



Australian Government

UEPMNT307 Maintain industrial screens, strainers and filters

Release: 2

UEPMNT307 Maintain industrial screens, strainers and filters

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 Minor release to update superseded pre-requisite units.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 undertake fault finding, diagnosis, repair and/or overhaul of industrial screens, strainers and filters.

Industrial screens, strainers and filters are used in the filtration, separation, extraction and absorption of liquids or solids in a power generation facility's machinery and plant. The diagnosis and repair of faults requires the systematic investigation of any industrial screen, strainer and filter malfunction.

Competency in this unit requires the ability to plan work, remove industrial screens, strainers and filters for maintenance, maintain industrial screens, strainers and filters, replace and/or install industrial screens, strainers and filters 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 for work activities 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 and 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 screens, strainers and filters for

- 2.1** Isolations are confirmed, where appropriate, in

- maintenance** accordance with workplace procedures
- 2.2** Screens, strainers and filters are disconnected, in accordance with workplace procedures
- 2.3** Screens, strainers and filters are removed, in a manner which will assist in replacement, in accordance with workplace procedures
- 2.4** Screens, strainers and filters are inspected for abnormalities, in accordance with workplace procedures
- 3 Maintain screens, strainers and filters**
- 3.1** Equipment isolation and depressurisation is confirmed visually and manually, as required, in accordance with workplace procedures
- 3.2** Plant and/or equipment including screen, strainer and filter components, assemblies and/or subassemblies, are identified and prepared for maintenance, in accordance with workplace procedures
- 3.3** Equipment, including screens, strainers and filters are removed, cleaned and marked for identification, in accordance with workplace procedures
- 3.4** Faulty items are repaired or overhauled, using appropriate principles, techniques and industry standards, in accordance with the workplace procedures
- 3.5** Replacement items for installation are selected and inspected, in accordance with manufacturers' specification and workplace procedures
- 3.6** Modifications or alterations outside of the manufacturers' specification are approved by appropriate personnel, in accordance with workplace procedures
- 3.7** Component failures are identified and probable causes are reported, in accordance with workplace procedures
- 3.8** Components or subassemblies are refitted, in accordance with workplace procedures and manufacturers' specification
- 3.9** All fastenings are torqued, in accordance with workplace procedures and manufacturers' specification
- 4 Replace screens, strainers**
- 4.1** Equipment and plant is prepared for screens, strainers and filter replacements, in accordance with workplace

and filters

procedures

- 4.2** Screens, strainers and filters are replaced, in accordance with workplace procedures and manufacturers' specification
- 4.3** Screens, strainers and filters are levelled, aligned and coupled, in accordance with workplace procedures
- 4.4** All fastenings are torqued, in accordance with workplace procedures and manufacturers' specification
- 4.5** Equipment and plant including screens, strainers and filters, are given a test run and are monitored and adjusted, as required, in accordance with workplace procedures and manufacturers' specification

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 UEPMT307B Maintain industrial screens, strainers and filters.

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 UEPMNT307 Maintain industrial screens, strainers and filters

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:

- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements including:
 - emergency procedures
 - hazard identification
 - risk control measures
 - safe working practices
- communicating with personnel
- completing work as per scheduled requirements
- dismantling and assembling components
- identifying permit to work system requirements
- interpreting manufacturers' specifications and manuals
- maintaining industrial screens, strainers and filters
- planning for industrial screen, strainer and filter maintenance work
- reading technical drawings and data
- removing industrial screens, strainers and filters for maintenance
- replacing and installing screens, strainers and filters
- using removal, maintenance and installing techniques and procedures
- utilising valve levelling and alignment techniques
- working with measuring equipment and tools

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:

- how to dismantle and assemble components
- installation and maintenance techniques

- legislation, industry standards, codes of practice and regulations
- levelling and alignment techniques
- maintenance of industrial screens, strainers and filters
- manufacturers' specifications and manuals
- measuring equipment
- permit to work system
- screen and filter types and characteristics
- technical drawings and data use
- tool use
- valve levelling and alignment techniques
- WHS/OHS legislated requirements including:
 - emergency procedures
 - hazard identification
 - 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.

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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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