



Australian Government

Assessment Requirements for MEM234032 Manage fluid power-related technologies in an organisation

Release: 1

Assessment Requirements for MEM234032 Manage fluid power-related technologies in an organisation

Modification History

Release 1. Supersedes and is equivalent to MEM234032A Manage fluid power related technologies in an enterprise.

Performance Evidence

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

- interpreting plans, specifications and other documentation to determine features and performance characteristics and requirements of fluid power systems
- advising other technicians, tradespersons and production personnel on fluid power installation, modification, commissioning, operation and maintenance on at least two occasions
- determining adequacy of standard operating procedures (SOPs) for fluid power systems and adjusting in response to requirements
- checking fluid power systems for safe operation including automation safety
- selecting and using software and validation techniques including 2D and 3D modelling
- determining situations that require other technical and professional assistance
- researching sustainability implications and current industrial design techniques
- evaluating solutions for feasibility against the installation, commissioning or modification criteria, including relevant engineering and financial calculations and analysis
- determining work health and safety (WHS), regulatory and risk management requirements
- communicating, negotiating and reviewing with stakeholders and client throughout installation, commissioning or modification project.

Note: Where a volume and/or frequency is not specified, demonstration must be provided at least once.

Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- current options and trends in fluid power modelling and simulation software including underpinning programme techniques and software validation techniques
- sustainability considerations
- validation techniques
- fluid power-related technologies
- fluid power system maintenance
- research and investigations methods
- principles of fluid power systems

- dimensions, capacity and position of system components
- electrical and mechanical behaviours of fluid power systems and system responsiveness
- hydraulics and hydraulics components
- applications and characteristics of servo valves
- electronic controllers for proportional and servo valves
- sensors, transducers and amplifiers
- pneumatics and designing with pneumatic components
- multiple actuator control circuits
- compressed air system design
- WHS and regulatory requirements, codes of practice, standards, risk minimisation and registration requirements.
-

Assessment Conditions

- Assessors must:
 - have vocational competency in managing fluid power-related technologies in an organisation at least to the level being assessed with relevant industry knowledge and experience
 - satisfy the assessor requirements in the Standards for Registered Training Organisations 2015 or its replacement and comply with the National Vocational Education and Training Regulator Act 2011, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires.
- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions that cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.
- Conditions for assessment must include access to all tools, equipment, materials and documentation required including relevant workplace procedures, product and manufacturing specifications.
- 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.
-

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2>