

## Spotlight: Charley Barrett, Welder, South32

### Describe your job.

I am a sheet metal fabricator and coded TIG welder at South32. Sheet metal is cutting, bending, welding and rolling of metal into a desired part or structure. My job can be complex, as there are many different aspects to learn in metal work. I get a lot of job satisfaction from my work when looking at a finished product that has been carefully formed and welded from a drawing. My sheet metal trade has offered me many opportunities, including the chance to work at the world's largest and most efficient alumina mining company.

My new position entails predominantly maintenance of the processing facility at South32 Worsley. Some of my day-to-day duties include, but are not limited to: repairs on pumps and motors, replacing valves, fabricating and repairs of plant equipment.

At South32 we are encouraged to upskill in a number of areas, including dogging, rigging and crane work. There is plenty of opportunity for advancement in my new role. I work in a crew of nine people, and my workmates are always helpful and willing to teach me new skills in the field.

### What inspired you to choose a career in welding?

I grew up on a property where I needed to be hands-on and help with jobs around the farm. It was my dad who first inspired me to weld at a young age. I would help Dad with repairs on the stables and round yards for the horses. My dad is a boilermaker by trade, so he was always giving me tips on how to do things. I loved being outside with Dad. He helped me believe in myself and encouraged me to try my best.

Later in school I chose metal work as a subject, where I was able to increase my skills even further. From then on I knew I wanted a career in

welding, that way wherever I found myself in the future I would always have a valuable trade to help me through any economy.

Completing my apprenticeship has helped me to be mechanically-minded inside and outside work. When I first moved out of home I was living alone and felt confident and able to do my own repairs around the house, whether it be welding or just a small plumbing fix-up. My trade has made me independent and eager to challenge myself in every aspect in life.

### Why do you think more women should look towards a career in welding or boilermaking?

“I encourage any female interested in the welding trade to give it a go. It isn't easy. It's hard work and challenging, but extremely rewarding and worth every minute.

After completing my trade I feel more confident as a person and I am just as capable as a man to do any job.

When I first started I was just 15, I walked into a workshop of only men, they were 'old timers' and doubtful to see a female in the industry, I felt very out of place and nervous, This made me more determined. I worked hard to prove them wrong and to be the best person and fabricator I could be. Five years later and things are totally different.

My recent start at South32 has made me realise how much has changed. There are many other females around site and on my work crew. There is plenty of opportunity for advancement and a lot of support. The fabrication and welding industry

is adaptive and dynamic with endless career paths, from welding and engineering to robotics.

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

There is an increase in the importation of pre-fabricated equipment and infrastructure, which results in local jobs and opportunities for apprentices being lost.

There is a struggle to remain cost-competitive with the increasing price of raw materials. These factors don't just affect the construction and mining industries; our economy as a whole is struggling, but I do believe things will get better.

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

In general, the welding and construction industry has been very slow to adapt to change and new techniques. I believe if we take the opportunity to embrace new technology, productivity will then increase. Making use of new technology will help the way we design, operate and maintain infrastructures. 3D printing and drones have been a massive breakthrough. 3D printing allows us to speed up the process of producing components and drones are allowing us to monitor projects and safety around sites.

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

The most interesting project I worked on was in the third year of my apprenticeship. My teacher Allan Inder-Smith at Challenger TAFE gave us the project of building a rocket stove. A rocket stove can be made from clay, steel or wood. We made ours from steel. The stoves are wood burning and very efficient. Our stoves cooked faster, used 80% less wood and produced very

little smoke. This project was more interesting for me as the aim was to produce a product for use in poorer countries. More than four million people a year die from respiratory problems caused by open fires.

Earlier this year, my teacher took the rocket stove to India and taught people in villages and orphanages how to build and use the rocket stove. I am grateful to have been involved in creating our rocket stoves. Allan has helped many families and underprivileged people live a little better.

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

My teacher Allan Inder-Smith at Challenger TAFE is my professional inspiration. He has worked in many places and in many areas of metal work, and has a lot of experience and knowledge that he has passed on. Allan didn't just educate me on the theory of sheet metal work, he also encouraged me to go to night school for welding. With every level passed he would encourage me to go further and push my limits.

As my mentor, he taught me how important goal-setting is. This has helped me to succeed in my career and also my personal life. Every apprentice needs an Allan!

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

My greatest achievement so far has been representing Australia in the International Tetrathlon in Ireland in 2016. Tetrathlon is the combination of running, swimming, horse riding and shooting in one event. I've been doing this for nine years and I'm very passionate about it. I would not have been able to achieve what I have in sport if it wasn't for the values that my apprenticeship has taught me. I learnt to overcome fears and challenge myself, and now have the drive to succeed in whatever I set my mind to.

