



Australian Government

MSMWJ306 Operate a vacuum loading system

Release: 1

MSMWJ306 Operate a vacuum loading system

Modification History

Release 1. Supersedes and is equivalent to MSMWJ303 Operate a vacuum loading system. Unit code changed. Application and Performance Criteria changed. Range of Conditions removed. Assessment Requirements changed.

Application

This unit describes the skills and knowledge required to autonomously operate a vacuum loading system to move products from an open space or vessel into a container. The materials moved may be solids (lump or particulate) and/or liquids. The materials may also be hazardous (chemical, flammable/explosive, and carbonaceous particulates).

The worksite may be a client's site, a site belonging to the organisation or a public space.

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

Operations

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. Prepare for work	1.1 Interpret and follow job requirements 1.2 Complete site access and work control requirements 1.3 Identify known site hazards and required hazard controls 1.4 Confirm work team members comply with site and job competency requirements 1.5 Lead toolbox meeting or similar 1.6 Select, check and load consumables, equipment and personal protective equipment (PPE) required for job 1.7 Complete pre-work documentation to job requirements

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
2. Complete on-site preparation	2.1 Confirm job scope, location and requirements with job owner or contact person 2.2 Communicate with site authorities and obtain correct work permits in accordance with site procedures 2.3 Review and confirm job scope on-site with team 2.4 Read, interpret and follow job-related documentation 2.5 Define work area and confirm required exclusion zones 2.6 Check available waste disposal is adequate for all waste generated by job 2.7 Confirm waste management, disposal and tracking procedures are in place 2.8 Recognise and control job and site-specific hazards 2.9 Identify competency of other team members and degree and means of required supervision 2.10 Communicate any additional job needs back to base
3. Set up vacuum loading job	3.1 Prepare worksite to comply with job, safety and environmental requirements 3.2 Inspect, assemble and check vacuum loading equipment in accordance with manufacturer's guidance 3.3 Complete pre-start on system, test emergency shut-off and have equipment repaired prior to starting job if not functional 3.4 Communicate with other work groups as appropriate to ensure safe and efficient operation of vacuum loading equipment 3.5 Establish appropriate means of communication between operators and ensure correct positioning of personnel 3.6 Ensure hazard controls and PPE are operational and adequate
4. Undertake vacuum loading job	4.1 Start up vacuum loading equipment for safe operation 4.2 Communicate with and supervise other operators as required by job 4.3 Operate equipment to meet job requirements 4.4 Monitor hazards and activate emergency stop as required 4.5 Monitor job, conditions and equipment and maintain agreed real-time visual and verbal communication 4.6 Recognise and diagnose problems and take appropriate action to

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	resolve them
5. Complete vacuum loading job	5.1 Shut down vacuum loading equipment 5.2 Report job completion and details of any issues arising from the task in accordance with client or organisation requirements 5.3 Disassemble equipment when safe to do so 5.4 Clean job site in accordance with site requirements 5.5 Disassemble exclusion zones when access to area is safe 5.6 Follow procedures to ensure vacuum unit is adequately sealed and fit for travel 5.7 Transport and unload waste, and follow procedures to decontaminate vacuum unit 5.8 Complete routine equipment servicing and store items in appropriate location 5.9 Identify and action restock requirements for spares and consumables 5.10 Complete documentation to job requirements

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. Supersedes and is equivalent to MSMWJ303 Operate a vacuum loading system.

Links

Companion Volume Implementation Guides are found in VETNet -

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

Assessment Requirements for MSMWJ306 Operate a vacuum loading system

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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 demonstrated the ability to:

- autonomously assemble and operate vacuum loading equipment and perform vacuum loading and unloading operations on both solids and liquids.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- hazards and hazard controls specific to the operation of vacuum loading equipment, including:
 - physical hazards
 - stored energy hazards
 - working environment hazards
- environmental protection considerations for vacuum loading operations
- techniques and methodology of vacuum loading
- principles of operation of vacuum loading equipment and its component items, including:
 - vacuum pumps:
 - liquid ring pump
 - lobe blower pump
 - vane pump
 - axial turbine
 - filtration systems:
 - bubble filter
 - bag house
 - cyclone
 - conductive, non-conductive and coded hoses
 - earthing and bonding
 - vacuum breakers or vacuum relief systems
- equipment variables and their application, including:
 - hose type, size and restraints

- pressure or vacuum
- additives to be used
- other items under the control of the operator
- correct methods of starting up, shutting down, operating and controlling vacuum loading equipment and its component items by type and application
- relevant communication systems used between operators, including hand signals
- operational parameters and limits of equipment
- types and causes of known problems for vacuum loading and its components and corrective action appropriate to the problem cause
- importance of monitoring and controlling job conditions
- methods for monitoring job variables, and the appropriate corrective actions
- types of situations that require:
 - activation of an emergency stop
 - stopping work until a situation is resolved
- procedures for:
 - raising the alarm (when, how, who to)
 - responding to injury
- correct methods of product and waste disposal
- routine cleaning and servicing requirements for vacuum loading equipment.

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:
 - vacuum loading system and other tools and materials to complete tasks specified in the performance evidence
 - safety and personal protective equipment (PPE)
 - job documentation.

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

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