



Australian Government

UEPOPS320 Operate and monitor compressed air systems

Release: 1

UEPOPS320 Operate and monitor compressed air systems

Modification History

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 operate compressed air systems.

Compressed air is defined as air kept under a pressure that is greater than the atmospheric pressure. Compressed air is critical to the operation of plant in power generating facilities, such as air operated control valves and fabric filter cleaning systems.

Competency in this unit requires the ability to plan work, operate compressed air system plant, test compressed air system plant, analyse compressed air system plant faults, monitor and inspect compressed air system plant and the completion of all documentation. Individuals will, in general, work under supervision, in a power generating facility as an operator.

Power generation plant operators are typically trained and authorised to isolate, prepare plant and issue 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 may require a licence or training permit to practice in the workplace where work is carried out on gas and electrical installations. Additional conditions may apply under state and territory legislative and regulatory licensing requirements.

Pre-requisite Unit

There are no prerequisites units.

Competency Field

Operations

Unit Sector

Electricity generation

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

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

1 Plan and prepare work

- 1.1 Safety issues related to operating and monitoring compressed air system plant are identified, in accordance with workplace procedures and Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) regulations and legislative requirements
- 1.2 Work requirements are identified, in accordance with workplace procedures, from relevant personnel and documentation
- 1.3 Documentation to determine compressed air system plant status is assessed and evaluated, in accordance with workplace procedures
- 1.4 Inspection and field preparation for compressed air system plant service are carried out, in accordance with workplace procedures and manufacturers' operational requirements
- 1.5 Compressed air system plant operational prerequisites are established, in accordance with workplace procedures and manufacturers' requirements
- 1.6 Sequence for recommissioning of compressed air system plant is determined, in accordance with workplace procedures and site requirements

2 Operate compressed air system plant

- 2.1 Compressed air system plant is operated, in accordance with workplace procedures and manufacturers' operating recommendations
- 2.2 Compressed air system plant is monitored and observed, in accordance with workplace procedures, to detect deviations from normal operating conditions
- 2.3 Corrective actions are taken to rectify compressed air system plant abnormalities, in accordance with workplace procedures
- 2.4 Compressed air system plant is identified and removed from service, in accordance with workplace procedures

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| | 2.5 | Corrective actions are taken, in accordance with workplace procedures when compressed air system plant abnormalities are identified during removal from service |
| 3 Test compressed air system plant operation | 3.1 | Operational tests are performed, in accordance with workplace procedures |
| | 3.2 | Compressed air system plant is observed for correct operational response, in accordance with workplace procedures |
| | 3.3 | Corrective action is taken, in accordance with workplace procedures, when response does not meet with documentation, compressed air system plant integrity or personnel safety requirements |
| | 3.4 | Compressed air system plant is returned to required operational status upon completion of testing, in accordance with workplace procedures |
| 4 Analyse compressed air system plant faults | 4.1 | Causes of abnormal compressed air system plant operating conditions are identified, in accordance with workplace procedures, and by analysing technical and operational information |
| | 4.2 | Corrective action is taken, in accordance with workplace procedures |
| | 4.3 | Compressed air system plant integrity and personnel safety is maintained, in accordance with workplace procedures, and in consultation with appropriate personnel and technical and operational documentation |
| 5 Monitor and inspect compressed air system plant | 5.1 | Compressed air system plant to be monitored and/or inspected is physically identified, in accordance with workplace procedures |
| | 5.2 | Compressed air system plant is monitored and/or inspected for normal operation or to detect deviations, in accordance with workplace procedures |
| | 5.3 | Corrective action is taken, in accordance with workplace procedures |
| | 5.4 | Appropriate personnel are notified when defects are detected, in accordance with workplace procedures |
| 6 Complete documentation | 6.1 | Compressed air system plant problems, movements, abnormalities and status are reported, in accordance with |

workplace procedures

- 6.2** Documentation is updated, 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 UEPOPS320B Operate and monitor compressed air systems.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for UEPOPS320 Operate and monitor compressed air systems

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions on at least two separate occasions and includes:

- analysing plant faults using data analysis techniques and tools
- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements including:
 - emergency procedures
 - risk control measures
 - safe working practices
- assessing compressed air system plant operation using diagnostic and testing techniques
- communicating effectively with relevant personnel
- completing documentation
- identifying compressed air system plant status
- implementing legislation, industry standards, codes of practice and regulations
- interpreting manufacturers' specifications and manuals
- monitoring and inspecting compressed air system plant operation
- operating compressed air systems
- organising resources
- planning and preparing work
- preparing compressed air system plant or equipment for operation
- recognising and responding to abnormal compressed air system plant operating conditions
- working with permit to work system

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions and includes knowledge of:

- compressed air system plant and equipment, its location and operating parameters
- compressed air system plant status
- legislation, industry standards, codes of practice and regulations

- manufacturers' specifications and manuals
- permit to work system
- typical arrangements of power production plant
- WHS/OHS legislated requirements including:
 - emergency procedures
 - risk control measures
 - safe working practices
- workplace documentation
- workplace policies and procedures

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and personal protective equipment currently used in industry
- applicable documentation including workplace procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

Links

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