



Australian Government

CPCPCM2049 Cut using oxy-acetylene equipment

Release: 2

CPCPCM2049 Cut using oxy-acetylene equipment

Modification History

- Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.1.
Minor title change. Changes to Elements and Performance Criteria 2.3 and 3.1.
- Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.
Supersedes and is equivalent to CPCPCM2049A Cut using oxy-LPG-acetylene equipment. Amended title. Updated to meet the Standards for Training Packages 2012.

Application

This unit specifies the skills and knowledge required to use oxy-acetylene equipment to carry out basic cutting of mild steel.

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

Pre-requisite Unit

CPCPCM2043 Carry out WHS requirements

Unit Sector

Plumbing

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

- | | |
|----------------------------------|---|
| 1 Identify cutting requirements. | 1.1 Access, read and determine cutting requirements from relevant job plans and specifications, codes, Australian standards, manufacturer's specifications and jurisdictional requirements. |
| | 1.2 Identify and apply workplace, work health and safety (WHS) and environmental requirements. |

- | | |
|-----------------------------|--|
| 2 Prepare for work. | 2.1 Create a materials list and collect materials. |
| | 2.2 Select appropriate tools and equipment, including personal protective equipment (PPE). |
| | 2.3 Prepare work area to support efficient cutting with oxy-acetylene equipment. |
| 3 Perform cuts and inspect. | 3.1 Set up oxy-acetylene cutting equipment according to relevant codes, Australian standards, manufacturer's specifications and jurisdictional requirements. |
| | 3.2 Select tip size appropriate for the materials to be cut. |
| | 3.3 Adjust cutting pressures to manufacturer recommendations for the materials to be cut. |
| | 3.4 Prepare materials for cutting according to relevant job plans and specification, codes, Australian standards, manufacturer's specifications and jurisdictional requirements. |
| | 3.5 Mark out materials prior to cutting. |
| | 3.6 Set flame and perform cuts according to the specified cutting procedures to affect a clean cut. |
| | 3.7 Visually inspect completed cuts for compliance with relevant job plans and specifications. |
| 4 Clean up. | 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. |
| | 4.2 Clean tools and equipment, check for serviceability and report any damage, and store and secure. |

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 CPCPCM2049A Cut using oxy-LPG-acetylene equipment.

Links

Companion volumes to this training package are available at the VETNet website -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

Assessment Requirements for CPCPCM2049 Cut using oxy-acetylene equipment

Modification History

- Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.1.
- Minor title change. Changes to Elements and Performance Criteria 2.3 and 3.1.
- Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.
- Supersedes and is equivalent to CPCPCM2049A Cut using oxy-LPG-acetylene equipment. Amended title. Updated to meet the Standards for Training Packages 2012.

Performance Evidence

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

- marking out and cutting the following materials from relevant job plans and specifications, using hand-held oxy-acetylene cutting equipment:
 - cut 150 mm x 150 mm mild steel plate (up to 8 mm thick) into three equal pieces
 - cut (up to 8 mm thick) mild steel disc to fit a DN40 to DN100 diameter mild steel pipe
 - cut three holes to fit up to DN50 branch pipes into a length of up to DN100 diameter mild steel pipe.

Knowledge Evidence

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

- the safe and operating principles of oxy-acetylene equipment
- the potential fumes and health and safety risks from high temperatures on materials
- the properties of materials and the effect of heat on the properties of metal
- hot work permit
- types of gases used for cutting mild steel
- how to access relevant information from relevant job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements
- tools, materials and equipment to cut mild steel using oxy-acetylene equipment
- work health and safety (WHS) requirements for cutting mild steel using oxy-acetylene equipment.

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 volumes to this training package are available at the VETNet website -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>