

# Career Profile: Boilermaker & Welder

Boilermakers and Welders possess a unique set of skills involving cutting, rolling, shaping, heating, assembling, and welding steel to construct and install metal products for steel structures, boilers, iron, ships and other vessels. They are responsible for the routine maintenance, repairing and upgrading of structures to ensure efficiency and make sure environmental standards are being met.

## Qualification

Certificate III in Engineering - Fabrication Trade (Boilermaker/Welder)

## Sector

Residential / Civil / Commercial / Resources

## What might a working day look like?

- ▶ Installing, inspecting, repairing boilers, and evaluating their performance to eliminate leaks and defects
- ▶ Determining the requirements for a job by studying blueprints, specifications, and fabrication drawings
- ▶ Using hand tools, metal cutting machines and flame cutting torches to cut, bend, shape and align pipes and metal sections
- ▶ Using bolting, riveting and various welding techniques to join and align metal sections
- ▶ Utilising a range of equipment from robotic and automatic welders to hand held power tools
- ▶ Testing and inspecting welds using precision measuring instruments
- ▶ Polishing, smoothing, and cleaning welds using grinding, filling, chiselling and acidic solutions to finish products
- ▶ Follow strict safety procedures and wear appropriate protective clothing

## Working Hours & Conditions

- ▶ Usually full time hours, overtime may be required depending on the project
- ▶ May be required to work indoors or outdoors
- ▶ Physically demanding job involving heat, heavy machinery and power tools at heights

## Skills and personal qualities

- ▶ Good level of physical fitness and comfortable working in confined spaces, at heights and in extreme environments
- ▶ Enjoy practical, hands-on work
- ▶ Can work independently, take pride in accuracy and can employ critical thinking
- ▶ Good mechanical and maths skills.

## How to get started

You will need to complete a Certificate III in Engineering (Fabrication Trade). This qualification allows you to specialise in either boilermaking or welding or both specialities.

## Future Pathways and opportunities in Construction:

- ▶ Leadinghand / Foreman



## Next Steps

Further information can be found at:

- ▶ Jobs and Skills WA – [www.jobsandskills.wa.gov.au](http://www.jobsandskills.wa.gov.au)
- ▶ The Good Universities Guide – [www.gooduniversitiesguide.com.au](http://www.gooduniversitiesguide.com.au)
- ▶ Job Outlook – [www.joboutlook.gov.au](http://www.joboutlook.gov.au)