# Fitter & Turner

(ANZSCO: 323212)

Fact Sheet

AUSTRALIAN TRADE TRAINING COLLEGE

## Job description

Fitters and Turners in the machining industry manufacture metal components, and they then assemble those components into products such as tools, machinery, and machine components. They work with drawings and specifications to ensure that parts will fit together; they work with machinists under a manufacturing supervisor.

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

Fitter & Turners 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 Fitter / Turner.

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 | MEM07004B | Perform machine setting (complex) | E/A | 8 | MEM07005C<br>MEM07006C<br>MEM09002B<br>MEM12023A<br>MEM16006A<br>MEM18001C |
| 14 | MEM07005C | Perform general machining | E/A | 8 | MEM09002B<br>MEM12023A<br>MEM18001C |
| 15 | MEM07006C | Perform lathe operations | E/A | 4 | MEM07005C<br>MEM09002B<br>MEM12023A<br>MEM18001C |
| 16 | MEM07007C | Perform milling operations | E/A | 4 | MEM07005C<br>MEM09002B<br>MEM12023A<br>MEM18001C |

| | | | | | |
|---|---|---|---|---|---|
| 17 | MEM07008D | Perform grinding operations | E/A | 4 | MEM07005C<br>MEM09002B<br>MEM12023A<br>MEM18001C |
| 18 | MEM07015B | Set computer controlled machines/processes | E/A | 2 | MEM07005C<br>MEM07024B<br>MEM07028B<br>MEM09002B<br>MEM12023A<br>MEM18001C |
| 19 | MEM07016C | Set and edit computer controlled machines/processes | E/A | 4 | MEM07005C<br>MEM07015B<br>MEM07024B<br>MEM07028B<br>MEM09002B<br>MEM12023A<br>MEM18001C |
| 20 | MEM07018C | Write basic NC/CNC programs | E/A | 4 | MEM07005C<br>MEM07015B<br>MEM07016C<br>MEM07024B<br>MEM07028B<br>MEM09002B<br>MEM12023A<br>MEM18001C |
| 21 | MEM07024B | Operate and monitor machine/process | E/A | 4 | NIL |
| 22 | MEM07028B | Operate computer controlled machines/processes | E/A | 2 | MEM07024B |
| 23 | MEM09002B | Interpret technical drawing | E/A | 4 | Nil |
| 24 | MEM10004B | Enter and change programmable controller operational parameters | E/A | 2 | MEM09002B<br>MEM12023A |
| 25 | MEM12003B | Perform precision mechanical measurement | E/A | 2 | MEM12023A |
| 26 | MEM12006C | Mark off/out (general engineering) | E/A | 4 | MEM09002B<br>MEM12023A |
| 27 | MEM18001C | Use hand tools | E/A | 2 | Nil |
| 28 | MEM18002B | Use power tools/hand held operations | E/A | 2 | Nil |
| 29 | MEM18003C | Use tools for precision work | E/A | 4 | MEM12023A<br>MEM18001C<br>MEM18002B |
| 30 | MEM18004B | Maintain and overhaul mechanical equipment | E/A | 4 | MEM09002B<br>MEM12023A<br>MEM18001C<br>MEM18002B<br>MEM18003C<br>MEM18005B<br>MEM18006C<br>MEM18007B<br>MEM18009B<br>MEM18055B |

| | | | | | |
|---|---|---|---|---|---|
| 31 | MEM18005B | Perform fault diagnosis, installation and removal of bearings | E/A | 4 | MEM09002B<br>MEM18001C<br>MEM18002B<br>MEM18003C<br>MEM18006C<br>MEM18055B<br>MEM12023A |
| 32 | MEM18006C | Repair and fit engineering components | E/A | 6 | MEM09002B<br>MEM12023A<br>MEM18001C<br>MEM18002B<br>MEM18003C<br>MEM18055B |
| 33 | MEM18007B | Maintain and repair mechanical drives and mechanical transmission assemblies | E/A | 4 | MEM09002B<br>MEM12023A<br>MEM18001C<br>MEM18002B<br>MEM18003C<br>MEM18006C<br>MEM18009B<br>MEM18055B |
| 34 | MEM18008B | Balance equipment | E/A | 2 | MEM09002B<br>MEM12023A<br>MEM18001C<br>MEM18002B<br>MEM18003C<br>MEM18006C<br>MEM18055B |
| 35 | MEM18009B | Perform levelling and alignment of machines and engineering components | E/A | 4 | MEM09002B<br>MEM12023A<br>MEM18001C<br>MEM18002B<br>MEM18003C<br>MEM18006C<br>MEM18055B |
| 36 | MEM18011C | Shut down and isolate machines/equipment | E/A | 2 | Nil |
| 37 | MEM18018C | Maintain pneumatic system components | E/A | 4 | MEM09002B<br>MEM12023A<br>MEM18001C<br>MEM18002B<br>MEM18003C<br>MEM18006C<br>MEM18055B |
| 38 | MEM18020B | Maintain hydraulic system components | E/A | 4 | MEM09002B<br>MEM12023A<br>MEM18001C<br>MEM18002B<br>MEM18003C<br>MEM18006C<br>MEM18055B |
| 39 | MEM18055B | Dismantle, replace and assemble engineering components | E/A | 3 | MEM09002B<br>MEM12023A<br>MEM18001C<br>MEM18002B |

| | | | | | |
|---|---|---|---|---|---|
| 40 | MEM05005B | Carry out mechanical cutting | E/B | 2 | MEM12023A MEM18001C |
| 41 | MEM05006C | Perform brazing and or silver soldering | E/B | 2 | Nil |
| 42 | MEM05007C | Perform manual heating and thermal cutting | E/B | 2 | Nil |
| 43 | MEM05012C | Perform routine manual metal arc welding | E/B | 2 | Nil |
| 44 | MEM05049B | Perform routine gas tungsten arc welding | E/B | 2 | Nil |
| 45 | MEM05050B | Perform routine gas metal arc welding | E/B | 2 | Nil |
| 46 | MEM05051A | Select welding processes | E/B | 2 | Nil |
| 47 | MEM05052A | Apply safe welding practices | E/B | 4 | Nil |
| 48 | MEM11010B | Operate mobile load shifting equipment | E/B | 4 | Nil |
| 49 | MEM11011B | Undertake manual handling | E/B | 2 | Nil |
| 50 | MEM12001B | Use comparison and basic measuring devices | E/B | 2 | Nil |
| 51 | 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.
- Disassemble and reassemble parts, for example a drive shaft
- 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)

TRS (All states of Australia)

TSS (Europe & All states of Australia)

## What will I receive after the assessment?

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

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Scarborough Qld 4020
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