

# Unit of Competency CPCPMS3034

## Install and test medical gas pipeline systems

### Application

This unit specifies the skills and knowledge required to install and test medical gas pipeline systems.

In some jurisdictions, this unit of competency may form part of accreditation, licensing, legislative, regulatory or certification requirements.

### Prerequisite Unit

CPCPCM2043 Carry out WHS requirements

### Elements and Performance Criteria

1. Identify installation requirements.	<ul style="list-style-type: none"><li>1.1 Access, read and determine medical gas pipeline systems installation requirements from relevant plans, job specifications, relevant Australian Standards, codes, manufacturer's specifications and jurisdictional requirements.</li><li>1.2 Identify and apply workplace policies and procedures, work health and safety (WHS) and environmental requirements.</li><li>1.3 Determine job priorities and sequence job tasks in consultation with others on site.</li></ul>
2. Prepare for work.	<ul style="list-style-type: none"><li>2.1 Create a materials list and collect materials.</li><li>2.2 Select and check serviceability of appropriate tools and equipment including personal protective equipment (PPE).</li></ul>
3. Fabricate, install, purge and test pipeline system.	<ul style="list-style-type: none"><li>3.1 Set out pipelines and connection points according to drawings and specifications or job instructions.</li><li>3.2 Perform installation and testing of pipework in accordance with relevant codes.</li><li>3.3 Perform testing of installed pipework according to standards and manufacturer's specifications.</li><li>3.4 Perform purging of pipeline system according to standards and authorities' requirements.</li><li>3.5 Access information to complete documentation according to workplace procedures and submit within specified timeframes.</li></ul>
4. Clean up.	<ul style="list-style-type: none"><li>4.1 Clear the work area, and dispose of, reuse or recycle materials in accordance with state and territory legislation and workplace policies and procedures.</li><li>4.2 Clean tools, plant and equipment, check for serviceability and report any damage, and store and secure.</li></ul>

### Foundation skills

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

## Unit Mapping Information

Supersedes and is equivalent to CPCPMS3034A Install medical gas pipeline systems.

## Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

# Assessment Requirements for CPCPMS3034 Install and test medical gas pipeline systems

## Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria for this unit by:

- installing and testing three medical gas pipeline systems (each with a different medical gas) from a manifold system to terminal units and fittings ensuring:
  - o the inclusion of purged silver brazed joint(s)
  - o a minimum of 1.5 metres of approved copper tube per medical gas pipeline incorporating a minimum of two changes of direction using a mechanical bender
  - o test and document results are recorded
  - o cleanliness and sterility of finished system
  - o correct identification of requirements and details of proposed installation
  - o correct selection and use of appropriate processes, tools and equipment
  - o completion of all work to specifications.

## Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- pressure testing procedures and equipment
- processes and requirements of installing, testing and purging medical gas pipeline systems
- types of information on medical gas pipelines systems
- materials for installing medical gas pipeline systems
- types of medical gas and pipelines:
  - o medical breathing air
  - o medical suction
  - o standard oxygen
- components of medical gas pipeline systems:
  - o fixtures and labels
  - o medical gas pipeline materials and supports
  - o terminal units and fittings
- how to access relevant information, including codes, standards and manufacturer's specifications
- tools, materials and equipment used to install and test medical gas pipeline systems
- work health and safety (WHS) requirements to install and test medical gas pipeline systems
- properties of gas, gas safety, combustion principles, pressure and flow rates.

## Assessment Conditions

Assessors must satisfy the requirements for assessors listed in the Standards for Registered Training Organisations.

This unit must be assessed in the workplace or a close simulation using realistic workplace conditions, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

## Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>