

# Boilermaker

(ANZSCO: 323211)



Fact Sheet

## Job description

**Welders**, cutters, and **welder fitters** 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

Fitter Welder 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 Boilermaker.

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	MEM18001
15	MEM03003B	Perform sheet and plate assembly	E/A	4	MEM18001C MEM18002B
16	MEM07003B	Perform machine setting (routine)	E/A	4	MEM07024B MEM12023A MEM16006A MEM18001C
17	MEM07024B	Operate and monitor machine/process	E/A	4	Nil
18	MEM07032B	Use workshop machines for basic operations	E/A	2	MEM18001C
19	MEM09002B	Interpret technical drawing	E/A	4	Nil

20	MEM10004B	Enter and change programmable controller operational parameters	E/A	2	MEM09002B MEM12023A
21	MEM10006B	Install machine/plant	E/A	4	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18009B MEM18055B
22	MEM11010B	Operate mobile load shifting equipment	E/A	4	Nil
23	MEM11011B	Undertake manual handling	E/A	2	Nil
24	MEM12003B	Perform precision mechanical measurement	E/A	2	MEM12023A
25	MEM18001C	Use hand tools	E/A	2	Nil
26	MEM18002B	Use power tools/hand held operations	E/A	2	Nil
27	MEM18003C	Use tools for precision work	E/A	4	MEM12023A MEM18001C MEM18002B
28	MEM18004B	Maintain and overhaul mechanical equipment	E/A	4	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18005B MEM18006C MEM18007B MEM18009B MEM18055B
29	MEM18005B	Perform fault diagnosis, installation and removal of bearings	E/A	4	MEM09002B MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B MEM12023A
30	MEM18006C	Repair and fit engineering components	E/A	6	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18055B
31	MEM18007B	Maintain and repair mechanical drives and mechanical transmission assemblies	E/A	4	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18009B MEM18055B

32	MEM18008B	Balance equipment	E/A	2	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B
33	MEM18009B	Perform levelling and alignment of machines and engineering components	E/A	4	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B
34	MEM18011C	Shut down and isolate machines/equipment	E/A	2	Nil
35	MEM18012B	Perform installation and removal of mechanical seals	E/A	2	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B
36	MEM18013B	Perform gland packing	E/A	2	MEM12023A MEM18001C
37	MEM18018C	Maintain pneumatic system components	E/A	4	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B
38	MEM18020B	Maintain hydraulic system components	E/A	4	MEM09002B MEM12023A MEM18001C MEM18002B MEM18003C MEM18006C MEM18055B
39	MEM18055B	Dismantle, replace and assemble engineering components	E/A	3	MEM09002B MEM12023A MEM18001C 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	MEM05013C	- Perform manual production welding	E/B	2	NIL

45	MEM05015D	Weld using manual metal arc welding process	E/B	4	MEM05012C MEM05051A MEM05052A MEM12023A MEM18011C MEM18002B
46	MEM05017D	Weld using gas metal arc welding process	E/B	4	MEM05050B MEM05051A MEM05052A MEM12023A MEM18001C MEM18002B
47	MEM05019D	Weld using gas tungsten arc welding process	E/B	4	MEM05049B MEM05051A MEM05052A MEM12023A MEM18001C MEM18002B
48	MEM05049B	Perform routine gas tungsten arc welding	E/B	2	Nil
49	MEM05050B	Perform routine gas metal arc welding	E/B	2	NIL
50	MEM05051A	Select welding processes	E/B	2	NIL
51	MEM05052A	Apply safe welding practices	E/B	4	NIL
52	MEM12001B	Use comparison and basic measuring devices	E/B	2	NIL
53	MEM12002B	Perform electrical/electronic measurement	E/B	2	NIL
<b>TOTAL Weighting Points – Group A &amp; Group B</b>				<b>73</b>	

### 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:

TRS (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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