

Job description

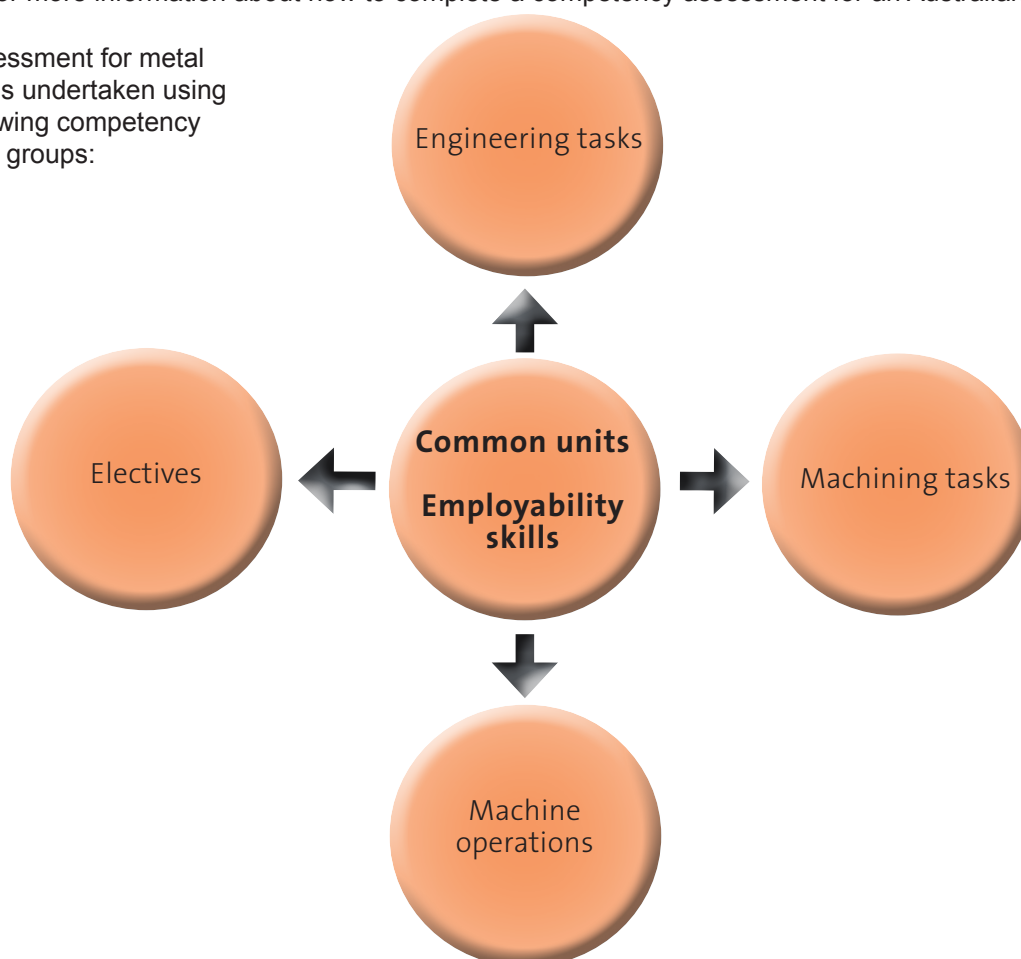
The work of a metal machinist generally encompasses; studying drawings and specifications to determine suitable material method, machine settings and sequence of operations; forming metal stock and castings to fine tolerances using machining tools to press, cut, grind, plane, bore and drill metal; fitting fabricated metal parts into products and assembling metal parts and subassemblies to produce machines and equipment; checking fabricated and assembled metal parts for accuracy, clearance and fit using precision measuring instruments; setting guides, stops and other controls on machining tools, setting up prescribed cutting and shaping tools and dies in machines and presses, and setting controls for machines.

Competency assessment

The VETASSESS assessment uses competency groups. These groups consist of units of competency for the Certificate III in Engineering - Mechanical Trade qualification (MEM30205). 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 metal machinist 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 metal machinist in Australia.

Employability skills

The assessment includes the following employability skills: teamwork; communication; problem solving; planning and organising; learning; technology; self-management; initiative and 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
MEM16007A	Work with others in a manufacturing, engineering or related environment
MEM16006A	Organise and communicate information
MEM15002A	Apply quality systems
MEM15024A	Apply quality procedures
MEM17003A	Assist in the provision of on the job training

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

Engineering tasks

Be able to perform and plan a range of engineering tasks such as interpreting technical drawings, measurements, manual handling and use of tools.

MEM14004A	Plan to undertake a routine task
MEM14005A	Plan a complete activity
MEM16008A	Interact with computing technology
MEM09002B	Interpret technical drawing
MEM12023A	Perform engineering measurements
MEM12024A	Perform computations
MEM11011B	Undertake manual handling
MEM18001C	Use hand tools
MEM18002B	Use power tools/hand held operations

Machining tasks

Be able to perform general machining, lathe, milling, grinding and boring operations.

MEM18003C	Use tools for precision work
MEM12003B	Perform precision mechanical measurement
MEM07005B	Perform general machining
MEM07006B	Perform lathe operations
MEM07007B	Perform milling operations
MEM07008C	Perform grinding operations
MEM07009B	Perform precision jig boring operations
MEM07014B	Perform electro-discharge (EDM) machining operations
MEM07029B	Perform routine sharpening/maintenance of production tools and cutters

Machine operations

Be able to operate and monitor machines in an engineering workshop.

MEM07003B	Perform machine setting (routine)
MEM07024B	Operate and monitor machine/process
MEM07015B	Set computer controlled machines/processes
MEM07028B	Operate computer controlled machine/processes

Electives areas

Elective areas are comprised of units that represent the work context or environment in which a metal machinist (first class) works. They are included specifically to meet particular work organisation and skill requirements of the metal machinist (first class) qualification.

You are required to provide evidence of your skills, knowledge and experience in **ONE** of the following elective areas as part of the assessment process.

Lathe operations

Perform advanced lathe operations.

- MEM07004B Perform machine setting (complex)
- MEM07021B Perform complex lathe operations
- MEM07025B Perform advanced machine/process operation

OR

Milling operations

Perform advanced milling operations.

- MEM07004B Perform machine setting (complex)
- MEM07011B Perform complex milling operations
- MEM07025B Perform advanced machine/process operation

OR

Boring operations

Perform advanced boring operations.

- MEM07004B Perform machine setting (complex)
- MEM07013B Perform machining operations using horizontal and/or vertical boring machines
- MEM07025B Perform advanced machine/process operation

OR

Grinding operations

Perform advanced grinding operations.

- MEM07004B Perform machine setting (complex)
- MEM07012B Perform complex grinding operations
- MEM07025B Perform advanced machine/process operation

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>