



Australian Government

MEM30011 Set up basic pneumatic circuits

Release: 1

MEM30011 Set up basic pneumatic circuits

Modification History

Release 1. Supersedes and is equivalent to MEM30011A Set up basic pneumatic circuits.

Application

This unit of competency defines the skills and knowledge required to set up and select components associated with single linear pneumatic systems.

This unit applies to all manufacturing and engineering workplace environments. It refers to simple pneumatic circuits containing single linear actuators and motors and is limited to linear actuators, motors, control valves and to the selection and verification of components for the simple pneumatic circuits.

The unit applies to engineering or related activities and is suitable for people giving technical support in manufacturing or engineering operations and those pursuing technical qualifications and careers at paraprofessional or technician level. All work is carried out under supervision.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Nil

Competency Field

Engineering technician

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Determine system requirements	1.1 Follow standard operating procedures (SOPs) and comply with work health and safety (WHS) requirements at all times 1.2 Obtain instructions regarding system requirements and clarify as necessary 1.3 Correctly interpret circuit drawings using standard symbols
2. Select components for simple pneumatic	2.1 Select suitable air system components for fluid power systems from specification charts

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
circuits	2.2 Select linear actuators to suit system requirements 2.3 Selected control valves to suit system requirements 2.4 Select tubing or hose and fittings to suit system requirements
3. Verify component selection	3.1 Set up trial basic pneumatic circuits on test bench 3.2 Store approved sketches, drawings, specifications and catalogues 3.3 Issue approved sketches, drawings or specifications 3.4 Analyse operation and verify outcomes against system requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Safety procedures include:	<ul style="list-style-type: none"> • following required precautions when: <ul style="list-style-type: none"> • using compressed air • shutting down air compressors and receivers • exhausting stored energy.
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Unit Mapping Information

Release 1. Supersedes and is equivalent to MEM30011A Set up basic pneumatic circuits.

Links

Companion Volume Implementation Guides are available on VETNet -

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