4 Identify hazards associated with the job and take appropriate action

1.5 Check materials, ancillary supplies and equipment for quality, access and condition

1.6 Identify and check emergency stops, gauges, guards and controls

2 Plan vulcanising operations

2.1 Identify time, pressure and temperature requirements

2.2 Plan the task sequences

2.3 Plan for waste management, maintenance and housekeeping requirements

3 Prepare vulcanising equipment

3.1 Check vulcaniser, ancillary, equipment and attachments are fit for purpose

3.2 Set up vulcanising press according to procedures

3.3 Set equipment control parameters to specifications

3.4 Obtain appropriate clearances for vulcanising to commence

4 Conduct and monitor vulcanising operations

4.1 Start the unit and commence vulcanising

4.2 Monitor the unit operation throughout the entire process

4.3 Note and report non-conformity to specifications to procedures

4.4 Make adjustments as required

4.5 Shut down unit when cycle completed

4.6 Follow procedure to disassemble equipment as required

4.7 Assess the outcome of the vulcanising process and take remedial action as necessary and report to the appropriate person

4.8 Brand splice according to company policy
4.9 Clean up, lubricate and adjust equipment as required
4.10 Complete waste removal or recycling as required

5 Respond to routine problems to procedure

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)
- formulas/recipes
- batch sheets
- temporary instructions
- any similar instructions provided for the smooth running of the plant.

**Tools and equipment**

Tools and equipment include:

- portable vulcanising equipment
- ancillary equipment that is integral to the process
- knives and other rubber cutting and shaping equipment.

Additional tools and equipment will be selected as required from:

- powered equipment/aids
- hoists/lifting equipment not requiring any special permits or licences
- manual handling aids, such as hand carts and trolleys
- 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
- knives, blades and cutting tools
- 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:

• incorrect vulcaniser set-up
• variations in materials
• contamination of materials
• unsuccessful vulcanising processes
• entrapped gasses
• wire or reinforcing exposure
• inappropriate material specification.

Known solutions are drawn from one or more of:

• procedures
• training
• remembered experience.

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

**Unit Mapping Information**

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**Links**

Companion Volume implementation guides are found in VETNet -