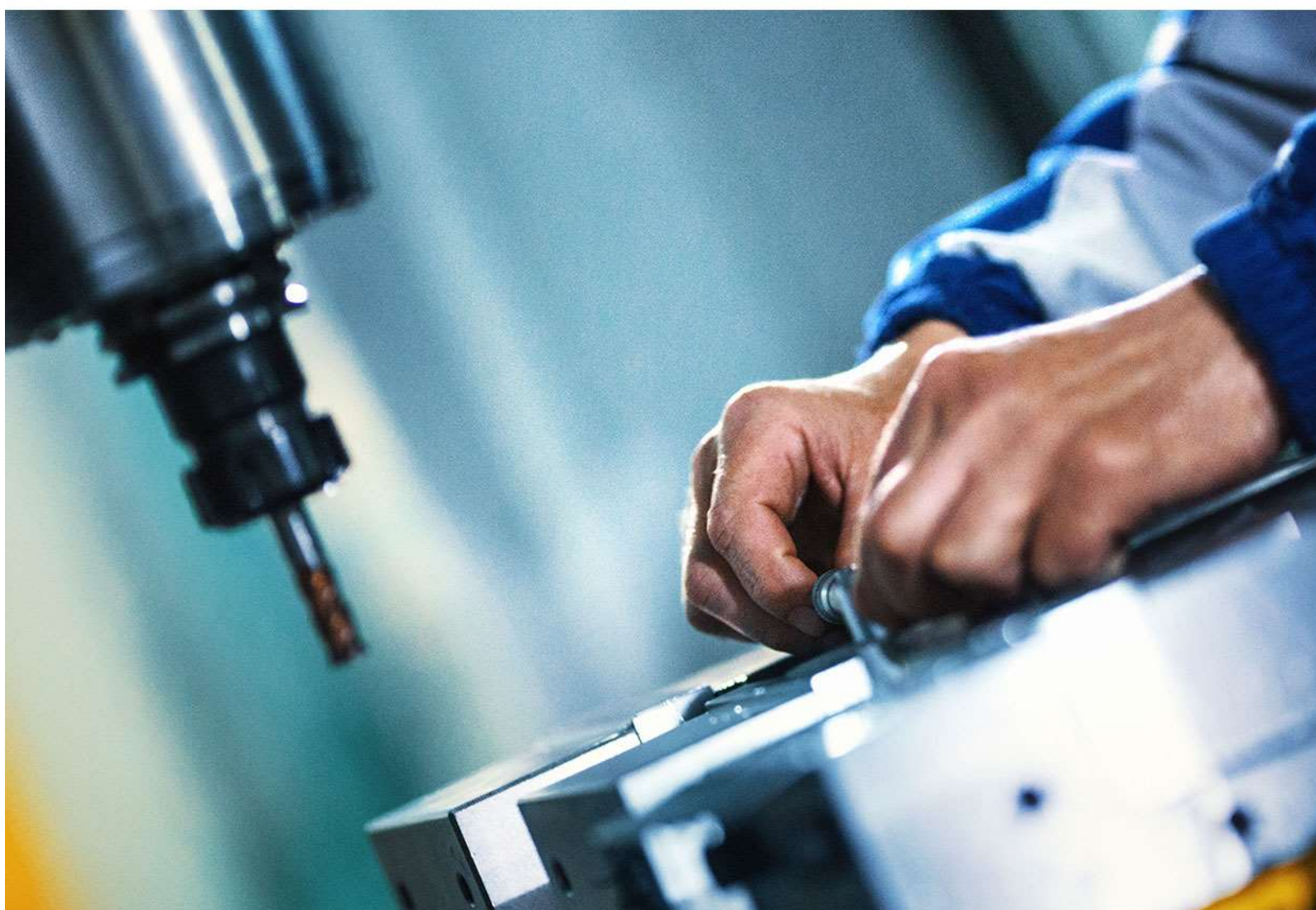


Metal Fitter and Machinist

(ANZSCO: 323299)



Fact Sheet

Job description

Metal Fitter & Machinist use flame-cutting and hand-**welding** equipment and techniques to join metal components, **weld**, fill holes or indentations, or fill seams or fabrications on metal objects.

Their job involves:

- Assembling products by fitting parts together
- Inspecting products for quality and accuracy according to specifications
- Maintaining and repairing machines, tools and equipment
- Monitoring operations and making adjustments, when necessary
- Reading and interpreting plans and specifications
- Using specialised cutting and shaping tools and machining equipment to produce assembly parts

Metal Fitter & Machinist Skills include:

- Ability to follow Safety Standards
- Concentration
- Fit and Able to Perform Physical and Repetitive Tasks
- Monitoring Operations and Machinery
- Strong Attention to Detail
- Strong Hand-eye Coordination and Manual Agility

The qualification relevant to this job is [MEM30205 Certificate III in Engineering - Mechanical Trade](#).

How will I be assessed?

Assessment is conducted in two stages:

Documentary Evidence Assessment:

We will review your training and employment evidence to ensure you have:

- with no formal training – five years work experience.
- with formal training – three years work experience
- the range of skills and knowledge required by a Metal Fitter & Machinist.

Your experience may include time spent in workplace-based training, up to a maximum of 12 months.

Your evidence must show you have worked in your occupation for at least 12 months within the last 3 years.

[For more information on the documents required for Documentary Evidence Assessment Stage, see the Evidence Guide on our website.](#)

Technical Interview:

If you are successful in Documentary Evidence Assessment, an assessor will assess you via a technical interview.

The technical interview will be conducted in English and no interpreters are allowed.

[For more information on Technical Interview, see the Technical Interview Guide on our website.](#)

What skills and knowledge do I need?

To be awarded the qualification [MEM30205 Certificate III in Engineering - Mechanical Trade](#), you must demonstrate your skill and knowledge in a number of units of competency. Each unit of competency defines a selection of knowledge and skill required in Australian workplaces.

You must demonstrate competency in **all core** units, and demonstrate competency in additional units to a total of **at least 73 points** (the number of points relating to each unit is show). If the unit selected has a prerequisite, then those units that form the prerequisite must be selected as well

| | Code | Title | Core/ Elective | Weighting Points | Pre-requisites |
|----|------------|----------------------------------------------------------------------------|-------------------|---------------------|----------------------------------------------------------------------------|
| 1 | MEM12023A | Perform engineering measurements | Core | | |
| 2 | MEM12024A | Perform computations | Core | | |
| 3 | MEM13014A | Apply principles of occupational health and safety in the work environment | Core | | |
| 4 | MEM14004A | Plan to undertake a routine task | Core | | |
| 5 | MEM14005A | Plan a complete activity | Core | | |
| 6 | MEM15002A | Apply quality systems | Core | | |
| 7 | MEM15024A | Apply quality procedures | Core | | |
| 8 | MEM16006A | Organise and communicate information | Core | | |
| 9 | MEM16007A | Work with others in a manufacturing, engineering or related environment | Core | | |
| 10 | MEM16008A | Interact with computing technology | Core | | |
| 11 | MEM17003A | Assist in the provision of on the job training | Core | | |
| 12 | MSAENV272B | Participate in environmentally sustainable work practices | Core | | |
| 13 | MEM03001B | Perform manual production assembly | E/A | 4 | NIL |
| 14 | MEM03002B | Perform precision assembly | E/A | 4 | MEM18001C |
| 15 | MEM07004B | Perform machine setting (complex) | E/A | 8 | MEM07005C MEM07006C MEM09002B MEM12023A MEM16006A MEM18001C |
| 16 | MEM07005C | Perform general machining | E/A | 8 | MEM09002B MEM12023A MEM18001C |

| | | | | | |
|----|-----------|-------------------------------------------------------------------------------|-----|---|------------------------------------------------------------------------------------------------------|
| 17 | MEM07006C | Perform lathe operations | E/A | 4 | MEM07005C MEM09002B MEM12023A MEM18001C |
| 18 | MEM07007C | Perform milling operations | E/A | 4 | MEM07005C MEM09002B MEM12023A MEM18001C |
| 19 | MEM07008D | Perform grinding operations | E/A | 4 | MEM07005C MEM09002B MEM12023A MEM18001C |
| 20 | MEM07011B | Perform complex milling operations | E/A | 4 | MEM07005C MEM07007C MEM09002B MEM12003B MEM12023A MEM12024A MEM18001C |
| 21 | MEM07013B | Perform machining operations using horizontal and/or vertical boring machines | E/A | 4 | MEM07005C MEM09002B MEM12023A MEM18001C |
| 22 | MEM07015B | Set computer controlled machines/processes | E/A | 2 | MEM07005C MEM07024B MEM07028B MEM09002B MEM12023A MEM18001C |
| 23 | MEM07016C | Set and edit computer controlled machines/processes | E/A | 4 | MEM07005C MEM07015B MEM07024B MEM07028B MEM09002B MEM12023A MEM18001C |
| 24 | MEM07018C | Write basic NC/CNC programs | E/A | 4 | MEM07005C MEM07015B MEM07016C MEM07024B MEM07028B MEM09002B MEM12023A MEM18001C |

| | | | | | |
|----|-----------|------------------------------------------------------------------------|-----|---|--------------------------------------------------------------------------------------------------------------------------------|
| 25 | MEM07019C | Program NC/CNC machining centre | E/A | 2 | MEM07005C MEM07015B MEM07016C MEM07018C MEM07024B MEM07028B MEM09002B MEM12023A MEM18001C |
| 26 | MEM07021B | Perform complex lathe operations | E/A | 4 | MEM07005C MEM07006C MEM09002B MEM12003B MEM12023A MEM12024A MEM18001C |
| 27 | MEM07024B | Operate and monitor machine/process | E/A | 4 | NIL |
| 28 | MEM07028B | Operate computer controlled machines/processes | E/A | 2 | MEM07024B |
| 29 | MEM07029B | Perform routine sharpening/maintenance of production tools and cutters | E/A | 4 | MEM12023A MEM18001C |
| 30 | MEM09002B | Interpret technical drawing | E/A | 4 | Nil |
| 31 | MEM10004B | Enter and change programmable controller operational parameters | E/A | 2 | MEM09002B MEM16008A |
| 32 | MEM12003B | Perform precision mechanical measurement | E/A | 2 | MEM12023A |
| 33 | MEM12006C | Mark off/out (general engineering) | E/A | 4 | MEM09002B MEM12023A |
| 34 | MEM18001C | Use hand tools | E/A | 2 | Nil |
| 35 | MEM18002B | Use power tools/hand held operations | E/A | 2 | Nil |
| 36 | MEM18003C | Use tools for precision work | E/A | 4 | MEM12023A MEM18001C MEM18002B |
| 37 | MEM18004B | Maintain and overhaul mechanical equipment | E/A | 4 | MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18005B MEM18006C MEM18007B MEM18009B MEM18055B |

| | | | | | |
|----|-----------|------------------------------------------------------------------------------|-----|---|------------------------------------------------------------------------------------------------------|
| 38 | MEM18005B | Perform fault diagnosis, installation and removal of bearings | E/A | 4 | MEM09002B MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B MEM12023A |
| 39 | MEM18006C | Repair and fit engineering components | E/A | 6 | MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18055B |
| 40 | MEM18007B | Maintain and repair mechanical drives and mechanical transmission assemblies | E/A | 4 | MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18009B MEM18055B |
| 41 | MEM18008B | Balance equipment | E/A | 2 | MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B |
| 42 | MEM18009B | Perform levelling and alignment of machines and engineering components | E/A | 4 | MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B |
| 43 | MEM18011C | Shut down and isolate machines/equipment | E/A | 2 | Nil |
| 44 | MEM18012B | Perform installation and removal of mechanical seals | E/A | 2 | MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B |
| 45 | MEM18018C | Maintain pneumatic system components | E/A | 4 | MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B |

| | | | | | |
|-------------------------------------------------------|-----------|--------------------------------------------------------|-----|-----------|-----------------------------------------------------------------------------------------|
| 46 | MEM18020B | Maintain hydraulic system components | E/A | 4 | MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B |
| 47 | MEM18055B | Dismantle, replace and assemble engineering components | E/A | 3 | MEM09002B MEM12023A MEM18001C MEM18002B |
| 48 | MEM05005B | Carry out mechanical cutting | E/B | 2 | MEM12023A MEM18001C |
| 49 | MEM11010B | Operate mobile load shifting equipment | E/B | 4 | Nil |
| 50 | MEM11011B | Undertake manual handling | E/B | 2 | Nil |
| 51 | MEM12001B | Use comparison and basic measuring devices | E/B | 2 | Nil |
| 52 | MEM12002B | Perform electrical/electronic measurement | E/B | 2 | Nil |
| TOTAL Weighting Points – Group A & Group B | | | | 73 | |

What can I expect to be asked at the Technical Interview?

- Write answers to Workplace Health and Safety (WHS) questions, environment questions, correct manual handling techniques and complete a Job Safety Analysis (JSA).
- Complete a number of drawings and marking out exercises, computing engineering measurements. Select appropriate tools and equipment such as milling cutters, grinding tools, marking out equipment etc.
- Machine various parts using a lathe and a milling machine

What programs does this assessment fall under?

This assessment comes under the following programs and regions:

OSAP (Europe & All states of Australia)

TSS (Europe & All states of Australia)

What will I receive after the Interview?

If you **successfully** complete the Technical Interview you will receive the following:

- an Australian Certificate III qualification and a Statement of Results
- a migration outcome letter if the assessment is to support your visa application.

If you are **unsuccessful** in Technical Interview you will receive:

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

Where can I find more information?

Please refer to our website: <https://www.attc.org.au/trades-recognition> 

Any queries may be directed to:

Australian Trade Training College Ltd

294 Scarborough Road

Scarborough Qld 4020

Phone: +61 (0) 7 3414 5999

Australian Trade Training College Ltd (Europe Office)

48 Haven Green

Ealing Broadway, UK W5 2NX

Phone: +44 (0) 203 780 2437

Email: tra@attc.org.au

Website: <https://www.attc.org.au> 

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