



Australian Government

MSMPMC325 Operate bulk materials handling equipment

Release: 1

MSMPMC325 Operate bulk materials handling equipment

Modification History

Release 1. New unit. Supersedes and is equivalent to PMC562071 Operate bulk materials handling equipment

Application

This unit describes the skills and knowledge required to operate equipment used to store and convey bulk, particulate materials, including cement, sand, aggregate, frit, cullet and asphalt.

This unit applies to operators who are required to take responsibility for own outputs and follow established procedures to start up and shut down conveyors; transfer and store materials; monitor quality, quantity and location of bulk materials and perform minor maintenance on equipment. Operators are also required to work autonomously and apply their own judgement to interpret information; monitor processes; identify and address routine and non-routine problems and control hazards.

This unit applies to an individual working alone or as part of a team or group and in liaison with other shift team members, team leader and supervisor.

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

Support

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. Operate conveyors	1.1 Identify the type and number of conveyors required 1.2 Start up and shut down the conveyor in a manner appropriate to the conveyor type and duty 1.3 Complete routine checks, logs and paperwork and act on unexpected observations, readings and trends according to standard operating 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>
	1.4 Convey correct material from and to the correct location
2. Manage bulk material storages	2.1 Identify type of storage facility required 2.2 Monitor quality, quantity and location of bulk materials stored 2.3 Transfer stock into, out of and between storage 2.4 Supply internal and external customers with correct quality and quantity in a timely manner 2.5 Make effective use of storage capacity available, taking account of safety issues
3. Carry out maintenance procedures	3.1 Identify a need for maintenance 3.2 Isolate materials handling equipment and prepare for maintenance or vessel entry 3.3 Complete minor maintenance 3.4 Receive plant back from maintenance and check for safe operation 3.5 Prepare plant for the introduction of materials and for operation
4. Rectify problems	4.1 Identify and rectify faults and equipment failure 4.2 Maintain records and log books of equipment operations 4.3 Identify non-routine problems and report to designated person
5. Control hazards	5.1 Identify hazards in the material handling work area 5.2 Assess the risks arising from those hazards 5.3 Implement measures to control those risks 5.4 Shut down in an emergency

Foundation Skills

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

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Release 1. New unit. Supersedes and is equivalent to PMC562071 Operate bulk materials handling equipment

Links

Companion Volume Implementation Guides are available at VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=d1287d36-dff4-4e9f-ad2c-9d6270054027>

Assessment Requirements for MSMPMC325 Operate bulk materials handling equipment

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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:

- operated bulk materials handling equipment to convey and store stock on at least 1 occasion, including:
 - recognising possible causes of the following routine problems:
 - raw material variations and contamination
 - instrument faults and incorrect readings
 - equipment faults and abnormalities
 - procedure errors
 - maintenance issues.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- principles of safe and efficient transfer and storage of bulk materials
- principles of operation of plant, equipment and tools used in material handling
- relationship of properties of particulates to transport and storage, including:
 - particle size and shape: reactivity, solubility and colour
 - angle of repose
 - angle of slide
 - dusts
- density and bulk density
- emergency procedures
- routine problems, their probable causes and relevant corrective actions
- work permit system
- work health and safety (WHS) requirements relevant to work outcome
- hazards that may arising in bulk materials handling and:
 - their possible causes
 - potential consequences
 - risk control procedures.

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Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - bulk materials handling equipment and ancillary equipment
 - materials to be handled
 - specifications, procedures and job sheets
- modelling of industry operating conditions, including:
 - routine and non-routine problems.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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