



Australian Government

Assessment Requirements for UEEIC0021

Find and rectify faults in process final control elements

Release: 1

Assessment Requirements for UEEIC0021 Find and rectify faults in process final control elements

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, including
 - using risk control measures
- applying variable speed drives (VSD)
- checking and isolating apparatus
- dealing with unplanned situations safely and with the approval of relevant person/s
- determining need for inspecting, testing or measuring operating systems
- determining sources of materials required for work
- dismantling apparatus components, as required, and storing to protect against loss or damage
- finding faults in final control elements and associated equipment
- measuring control valves actuators and positioners and calculating values to identify faults
- obtaining scope of final control element faults
- obtaining tools, equipment and testing devices required to carry out work
- preparing to find and repair faults in final control elements
- replacing/rectifying and repairing components without damage using sustainable energy principles
- sourcing and obtaining materials required to rectify faults.

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:

- control valve body and trim types and flow characteristics
- control valve selection
- power cylinder (piston actuator) types
- problem-solving techniques
- relevant components, apparatus or circuits

- relevant control valves including:
 - control valves actuators and positioners measurements and calculations
- relevant industry standards
- relevant isolation procedures
- relevant job safety assessments or risk mitigation processes
- relevant manufacturer specifications and operating instructions
- relevant material, tools and equipment
- relevant rectification and repairs
- relevant VSD
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace instructions, policies and procedures
- self-acting pressure and temperature control valves
- spring opposed diaphragm actuator
- sustainable energy principles
- valve positioners.

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 simulated suitable 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 simulations
- relevant and appropriate materials, tools, facilities and equipment currently used in industry
- resources that current industry practices in relation to finding and rectifying faults in process final control elements and associated equipment
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>