

Job description

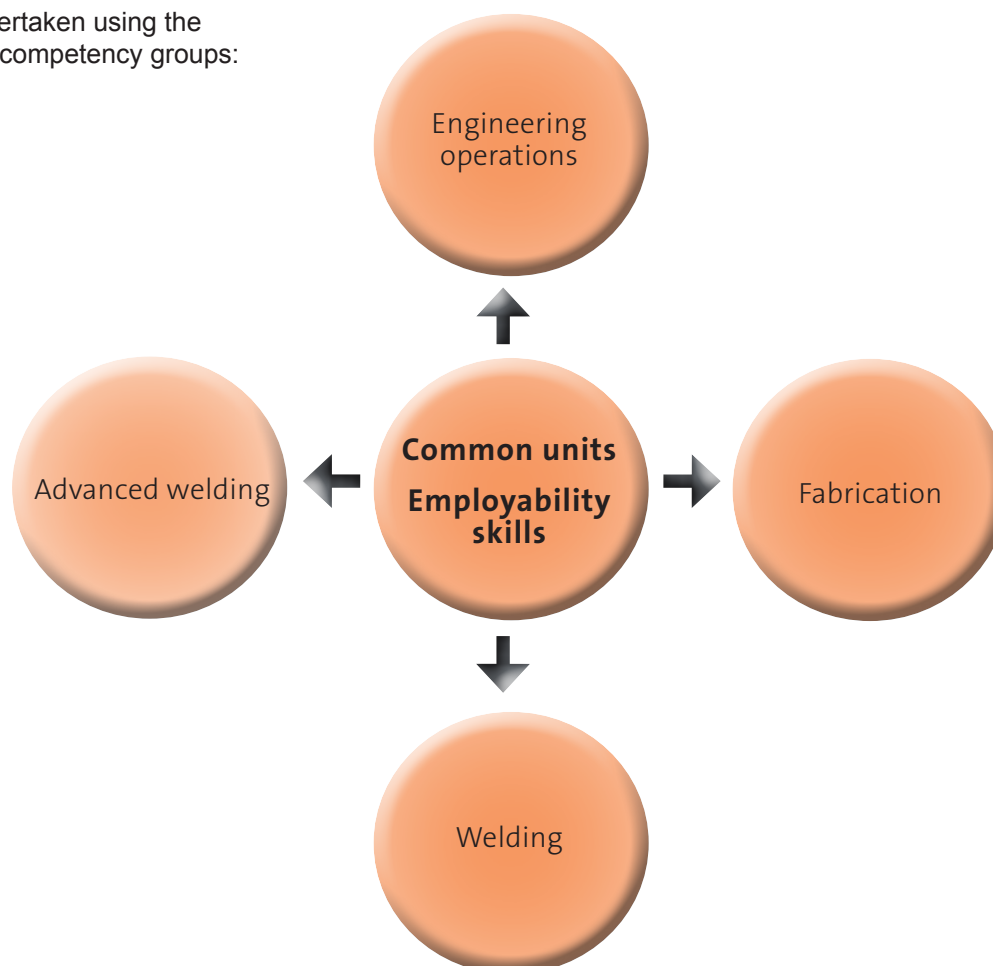
Welders assemble metal fabricated products such as structures, frames, plate and sheet assemblies, pipe-work and vessels using welding techniques. Welding techniques may include welding ferrous and non-ferrous metal plate or sheet. Welds are undertaken to pre-determined standards and may be tested for compliance to required standards. Welders use a range of hand and hand held power tools and workshop machines such as drills, grinders, clamps, benders and lifting equipment.

Competency assessment

The VETASSESS assessment uses competency groups. These groups consist of units of competency for the Certificate III in Engineering - Fabrication Trade qualification (MEM30305). They represent groups of tasks, skills and knowledge that are used to assess an applicant's competence in an occupation and are from the Metals, Engineering and Manufacturing Training Package (MEM05).

The minimum requirement for achievement of the Australian qualification is to demonstrate competence (employment and training evidence) in all of the units of competency. Please read the [Portfolio Builder](#) document for more information about how to complete a competency assessment for an Australian qualification.

The assessment for welder is undertaken using the following competency groups:



Common units

Units of competency covering common skills and knowledge will be assessed with each of the competency groups. These common units relate to the workplace occupational health and safety requirements, work processes and procedures, engineering industry standards and requirements to work as a welder (first class) in Australia.

Employability skills

The assessment includes the following employability skills: teamwork; communication; problem solving; planning & organising; learning; technology; self-management; initiative & enterprise. Competency units contain employability skills that will be assessed with each competency group.

Competency groups

The following is a breakdown of the competency groups shown in the diagram on page 1.

Common units

The following units of competency are common in all groups for assessment purposes.

MEM13014A	Apply principles of occupational health and safety in the work environment
MEM15002A	Apply quality systems
MEM15024A	Apply quality procedures
MEM16006A	Organise and communicate information
MEM16007A	Work with others in a manufacturing, engineering or related environment

Note: The tasks, skills, knowledge and employability skills required for the common units are assessed with the following competency groups

Engineering operations

Be able to perform and plan a range of engineering operations such as measurements, handling and interpreting technical drawings.

MEM12023A	Perform engineering measurements
MEM12024A	Perform computations
MEM14004A	Plan to undertake a routine task
MEM14005A	Plan a complete activity
MEM16008A	Interact with computing technology
MEM17003A	Assist in the provision of on the job training
MEM09002B	Interpret technical drawing
MEM11011B	Undertake manual handling
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operation

Fabrication

Be able to fabricate using a range of fabrication techniques.

MEM12007D	Mark off/out structural fabrications and shapes
MEM07032B	Use workshop machines for basic operations
MEM05005B	Carry out mechanical cutting
MEM03003B	Perform sheet and plate assembly
MEM10010B	Install pipework and pipework assemblies

Welding

Be able to perform oxy acetylene, metal arc, gas metal arc and gas tungsten welding.

MEM05051A	Select welding processes
MEM05052A	Apply safe welding practices
MEM13003B	Work safely with industrial chemicals and materials
MEM05007C	Perform manual heating and thermal cutting
MEM05004C	Perform routine oxy acetylene welding
MEM05006B	Perform brazing and/or silver soldering
MEM05012C	Perform routine manual metal arc welding
MEM05015D	Weld using manual metal arc welding process
MEM05047B	Weld using flux core arc welding process
MEM05049B	Perform routine gas metal arc welding
MEM05017D	Weld using gas metal arc welding process
MEM05049B	Perform routine gas tungsten arc welding
MEM05019D	Weld using gas tungsten arc welding process

Advanced Welding

Be able to perform advanced metal arc, gas metal arc and gas tungsten welding.

MEM05016C	Perform advanced welding using manual metal arc welding process
MEM05018C	Perform advanced welding using gas metal arc welding process
MEM05020C	Perform advanced welding using gas tungsten arc welding process

Assessment outcome

If you **successfully** complete the assessment process you will receive the following:

- an **Australian Certificate III** qualification that lists the units of competency you successfully achieved.

If you are **unsuccessful** in the assessment process you will be issued:

- a **Statement of Attainment** that lists units of competency you have successfully achieved and those that were not achieved

Licensing and industry information

A licence, registration or certification may be required for this occupation.

For further information regarding any licensing requirements refer to:

- Department of Immigration and Citizenship (DIAC) - Australian Skills Recognition Information (ASRI):
www.immi.gov.au/asri
- Mutual recognition for occupational licences in Australia:
www.licencerecognition.gov.au

Additional industry information that may assist you can be found at:

- The myfuture website is Australia's national career information and exploration service, helping people to make career decisions, plan career pathways and manage work transitions:
<http://www.myfuture.edu.au>

Qualification information

If you would like detailed information about the units of competency that make up this qualification please refer to the National Training Information Service (NTIS) website:

<http://www.ntis.gov.au>