

You Should Pick Something You Love

by Thomas McLennan

I am a senior at Pittsburg State University studying Manufacturing Engineering Technology. My true aspiration in life is to obtain an engineering position with a quality investment casting company that will help me develop my leadership and engineering skills. My values consist of hard work, integrity, and communication. I believe hard work can get you anywhere in life, and that anything is possible if you put enough brain power into it. It is also important to be honest with yourself and those you work with. Lastly, without good communication in the workplace it can potentially become a hostile environment and safety can be impacted. I truly believe this and have experienced it in every metal casting internship I have had.

I caught the metal casting bug within my first semester of college and it has consumed me ever since. This field of work fits me because there are always new problems to be solved and it involves hands-on work which really helps me learn and understand concepts. My experiences within the metal casting industry have been unique and varied. In addition to my university course work, I have had three metal casting internships. The longest (6 months) and most recent being within the investment casting industry.

Starting in January through June of this year (2017), I had the honor of being selected for a six-month internship with AW Bell in Melbourne, Australia. AW Bell is an ICI member company supplying both investment castings and equipment to industries around the world. While working for AW Bell, I had the unique opportunity to work as a quality engineering intern and also work in a general labor position. The general labor position was a great learning experience. I got to work as a furnace operator, pouring shells, pull shells, and do metallurgical charge calculations.



Above: Thomas McLennan completing an internship at AW Bell in Melbourne, Australia.

Basically all things melting and pouring. Once I learned the melting and pouring area I was able to apply my knowledge as a Quality Intern. My projects included shell furnace temperature mapping for maintaining proper shell temperature control, Ladle preheat project to make new equipment selections to establish the process sequence and basic process control improvement projects. One of my biggest and most challenging projects was the implementation of a 5s program within the melting and pouring area. It also was one of my proudest. The challenge was to work with employees to get them to embrace the concept of 5s. Once I developed our 5s plan I was able to implement it with ease, as I was an established employee in the area, not just a new college intern. This gradual implementation got everyone to buy in. They were involved with improving their work area and also their jobs. Within two months the melting and pouring area won the most improved area in the plant. Something to be proud of.

This six-month experience opened my eyes to a new point of view of metal casting. It really helped me develop a great understanding of the processes and taught me valuable leadership and people skills that I need to motivate workers. In addition to the work aspects of the internship, I also got to experience another great country and meet some really awesome people along the way. Friends I will have the rest of my life.

I plan to continue working during school as the foundry lab assistant at Pittsburg State University. This will allow me to earn some funds, but also teach students about the field that I love and allow new life lessons for me to experience. Overall this ride has been an exciting, bumpy experience that I wouldn't trade for anything. I am very fortunate to be involved in a field with great people and interesting work. My professor told me, "When you need to find a career to work in for forty plus years you should pick something you love." I think I did.