

# Assessment Requirements for UEEEL0034 Conduct mechanical tests on electrical machines and components

Release: 1

# Assessment Requirements for UEEEL0034 Conduct mechanical tests on electrical machines and components

### **Modification History**

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

#### **Performance Evidence**

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

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures and practices, including using risk control measures
- applying sustainable energy principles and practices
- completing workplace reports
- conducting mechanical inspections and tests on electrical machines and components, including:
  - determining the serviceability status of the machine correctly from inspection and test results
  - dismantling machine and storing parts securely
  - documenting the serviceability status of the machine clearly
  - setting up tests correctly
  - taking test and measurement readings accurately
- dealing with unplanned events in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- planning to conduct mechanical inspection and tests on electrical machines and components
- using tools safely in accordance with workplace procedures.

## **Knowledge Evidence**

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

- current industry practices and technologies
- electric motor mechanical measuring, inspection and testing devices and techniques
- devices and techniques for measuring geometric attributes, including a measuring device for geometric attributes, dynamic balancing and alignment of shafts
- operational inspection, test/measuring devices and their application
- set-up of test/measuring devices, including safety and set-up procedures

Approved Page 2 of 3

- storage, maintenance and care of test/measuring devices, including mechanical measuring and testing devices
- taking and interpreting readings, including taking and interpreting reading by the correct method, measuring roundness, dynamic balancing and aligning shafts
- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications
- relevant safe working practices
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- sustainable energy principles and practices.

#### **Assessment Conditions**

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in suitable simulated workplace operational situations that replicate workplace conditions.

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.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, facilities, equipment and personal protective equipment (PPE) currently used in industry
- resources that current industry practices in relation to conducting mechanical inspections and tests on electrical machines and components
- applicable documentation, including workplace procedures, equipment specifications, regulations, relevant industry standards, codes of practice and operation manuals.

#### Links

Companion Volume implementation guides are found in VETNet -- <a href="https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6">https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6</a>

Approved Page 3 of 3