



Australian Government

UEPMNT309 Maintain material feeders

Release: 2

UEPMNT309 Maintain material feeders

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 Minor release to update superseded pre-requisite units.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, out of service inspection (internal or external), repairs and/or overhaul of material feeders.

Material feeders are used to regulate the flow of bulk materials from bins and hoppers. They can be used in conjunction with other types of material handling equipment such as conveyors in a power generation facility.

Competency in this unit requires the ability to plan work, conduct in-service testing, remove equipment to facilitate maintenance of material feeders, maintain material feeders, replace or install material feeders 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 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 Conduct in-service testing

- 2.1** In-service tests are carried out, in accordance with

- workplace procedures
- 2.2** Faults are located using appropriate tools, equipment and testing techniques, in accordance with workplace procedures
 - 2.3** Testing and fault finding results are analysed, in accordance with workplace procedures, to establish repairs required or serviceability of material feeder
- 3 Remove equipment to facilitate maintenance**
- 3.1** Isolations are confirmed, where appropriate, in accordance with workplace procedures
 - 3.2** Material feeders are disconnected, in accordance with the workplace procedures
 - 3.3** Material feeders are removed, in a manner which will assist in replacement, in accordance with workplace procedures
 - 3.4** Material feeders are inspected for abnormalities, in accordance with workplace procedures
- 4 Maintain material feeders**
- 4.1** Maintenance is performed on material feeder, in accordance with workplace procedures and manufacturers' specification
 - 4.2** Components or subassemblies are dismantled, cleaned and examined, in accordance with workplace procedures, to verify tolerances and to determine whether to replace, overhaul or repair
 - 4.3** Material feeder equipment is dismantled, in a manner that will facilitate reassembly, in accordance with workplace procedures
 - 4.4** Component parts are clearly marked for identification, in accordance with workplace procedures
 - 4.5** Components are laid out, in preparation for reassembly, in accordance with workplace procedures and manufacturers' drawings or specifications
 - 4.6** New components are inspected for compliance with manufacturers' specification and are prepared for assembly, in accordance with workplace procedures
 - 4.7** Modifications or alterations are undertaken, in accordance with workplace procedures

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| | 4.8 | Components are reassembled, in accordance with workplace procedures |
| 5 Replace or install material feeders | 5.1 | Equipment is prepared for material feeders to be replaced, in accordance with workplace procedures |
| | 5.2 | All fastenings are torqued, in accordance with workplace procedures and manufacturers' specifications |
| | 5.3 | Material feeders are given a test run and are monitored, as required, in accordance with workplace procedures and manufacturers' specification |
| 6 Complete work | 6.1 | Work is completed and appropriate personnel are notified, in accordance with workplace procedures |
| | 6.2 | Work area is cleared of waste, cleaned, restored and secured, in accordance with workplace procedures |
| | 6.3 | Tools and equipment are cleaned, maintained and stored, in accordance with workplace procedures |
| | 6.4 | 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 UEPMT309B Maintain material feeders.

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 UEPMNT309 Maintain material feeders

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 schedule requirements
- conducting material feeder in-service testing using in-servicing testing procedures
- dismantling and reassembling components
- identifying and selecting resources, materials and components
- interpreting manufacturers' specifications and manuals
- interpreting technical drawings and data
- maintaining material feeders using maintenance techniques and procedures including levelling and alignment techniques and adjustments for desired material feed rate replacing and installing material feeders using removal or installation techniques and procedures
- planning for material feeder maintenance work
- removing equipment to facilitate maintenance using removal techniques
- using tools
- utilising data analysis techniques
- 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:

- adjustments for desired material feed rate
- component dismantling and reassembling
- data analysis techniques
- feeder types and operating characteristics
- legislation, industry standards, codes of practice and regulations
- level and alignment techniques
- maintenance of material feeders
- manufacturers' specifications
- materials and components
- permit to work system
- technical drawings and data
- tools
- typical arrangements of power production plant
- 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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