

Unit of Competency CPCPCM3022

Weld polymer pipes using fusion method

Application

This unit specifies the skills and knowledge required to fusion weld polymer pipes.

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

Prerequisite Unit

CPCPCM2043 Carry out WHS requirements

Elements and Performance Criteria

1. Prepare for work.	<ul style="list-style-type: none">1.1 Access, read and determine welding requirements for polymer pipes and installation methods from relevant job plans and specifications, codes, Australian standards, manufacturer's specifications and jurisdictional requirements.1.2 Determine job priorities and sequence job tasks in consultation with others on the worksite.1.3 Identify and apply workplace policies and procedures, work health and safety (WHS) and environmental requirements.1.4 Select and check the serviceability of the appropriate tools, equipment and personal protective equipment (PPE).
2. Identify welding requirements.	<ul style="list-style-type: none">2.1 Create a materials list and collect materials.2.2 Check welding equipment for correct operation according to manufacturer instructions.
3. Weld and inspect pipe joints.	<ul style="list-style-type: none">3.1 Prepare joints using tools and techniques according to manufacturer specifications and relevant standards.3.2 Conduct test welds and verify according to job specifications.3.3 Carry out fusion welds according to relevant job plans and specifications, codes, Australian standards, manufacturer's specifications and jurisdictional requirements.3.4 Visually inspect fusion welds for compliance with relevant job plans and specifications, codes, Australian standards, manufacturer's specifications and jurisdictional requirements.
4. Clean up.	<ul style="list-style-type: none">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 CPCPCM3022A Weld polyethylene and polypropylene pipes using fusion method.

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCPCM3022

Weld polymer pipes using fusion method

Performance Evidence

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

- butt welding three joints up to DN110 (OD) for a non-pressure application
- electro-fusion welding one socket joint up to DN110 (OD) for a pressure application.

Knowledge Evidence

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

- safe operation procedures for fusion welding of polymer pipe
- effect of heat and other products on the properties of polymer pipe
- operating principles of fusion welding equipment
- characteristics and limitations of materials
- surface preparation in the welding process
- identification of welding requirements
- how to access relevant information, including codes and standards
- tools, materials and equipment used to fusion weld polymer pipes
- work health and safety (WHS) requirements for fusion welding polymer pipes.

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.

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