



Catherine Blake, Quality Manager, Australian Precast Solutions.



me through any economy or city. I decided I needed to be different and do something that was challenging, yet rewarding. I wanted to be a truly independent, strong woman who could achieve anything I wanted.”

“Welding has given me a career and drive like nothing else. I feel like, at times, it was the only thing keeping me on track. It has inspired me to be a better person than the path I was heading down. I owe my life to welding,” said Abbot.

There are a myriad of benefits to attracting more women to welding and nurturing their career development in the industry. Highly skilled, passionate and progressive individuals are now needed to support this fast-evolving trade and provide the talent pool required.

Narrowing the sizeable gender gap and making welding a legitimate career choice for women is now crucial in widening that pool. And with the challenges facing the skilled labour workforce, it is the only viable solution for the sustainability of the welding industry in Australia.

### Spotlight: Catherine Blake, Quality Manager, Australian Precast Solutions

#### Describe your job.

I’m employed by Lendlease as a Quality Manager. My current role is at Australian Precast Solutions (APS), Lendlease’s precast concrete facility on the mid north coast of New South Wales. My role incorporates responsibilities as a WTIA Certified Welding Inspector, as well as managing the APS NATA accredited concrete testing laboratory.

APS manufactures a range of prestressed and reinforced concrete products, including concrete girders, planks, super-T bridge beams, noise walls, barriers, arches and other precast products. We are currently manufacturing headstocks and abutment sill beams for the Woolgoolga to Ballina (W2B) Pacific Highway upgrade.

My role involves managing the product and process conformance of the precast facility, including inspection and testing, identification of and reporting quality issues, ensuring corrective action is implemented and effective, and

communicating quality management requirements including solutions to problems.

The manufacturing of precast units involves welding of steel in accordance with AS1554.1, structural steel stud welding in accordance with AS1554.2 and welding of reinforcing steel in accordance with AS1554.3.

As Quality Manager (and Welding Inspector), I am involved in the management of welder prequalification, inspection and surveillance. I also liaise with the client in regards to weld details, weld inspection and weld surveillance.

#### What inspired you to choose a career in the welding and industrial sector?

After studying Geology at university I headed into the mining industry, mostly in Far North Queensland. During this time, I studied as a postgraduate in metallurgy. In the last 10 years I have ‘drifted’ into quality management, and welding processes and inspection took my



fancy. For the past six years I have been involved in weld surveillance with Lendlease on different projects. I enjoy applying scientific and quality knowledge to practical processes where operator skill is often an art, not just a trade.

### **Why do you think more women should look to a welding and industrial sector career?**

It's a great time to be female in the welding and industrial sectors. It is my opinion that gender issues are disappearing rapidly in the industry and the focus is now where it should be; competence, skill, safety. I admire women in male dominated industries that understand that they are the best person for the job and don't worry about anything else as they are too busy doing it. If a woman is interested in the welding or industrial sector and have the skills; good organisations are fostering this interest with opportunities.

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

The biggest challenge is maintaining workmanship skills through the transition to automation. The transfer of knowledge from skilled workers to people wanting to learn the trade is essential. It's important that this transfer of knowledge includes the 'pride in work' aspect, as well as understanding the art and science of the industry.

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

It's a good opportunity for Australian skilled welders, welding processes and Australian steel to be the

benchmark for quality internationally. The technology available today can be applied locally in Australia to keep skilled workers available and boost local communities.

APS is one of the biggest employers in our local area. We are committed to maximising our use of Australian steel, Australian consumables and local skills. This contributes to the pride in one's workplace, which fosters a healthy quality culture and makes for a great work environment.

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

When I moved from the mining industry into construction quality management with Lendlease, I worked on a wastewater treatment plant upgrade project on the Gold Coast. The project was to increase the treatment plant capacity by 25%. There was lots of cutting-edge mechanical, electrical and instrumentation design and construction. This was my introduction to AS4041 pressure pipe welding in a corrosive, aggressive environment and the learning curve was fantastic.

### **Who or what has inspired you the most professionally?**

I have been very fortunate to be mentored by some technically-advanced and diverse people in my career.

I had a wonderful role model growing up. My older sister is a Mining Engineer and has managed major projects around the globe. I remember some of the experiences that she had in a male-dominated sector, which displayed a gender inequality that would not be accepted now. That was only 20 years ago. It's amazing how quickly a culture can change when everyone wants it to.

### **What gives you the most satisfaction at work?**

Working on a quality issue with a problem-solving team and implementing corrective actions that effectively nail the root cause is a very satisfying part of my work.

Further to this, a precast facility is a manufacturing environment that lends itself nicely to continuous improvement. One of the most satisfying aspects of my role is being able to strip any superfluous tasks, controls, processes that do not add value to the end product. I like the quote from Leonardo da Vinci, "Simplicity is the ultimate form of sophistication".

### **What are your greatest achievements?**

I think back to different quality issues that I've faced in different roles and being part of the management team controlling these issues successfully has contributed to achievements that I'm most proud of. As Quality Manager, having a healthy, challenging and innovative quality culture in the workplace is a great source of pride.

Gaining my WTIA Certified Welding Inspector qualification was also a proud achievement for me.