

UEEHA0013 Supervise repair and overhaul of explosion-protected equipment type intrinsically safe (Ex i)

Release: 1

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Modification History

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

Application

This unit involves the skills and knowledge required to plan and supervise the repair and overhaul of explosion-protected equipment type intrinsically safe (Ex i). It includes liaising with equipment users to establish and document the level of work required; writing specifications for the repair and overhaul and arranging for repairs to be carried out; verifying compliance of repaired and overhauled equipment; and, completing all the required documentation. It is adopted from clause 2.22 of AS/NZS 4761.1:2018 Competencies for working with electrical equipment for hazardous areas (EEHA).

This unit applies to electrical equipment repair workshop supervisory job function, designated as the 'responsible person'.

Site-specific work permits maybe required to work in the hazardous environment. In addition, other permits may be required, such as confined space and to operate specific pieces of equipment such as elevated work platforms (EWPs) in various jurisdictions.

Additional and/or other conditions may apply in some jurisdictions subject to regulations related to electrical work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Pre-requisite Unit

UEEHA0003 Determine the explosion-protection requirements to meet a specified classified hazardous area

and

UEEEL0039 Design, install and verify compliance and functionality of general electrical installations

or

UEEEL0028 Conduct compliance and functional verification of electrical apparatus and existing circuits

or

UEEIC0048 Verify compliance and functionality of instrumentation and control installations

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Competency Field

Hazards

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

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

- 1 Prepare for repair and overhaul of equipment
- **1.1** Repair facility quality assurance system is obtained, interpreted and applied
- 1.2 Instructions on repair and/or overhaul are received and expected outcomes of the work confirmed with the user
- 1.3 All documentation relevant to the equipment repair and/or overhaul is obtained, interpreted and applied
- **1.4** Where adequate relevant equipment information is not available, steps taken to source such information are documented
- 1.5 Agreement is made with the user for the repair and/or overhaul of Group II and III equipment to be completed in accordance with standards where adequate documentation is not available
- 1.6 The common requirements for equipment repair and overhaul are ascertained from relevant standards and regulations and applied to the preparation for the work only where this arrangement is permitted
- 2 Establish the level of repair/ overhaul required
- 2.1 Safe work methods are applied to measurements, tests and inspections carried out on the equipment to establish the extent of repair and/or overhaul
- 2.2 The requirements, evaluation procedures and parameters of the type of equipment to be repaired and/or overhauled are ascertained from relevant standards and regulations and applied to establishing the extent of the work

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- 2.3 Measurement devices and instruments are maintained and calibrated in accordance with recognised practices
- 2.4 The extent of work to be completed is established from measurements, tolerances and evaluation procedures and their correspondence with equipment documentation and the requirements of standards
- 2.5 Specifications and instructions for the repair and/or overhaul work are documented ensuring compliance with original documentation, standards and user instructions
- 3 Arrange repair and overhaul work
- 3.1 Arrangements are made for the repair and overhaul work to be completed in accordance with the specification and instructions, by an operative with the competencies specified in standards
- 3.2 A copy of repair and/or overhaul specifications and instructions is provided to the operative responsible for completing the work
- 4 Verify that equipment complies with original certification
- 4.1 Scope and level of testing and measurements required to verify that overhauled and/or repaired equipment complies with original certification is determined in accordance with manufacturers' documentation and standards requirements as applicable to an equipment group
- **4.2** Verification tests and measurements are arranged, conducted and documented in accordance with equipment type standards and instruction manuals
- 4.3 Results of verification tests and measurements are reviewed to ascertain whether they comply with original equipment documentation and/or agreement with the user
- **4.4** Actions are taken to rectify any non-compliance identified through the verification tests and measurements
- 5 Document repair and overhaul work
- **5.1** Equipment is marked to show it has been repaired and/or overhauled in accordance with standards and applicable to an equipment group
- 5.2 Job report of the completed repair and/or overhaul is prepared in accordance with standards and submitted to the user for inclusion in their verification dossier

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- **5.3** Repair facility records are updated to include the job record in accordance with standards and quality system
- 5.4 The steps taken to obtain the certificate documents where adequate equipment documentation was not available is included in the repair facility records

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 UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Supervising repair and overhaul of explosion-protected equipment type intrinsically safe (Ex i) must:

- apply to the supervision of overhaul and repair of explosion-protected equipment
- be carried out under an approved quality management system
- include access to all relevant standards and liaison with end-users

Unit Mapping Information

No equivalent unit.

Links

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

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