An Interview With AIST President

By: Jennifer Vergot

ArcelorMittal

Keith Howell currently serves as chief operating officer (COO) for ArcelorMittal North America. He joined ArcelorMittal in June 2016 as COO of ArcelorMittal USA. Prior to his current position, he was senior vice president, operations for AK Steel. Howell was named vice president, operations for AK Steel in 2012. He joined AK Steel in 1997 as manager, steelmaking at Middletown Works. He was named manager, aluminized in 1999 and manager, cold strip department in 2000. He advanced to general manager, operations at Ashland Works in 2001. He was named general manager, operations at Middletown Works in 2003, and was named general manager, Butler Works in 2005. In 2009, he advanced to director, engineering and raw materials. He was named vice president, carbon steel operations in 2010 and also assumed responsibility for the Butler Works in 2011. Prior to joining AK Steel, Howell had 10 years of operating experience at U. S. Steel – Mon Valley Works, Edgar Thomson Plant. He had assignments in the quality assurance and steelmaking departments. Howell holds a B.S. degree in metallurgical engineering from the University of Pittsburgh and an M.B.A. from The Ohio State University. *Iron & Steel Technology* had the opportunity to interview Howell about his career and his upcoming term as AIST President.

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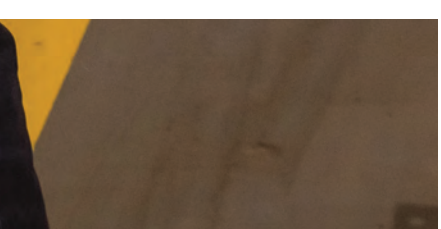
Keith Howell



Tell me a bit about your background. How did you become interested in the steel industry?

I was born and raised in Western Pennsylvania and am old enough to remember seeing the various operating steel mills along the Monongahela River in the greater Pittsburgh, Pa., USA, area. I did my undergraduate studies in engineering at the University of Pittsburgh, earning my degree in materials science and metallurgy, and after a very brief period in the aluminum industry, quickly found my way to the steel industry. I guess you could say that steel was always in my blood, being the second generation in my family to work in the industry. My father, John "Jack" Howell, worked at the U. S. Steel Research Center in Monroeville, Pa., for more than 30 years and became a well-recognized expert in blast furnace burden distribution, publishing multiple patents and helping solve blast furnace operating problems around the world. My uncle, Don Howell, also spent his entire career as a supplier and expert technical consultant to the industry, so iron and steel has always been a part of my life.

Did you have a mentor or somebody in your career who served as a role model? What did you learn from them?

I have had several mentors and role models throughout my career, so it would be impossible to name just one. Some that come to mind immediately are Mark Boyer, Bob Harris, Fred Harnack, Glenn Mikaloff, John Kaloski and John Brett, to name a few. Early on I learned the value of a hard day's work and the importance of being present on the shop floor. I also learned the importance of integrity and fairness and that it takes all employees of the team to work together to be successful. I have been very fortunate to be guided by so many experts in the technical and financial side of our business and have been able to apply all of their advice and knowledge throughout my career.

How did you first get involved with AIST? How has membership benefited your career and professional development?

I first learned about AIST as a new engineer working at the Edgar Thomson Works in Braddock, Pa. Some of the work that I was doing resulted in co-authoring a paper regarding steelmaking slag treatment. My dad also presented papers multiple times at AIST technical sessions, so I became familiar with AIST early on. Later in my career, Fred Harnack and Bill Breedlove approached me about joining the AIST Executive Committee and here I am. I always appreciated the technical exchanges and information available through AIST, and the training opportunities provided. The relationships with suppliers and other peers in the industry have been invaluable, and I encourage anyone who works in the steel industry to join the organization.

What has your experience been like serving on the AIST Executive Committee?

The AIST staff has made the experience of serving on the Executive Committee very rewarding and enjoyable. Ron Ashburn and his team do amazing work and all the heavy lifting within the organization to make our work as committee members easy. All the members of the committee that I have served with have been consummate professionals and I value the relationships that I have made during this time.

What areas do you plan to focus on as you begin your term as AIST President?

My focus will be on our core value of advancing the technical development, production, processing

and application for iron and steel. As we exit the pandemic, certainly many things have changed and will never return to how they were prior to it. The way we communicate, interact and work today is much different than how we did just a few years ago, so we need to make sure that we adapt and continue to provide networking and training opportunities to the industry within this new normal and reinvigorate our membership. This is important now more than ever with the industry focus on decarbonization and the amount of research and technology transfer that will happen over the next several years in this area alone.

AIST has dedicated significant resources to supporting the global steel industry's ongoing decarbonization. How can the association better serve industry stakeholders as they work to meet global climate benchmarks?

Research and the development of technology will play a significant role in the decarbonization of the steel industry. It will come along the fronts of many areas such as steel and energy transformation; green hydrogen production and usage; and the capture, storage and/or use of fossil carbons, for example. I believe that AIST can play a critical role in leading and administering the research and technology development that will be needed to reach reduction targets and goals moving forward.

Last summer your company announced a US$1.39 billion plan to convert ArcelorMittal Dofasco's integrated process route to direct reduced iron–electric arc furnace steelmaking. How is that project coming along? What other steps is ArcelorMittal North America taking to reach its decarbonization goals?

ArcelorMittal is committed to leading the decarbonization of the steel industry with a company target of net zero by 2050 and a 2030 group CO_2e emissions intensity reduction target of 25%. Our project in Hamilton, Ont., Canada, is an important part of that commitment that will reduce annual CO_2 emissions at Dofasco by approximately 3 million metric tons, or about 60% of emissions, as we transition away from the blast furnace-basic oxygen furnace steelmaking production route to the DRI-EAF production route. We are extremely excited about this project that is moving forward according to schedule. We are committed at all North American locations to reduce our CO_2 emissions intensity and are studying the use of various levers, such as steelmaking and energy transformation, sourcing clean energy, and offsetting residual emissions to achieve our goals.

It's often said that steel is a cyclical industry, and the last two years have lived up to that adage. Since 2020, domestic steel producers have rolled out major CAPEX investments, weathered dramatic downturns and supply crunches caused by the global pandemic, celebrated the passage of the Infrastructure Investment and Jobs Act, enjoyed healthy demand, and now wrestle with inflation and instability in the commodities market due to the conflict in Ukraine. What words of wisdom can you share about navigating through these extreme ups and downs?

The reality is that this is the steel industry and the business that we work in. It has been this way my entire career so you can't let yourself get overly optimistic during the high periods, nor too pessimistic during the low periods. Recognizing the cycle allows you to plan appropriately so that you can be successful in all cycles. The only certainty is that change is inevitable, so you must put yourself in a position to be as flexible as possible so you can quickly adapt to changes as they occur.

AIST is always looking to inspire the next generation of steelmakers. What would you say to a young professional considering a career in steel and joining AIST?

I would explain to them that the steel industry is not the dirty, antiquated industry that some may perceive it to be but an industry of opportunity and new technology. The adaptation of artificial intelligence and new breakthrough technologies create opportunities to make the production of steel cleaner and more efficient than ever before. The industry offers opportunities in all technical fields as well as opportunities in business and management functions and will allow you to develop any career path that you choose. You just have to take advantage of all that is offered. One of those growth opportunities is AIST, which provides exceptional technology offerings as well as networking and training that you will use your entire career. ✦