



Australian Government

UEPMNT312 Maintain industrial pressure vessels

Release: 2

UEPMNT312 Maintain industrial pressure vessels

Modification History

Release 2. Minor release to update superseded pre-requisite units.

Release 1. This is the first release of this unit of competency in the UEP Generation Training Package.

Application

This unit involves the skills and knowledge required to maintain boiler pressure parts, pressure vessels and associated components.

Pressure vessels are designed to hold gas or liquids at a pressure substantially different from the ambient pressure, they are used in conjunction with mechanical plant and equipment in a power generation facility. Maintaining boiler pressure parts, pressure vessels and associated components will include monitoring and verifying equipment is operating efficiently.

Competency in this unit requires the ability to plan work, remove associated equipment to facilitate maintenance, dismantle and maintain pressure vessel, reassemble pressure vessel and to report on all completed work tasks. Individuals will, in general, work under supervision in an electrical, electronic and/or mechanical equipment repair workshop or on site.

Power generation maintenance personnel are typically trained and authorised to receive permits to work.

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

Note: Workplace practice

The application of the skills and knowledge described in this unit of competency may require a licence or training permit to practice in the workplace, where work is carried out on gas and electrical installations. Additional and/or other conditions may apply under state and territory legislative and regulatory licensing requirements.

Pre-requisite Unit

MEM09002 Interpret technical drawing

MEM12023 Perform engineering measurements

MEM18001 Use hand tools

MEM18002 Use power tools/hand held operations

MEM18003 Use tools for precision work

MEM18006 Perform precision fitting of engineering components

MEM18055 Dismantle, replace and assemble engineering components

Competency Field

Maintenance

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Plan and prepare for work

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

- 1.1** Requirements including scope of work and assigned roles are identified and confirmed with appropriate personnel or by site inspection, in accordance with workplace procedures
- 1.2** Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations, legislative requirements, industry standards, codes of practice, manufacturers' specifications, environmental obligations and workplace procedures are reviewed in preparation for work
- 1.3** Resources are obtained and inspected for compliance with job specification
- 1.4** Relevant plans, drawings and manuals are selected and used, in accordance with workplace procedures
- 1.5** Correct materials and components for work are obtained and inspected, in accordance with workplace procedures, for compliance with job specification
- 1.6** Work is planned sequenced, prioritised, in accordance with workplace procedures
- 1.7** Potential hazards are identified and risk control measures are selected and implemented, in accordance with workplace procedures
- 1.8** Work area is prepared, in accordance with workplace procedures

2 Remove associated equipment to facilitate

- 2.1** Associated equipment isolation and depressurisation is confirmed visually and manually, as required, in

maintenance	accordance with workplace procedures
	2.2 Pressure vessel is disconnected, in accordance with the workplace procedures
	2.3 Pressure vessel's associated equipment is removed, in a manner which will assist in replacement, in accordance with workplace procedures
	2.4 Pressure vessel is inspected for abnormalities, in accordance with workplace procedures
3 Dismantle and maintain pressure vessel	3.1 Hazardous material is identified and arrangements are made for clearance from pressure vessel and work site, in accordance with workplace procedures and legislative requirements
	3.2 Internal and external components are systematically dismantled, marked and recorded, in accordance with workplace procedures
	3.3 Components are refurbished, catalogued and stored for reassembly, in accordance with workplace procedures and manufacturers' specifications
	3.4 Gasket and seal requirements are assessed, manufactured or obtained, in accordance with workplace procedures and manufacturers' specifications
	3.5 Vessel mountings are maintained, as required, in accordance with workplace procedures and manufacturers' specifications
	3.6 Internal piping or tubing is tested and expanded or replaced, as required, in accordance with workplace procedures and manufacturers' specifications
4 Reassemble pressure vessel	4.1 Internal and external components are systematically reassembled, in accordance with workplace procedures and manufacturers' specifications
	4.2 Associated equipment is aligned and replaced, in accordance with workplace procedures
	4.3 Fastenings are torqued, in accordance with manufacturers' specification and workplace procedures
	4.4 Vessel is pressure tested, monitored and adjusted, if required, in accordance with workplace procedures, and

		legislative requirements
5	Complete work	
	5.1	Work is completed and appropriate personnel are notified, in accordance with workplace procedures
	5.2	Work area is cleared of waste, cleaned, restored and secured, in accordance with workplace procedures
	5.3	Tools and equipment are cleaned, maintained and stored, in accordance with workplace procedures
	5.4	Work completion details are finalised, in accordance with workplace procedures

Foundation Skills

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

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to UEPMNT312B Maintain industrial pressure vessels.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=1715b9fa-e7bd-441c-bb8d-cf22c9c825a8>