



Australian Government

FBPSUG3004 Drive a master-slave locomotive

Release: 1

FBPSUG3004 Drive a master-slave locomotive

Modification History

Release	Comments
Release 1	This version released with FBP Food, Beverage and Pharmaceutical Training Package Version 2.0.

Application

This unit of competency describes the skills and knowledge required to drive a master-slave locomotive in a cane railway system.

The unit applies to individuals who work in the sugar milling industry and are required to operate a slave locomotive.

All work must be carried out to comply with workplace procedures according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

No occupational licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Prerequisite unit of competency for this unit is:

- FBPSUG3001 Drive a cane locomotive

Unit Sector

Sugar milling (SUG)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare and connect the slave locomotive for operation	1.1 Select, fit and use personal protective equipment according to health and safety procedures in the workplace 1.2 Identify and report health and safety hazards and operational maintenance requirements 1.3 Check workplace records to confirm operational status

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Set the remote control system according to operating requirements 1.5 Prepare slave locomotive and select required operating mode 1.6 Conduct pre-start checks according to operating procedures
2. Prepare and connect the master locomotive	2.1 Confirm the system is in link mode 2.2 Check control system and conduct system self-test to confirm that the system is operating effectively according to workplace procedures and manufacturer's guidelines 2.3 Confirm braking system is operating effectively 2.4 Establish and confirm total control of the system 2.5 Conduct pre-departure tests to confirm control system and locomotive equipment meet operating standards 2.6 Couple front and rear train safely to form a single train according to operating procedures
3. Start, operate and monitor locomotive	3.1 Start and operate master-slave locomotive according to transport requirements 3.2 Monitor condition of locomotive equipment according to operating procedures 3.3 Assess faults to determine risk of injury to personnel or damage to equipment 3.4 Take corrective action to address abnormal or unacceptable equipment condition or performance 3.5 Implement emergency procedures according to workplace procedures
4. Prepare for shift handover	4.1 Maintain workplace records according to workplace procedures 4.2 Carry out handover according to workplace procedures 4.3 Ensure changeover drivers are aware of locomotive and related equipment status, track conditions and incidents at completion of handover
5. Shut down locomotive	5.1 Follow shutdown procedures for master and slave locomotives 5.2 Confirm and complete shutdown sequence and secure locomotives according to operating procedures
6. Complete work	6.1 Record workplace information according to workplace procedures

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	6.2 Clean, store and park plant and equipment 6.3 Identify and report defects and faults according to workplace procedures

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Interpret routine information on marshalling strategy, traffic schedule log and running sheets, and standard operating procedures
Oral communication	Speak clearly and use accurate terminology to communicate with others
Numeracy	Monitor and interpret system control indicators and data
Navigate the world of work	- Understand main tasks, responsibilities and boundaries of own role - Apply workplace procedures relevant to own role
Interact with others	Apply communication practices and protocols relevant to own role
Get the work done	- Complete tasks in required sequence and according to schedule - Apply decision-making processes to control hazards in routine situations - Use screen-based information technology - Make routine decisions to correct abnormal system performance and control hazards in routine situations - Recognise and respond to routine problems

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
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FBPSUG3004 Drive a master-slave locomotive	FDFSUG301A Drive a master-slave locomotive	Updated to meet Standards for Training Packages	Equivalent unit
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Links

Companion Volume Implementation Guides are found in VETNet: -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=78b15323-cd38-483e-aad7-1159b570a5c4>

Assessment Requirements for FBPSUG3004 Drive a master-slave locomotive

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Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has driven a master-slave locomotive in line with workplace contexts and demonstrated each of the following points at least once:

- carried out all required pre-departure checks
- selected, fitted and used personal protective equipment (PPE)
- reported health and safety risks and maintenance requirements
- prepared and connected the master and slave locomotives, systems and operating settings
- safely started and operated the master-slave locomotive and associated equipment
- communicated with other personnel using available equipment
- monitored locomotive and equipment operating condition
- assessed equipment faults to determine appropriate corrective action
- took corrective action in response to abnormal or unacceptable performance of control systems or operating equipment
- carried out a shift changeover
- recorded shift information
- safely shut down the master-slave locomotive and associated equipment
- cleaned and stored plant and equipment.

Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- communication procedures, methods and equipment, including an understanding of warning devices and signals
- functions and operating principles of master and slave locomotive operating equipment
- purpose and limitations of protective clothing and equipment for driving a master and slave locomotive

- purpose of the master and slave locomotives in controlling the train, and operating principles of all instruments and controls
- safe operating capacities of equipment
- typical faults that can occur when operating a locomotive in a master-slave configuration and how to assess severity and risk in order to determine appropriate corrective action
- key health and safety requirements for driving a master and slave locomotive in the workplace:
 - health and safety hazards related to driving a locomotive and associated control measures
 - correct use of PPE
- procedures for responding to unplanned events or emergencies including derailments, breakdowns, accidents or track damage.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a cane railway system or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - PPE
 - master and slave locomotive and related equipment
 - relevant equipment required to carry out inspections, checks and monitoring
 - communications equipment
 - workplace information recording system
- specifications:
 - operating procedures and related advice, including advice on safe work practices
 - workplace information, including running slips and daily schedule, to advise of driving requirements
 - operating procedures and related advice on equipment operation.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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