



# Progress & Perspectives:

## WOMEN IN STEEL

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process engineer



### Where did your education and career start?

My education started at Texas State University as a manufacturing engineering student. It was there that I found my niche in metalcasting. The university has a 1,400-sq.-ft. foundry where I learned how to cast aluminum, brass, bronze, and iron with a 300-lb. lift swing induction furnace. I started working at the university as a lab technician. A year later I was introduced to Dr. Laura Bartlett and became her research assistant with my primary research being in lightweight high-manganese and aluminum steels. This change in my academic career led me to an internship in Seguin, Texas, with Commercial Metals Company as a meltshop intern. It was with Commercial Metals that I started my professional career as technical assistant and now a process engineer. Needless to say, I came from humble beginnings in that foundry but it's a big part of what shaped me into the steelmaker I am today. Looking back on the start of my career, I find it funny to think that I went from a 300-lb. induction furnace to a 150-ton electric arc furnace.

### Why did you choose the steel industry?

I chose the steel industry because of the opportunities it presented. I chose Commercial Metals Company because of the people. If asked to describe the men and women of CMC Steel Texas, I would say they are the welcoming arms of strangers that have become my family. The combination of the physical, chemical and mechanical hurdles within the meltshop sealed my choice to join the industry as a professional. It's hard to find other manufacturing environments as exhilarating when the sound wave of an electric arc furnace still reverberates through your chest long after the day has ended. Honestly, I think there is something about making steel that captures you; it is the

culmination of strength and finesse and the endless possibilities of what we as steelmakers are capable of achieving that make it hard to derive satisfaction from other career alternatives.

### How has your career advanced?

I started as an intern and have since become a process engineer with a primary focus on the ladle metallurgy furnace. My day-to-day duties have transitioned from data collection and systems management into alloy cost savings initiatives, process improvements and maintenance/reliability coordination.

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### Can you talk about any support you've received to advance your career?

In my academic career my most notable mentors were Shane Arabie and Laura Bartlett. Shane hired me as lab technician and set forth challenges that made me proficient in machining, sand casting and CAD design. Shane taught me a lot about leadership; he strived to develop those working for him and encouraged us to take on new opportunities for growth even when we were unsure of ourselves. His push led me to my other mentor, Laura Bartlett, who introduced me to the steel



industry. She molded my mechanical/casting abilities on the casting floor into a technical skill that has carried into my professional career. She also introduced me to AIST, the Foundry Education Foundation and the American Foundry Society, which were instrumental to the funding of my education and research. My professional career has been shouldered by a number of mentors at CMC that are too many to name but collectively they have challenged me beyond what I expected, guided me along a path of success, and supported me through my triumphs and failures. I am grateful and honored to work beside these men and women.

### Has the steel industry become more inclusive?

The industry has evolved by becoming more accessible to those wishing to pursue an education in the steel industry through the fostering of scholarship programs, internships, research opportunities and apprenticeships. These programs open a door to the incoming generations of steelmakers who otherwise may not have been able to afford a college/technical education. A number of notable steel manufacturers, suppliers and fabricators have taken on the challenge of engaging with our country's youth through different means before they have graduated from high school and this, I believe, opens a large number of opportunities within our communities.

The leadership of the steel industry has changed considerably for my generation; particularly for women. One of the things we underestimate in this industry is the importance of role models for the younger generation. The millennial and centennial generations are the first to have a large number of female leaders and role models in the

industry. My role models include Ruth Engel (industry-renowned refractory expert), Sara Hornby (author and multi-patent holder), Laura Bartlett (university professor and Kent D. Peaslee Award recipient), Barbara Smith (Commercial Metals Company chairman of the board, president and chief executive officer), Gretchen Haggerty (retired United States Steel Corporation executive vice president and chief financial officer) and Harriet Dutka (AIST Distinguished Member and Fellow Award recipient). These women have created a pipeline for others to enter the steel industry through their research, mentorship, technological advancements and leadership within the industry.

Among the leaders are a notable number of men who support women in the steel industry. My career would not have started/progressed without the support and encouragement of men such as Rolando Davila, Sam Matson, Timothy McKinney, Martin Garcia, William "Bill" VanderWaal and CMC executive vice president and chief operating officer Tracy Porter. Their support is best described by the words of Sir Isaac Newton: "If I have seen further, it is by standing upon the shoulders of giants." The industry is evolving to be more inclusive and this is due in part to these men and others alike being the giants that support women within our industry.

### Why do you feel diversity and inclusivity are important in the workplace, and the steel industry as a whole?

The steel that builds this country is made by the hands of many diverse individuals. The steel industry, as a whole, should reflect the diversity of those individuals and the communities in which we live. ♦