

**Women In Welding Profile:
Emma Claridge, Quality
Assurance Advisor, UGL**

With over 10 years industry experience, Emma specialises in the coordination of welding quality assurance and quality control across the structural, mechanical, piping and civil sectors. She is adept at creating, implementing, auditing and verifying quality systems and processes, as well as inspecting all aspects of fabrication to ensure the appropriate Standards and specifications are met, and the finished product is fit for purpose.

A boilermaker by trade, Emma holds an AS1796 Welding Supervisor Certificate 10, and is an International Welding Specialist (IWS), having completed both qualifications through Weld Australia.

Emma commenced her career at UGL in Mackay as a class one AS1210 pressure welder and boilermaker. Initially, Emma undertook welding of nickel, stainless steels, and mild steels using GMAW, GTAW, MMAW, and submerged arc welding. Her welding experience was gained on onshore and offshore projects, coal mines, sugar mills, and coal shipping terminals, at heights and in confined spaces. Since then, Emma has held various welding inspector and quality assurance roles, including: as Laing O'Rourke's representative on the

Ichthys LNG Project Accommodation Village; as ConocoPhillips' representative for the Bayu-Undan offshore facilities; for the Dalrymple Bay Coal Terminal; and as UGL's representative for the Olympic Dam Shutdown.

Until recently, Emma was a Quality Assurance and Quality Control Inspector at HiVue in Brisbane, having just taken on a Fly-In, Fly-Out (FIFO) quality role with UGL at Olympic Dam (the fourth largest copper deposit and the largest known deposit of uranium in the world).

Describe your job.

I am currently a quality assurance advisor for UGL. Throughout my career, I have worked on everything from oil rigs, chemical plants, coal terminals, and gold, copper and uranium mines, right through to providing quality assurance for the local fabrication workshop. My main tasks have included weld inspection, weld supervision and SMP inspection.

What I love most about my job is that it covers a vast array of quality topics and processes, from inspection and supervision, to document creation and control. Each of these topics plays a vital role in weld quality. At the moment, in my current role, I have the opportunity to be a part of each of these processes, which definitely keeps me on my toes.

What inspired you to choose a career in welding?

A career in welding is not something I planned during school. I did consider a career in engineering after school, but could not afford to study full time. So, instead, I thought a trade would be a round-about way to end up working in the same field.

Once I started my apprentice as a boilermaker, I realised just how interested I was in how the whole welding process fitted together, from fabrication to installation. There's a lot more to welding than most people realise, particularly once you start to learn about all the variables, such as metal thicknesses, grades,

types and fillers. This alone is an extremely interesting topic.

Why do you think women should consider a career in welding?

I think more women should consider a career in welding because it pays well and it's interesting. Plus, I am a firm believer that women have a keen eye and attention to detail—skills that are essential in welding and fabrication.

Do you have any advice for women considering a career in welding?

If you're thinking about a career in welding, and you're being put off, thinking that it's too hot and heavy, and too hard physically, don't let this stop you. There are workplace health and safety rules that limit factors like the amount of weight you can lift.

I completed my apprenticeship with UGL and they were great. If you can find a job with a larger company, like UGL, then you're more likely to find a better ratio of men to women in the workplace. This way, your workplace may not be quite so male dominated.

Have you found working in a traditionally male-dominated industry difficult? If so, how have you overcome any challenges?

At first, I was on a mission to prove a point to myself—and everyone else around me—that I could do the job. This was mainly because there were so many people around who believed that a boilermaker shop was for men only. I quickly found that I had a passion for learning about metal. But I needed the practical application in the boilermaker shop to understand the theory, and I wasn't going to let anyone deter me from my end goal. I knew early on in my career that I wanted to focus on the quality side of things. I knew that being on the tools was only a stepping stone for me.

In the end, I don't think being a woman in a male dominated industry has impacted me or my career negatively. If I couldn't practice what I preach, I definitely wouldn't be where I am today.

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What is the most interesting project you've worked on?

I would have to say the Olympic Dam Shutdown in 2017 was very interesting for me. It was the first project on which I had worked that wasn't a part of a process, and the mine was huge. I was lucky enough to be the BHP Billiton representative (contracted through UGL) for the project. I ensured all turnaround work activities complied with the relevant specification and Standards through inspection and verification of the structural, mechanical and piping scope of works. It was quite an experience.

Who has inspired you professionally?

I have been very fortunate along my journey to have certain people take me under their wing. I am always one of the youngest inspectors and am always pushing to learn more.

When I was an apprentice, my very first welding supervisor was in his 70s. I had to work hard to prove myself to him. He was the first person to make me realise that I have a passion for understanding the process of welding exotic materials. Until recently, I worked alongside Andrew Gray, the Managing Director of HiVue. Andrew has helped me understand how to put together all the pieces of the puzzle to create a Welding Procedure Specification. There is always something new to learn and I am so grateful to everyone that has had time for me over the years.

What do you believe is the biggest challenge for the welding industry at the moment?

One of the biggest challenges for the welding industry is changing people's mindsets around why we need quality control in the first place. There is a lot involved in the quality control process, and a lot of confusion around why we need to record and do the things we do in the first place. Some people don't understand why they now need to be qualified to weld certain things when they have been welding them their whole lives. It's not usually until something goes wrong that the welding process is reviewed. If we help people understand the need for quality control, we can create a better product and a more consistent product.

What do you believe is the biggest opportunity for the welding industry at the moment?

Welding is not going away. If you can weld, you can create. There's always room for new and improved ideas.



Top: Emma Claridge, Quality Assurance Advisor, UGL.
Middle: Emma Claridge performs an inspection on a pipe according to ASME B31.3 *Process Piping*.
Bottom: Emma Claridge performs an inspection on a pipe according to ASME B31.3 *Process Piping*.