





An Interview With 2023-2024 AIST President

Barry Schneider

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

I grew up in Cleveland, Ohio, and decided to be an engineer. I had pretty diverse interests growing up; I liked sports like football and wrestling, played in rock and roll bands, and did well in school, academically.

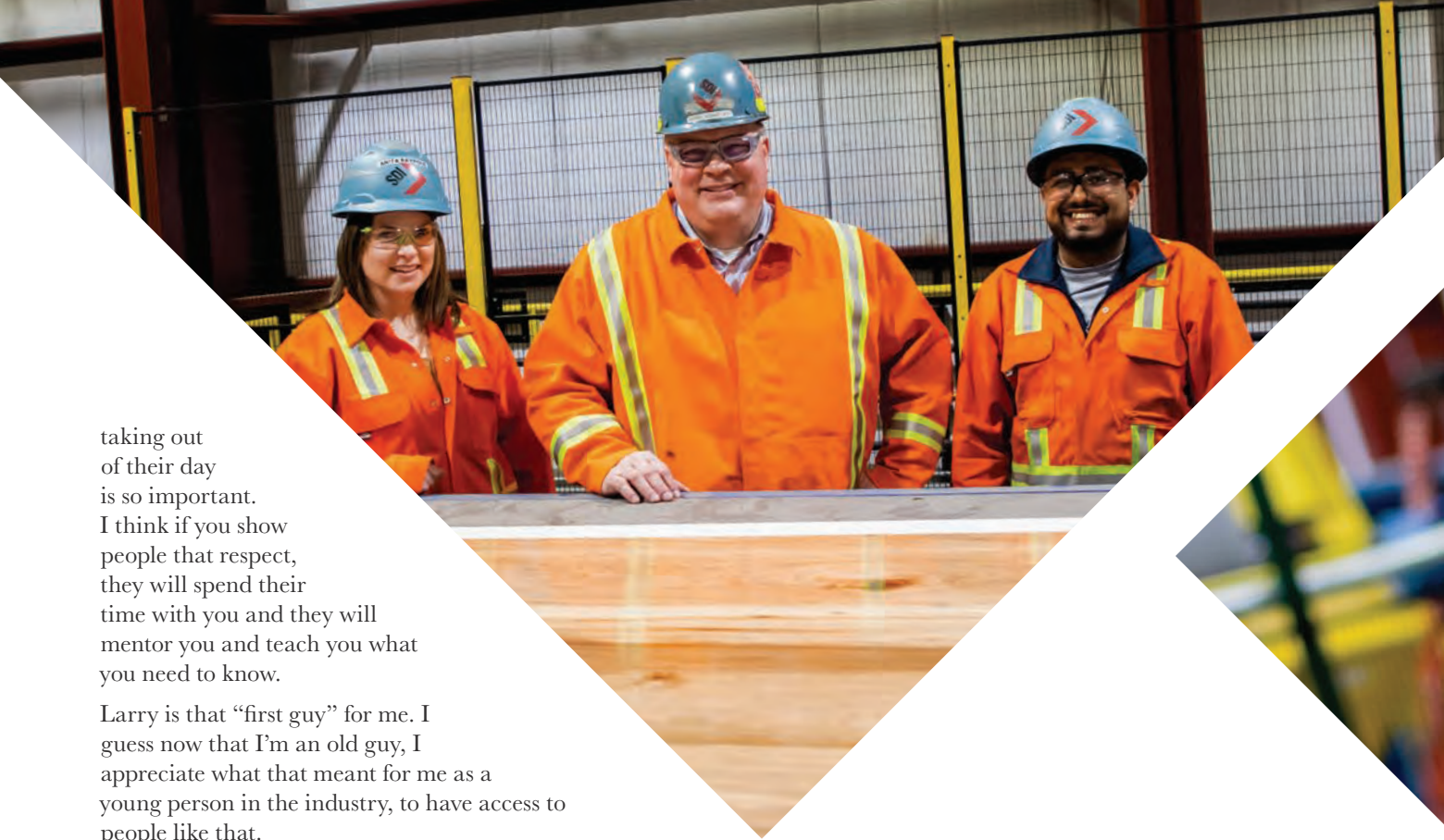
I went to school at Rose-Hulman Institute of Technology, which is a small engineering school in Terre Haute, Ind. When I graduated, my girlfriend at the time — now my wife — was still going to school in Cleveland, so I figured I'd go back to Cleveland. I interviewed at LTV Corp., which was bankrupt at the time, and I interviewed with the automotive companies that were in Cleveland, and I realized that I didn't know what I wanted to do when I grew up. But a steel mill is an interesting place because it has everything. I could learn about water treatment systems, pollution control systems, energy systems, all the equipment, all the various components of steel — literally anything you can imagine is at a steel mill. So, I thought what a great opportunity to learn! I went right on shift as a maintenance supervisor and it was fun. It was a good way to figure out what I didn't know.

Engineering school only teaches you a little bit about what you need to know. I was very fortunate to be able to come into a culture that had true craftsmen. The millwrights and electrical people and the engineers in the steel industry are very prepared and they're educated well. In steel mills, we break things in glorious ways, so you really get exposure to a lot of unique situations.

Did you have a mentor when you first started out?

I did and it was my first boss, Larry Traxler. He was a millwright. Ultimately, he was promoted to supervision and then leadership, and he became the general manager of maintenance for the hot strip mill I was working at. He had a great insight into how people work — which is important — and was great at motivating people. He was an excellent troubleshooter and taught engineers that while an engineering education teaches you how to solve problems, being in the field teaches you how to practically apply your knowledge. Larry taught me a lot of things, and most of it was understanding how things should properly operate in a mill.

He helped me realize that in the industry, just because a person is a millwright or an electrician doesn't mean they don't know what I do, and actually they have a knowledge base that I'll never have. I'm thankful to this day that people took their time to explain things to me, and to understand that, yes, I have an engineering degree, but I still needed to learn all the things you learn from coworkers and from people who are experienced and have opinions that may be different than yours. I was fortunate because I was put on crews with incredible, mechanical minds, and exposed to pretty big projects, and in those five years I spent on shift, I learned how to be self-sufficient in decision-making and leadership. I learned how to let the team do what they know to do and how to support that. When people would teach me things, I was like a sponge, and I am fortunate they took the time with me. The industry is full of real craftsmen and professionals and I think being willing to meet them halfway and being appreciative of the time they were



taking out
of their day
is so important.
I think if you show
people that respect,
they will spend their
time with you and they will
mentor you and teach you what
you need to know.

Larry is that “first guy” for me. I
guess now that I’m an old guy, I
appreciate what that meant for me as a
young person in the industry, to have access to
people like that.

When did you first get involved with AIST?

I joined the Association of Iron and Steel Engineers (AISE), one of the predecessor organizations of AIST, formally in 1999. In none of my early roles did I actually work as an engineer; rather, I was a maintenance supervisor or a production supervisor. At SDI when I went into the engineering department, you had to be an engineer to get into AISE, so I didn’t. I was tangentially aware of it, so I formally joined in 1999. I became a member of the Iron & Steel Society (ISS) probably in 1998/1999, around the same timeframe. I went to the conferences and I would go to the papers; back then ISS covered more of the production stuff. Being more operations minded, I was interested in that because they would talk about safety practices and different steelmaking things. ISS was really that first exposure, reading papers and meeting colleagues.

The industry was pretty rough from 1998 to 2001 — lots of bankruptcies. I think the number you hear is there were 52 steelmaking companies in 2000, and by 2002, 36 of them had gone bankrupt or disappeared. All of these incredible mills were shuttered, so as the industry reformulated and we got back on our feet, I think AIST also emerged out of that as a “blue chip” association. I’ve been engaged non-stop since 2009.

How has membership benefited your career?

Being a part of AIST has not only helped me on the technical and professional level, but I’ve benefited from the camaraderie of the industry and going to AISTech and the chapter meetings. You figure out pretty quick that there’s a lot of people that are doing a great job at

other companies and they become your friends and your colleagues, even though you’re competitors. I know that if I’m really stuck in a problem, I can call people in the industry and people can call me.

Particularly, there are certain things that transcend everything, like safety. There’s no one that would hesitate to talk to you about safety in this organization. If you have a new challenge, you could talk to somebody that’s been there and done that, and they’ll genuinely help you. The same when something’s broken. There’s been times I’ve gotten calls in the middle of the night from other mills. People have helped us over the years, we’ve helped our friends — that’s the wonderful part about this industry: the connections within AIST. Common problems that people can solve together. AIST has done all of that for me, more than I could hope for.

What motivated you to serve on the AIST Executive Committee and now as president?

I was motivated by the leadership at SDI; specifically, it was Dick Teets and Glenn Pushis. Dick and Glenn are the consummate engineers, and they were both very active in AIST and served as past presidents of the organization. They had each gone through the Executive Committee rotation — Glenn more recently — and I was active in AIST when Glenn was president. So, a lot of activities we would do together, and I saw the benefit of being in the leadership of AIST. Glenn, above all things, is very interested in the future of AIST and now that he’s the AIST Foundation president, he’s also very interested in what the legacy of our industry will be. I saw the Executive Committee as a way that I can help



leave a better legacy for our industry and help inspire young people to be part of that.

I also saw it as an opportunity to be in the room with leaders of the industry. I remember early on going to the Town Halls and I would see the leadership of the industry on stage, and it was so approachable. It's the industry! It's the Dan DiMicco's, the Keith Busse's, the U. S. Steel leadership — AIST was giving me a way to be connected to the industry leaders. At AIST events, you have people from academia, people from different aspects of producers, people from the supplier side of the business, so to be able to sit in the room with those folks and expand your own mind is invaluable. I look at my involvement as a service, but I am learning as much as I could ever hope



to give. The Executive Committee became a great opportunity for me to do that, and to be mentored by people outside my company that I would otherwise not directly have contact with.

You touched on this a little bit earlier, so we'll go back to that. How have you seen the industry change throughout your career?

I love what I do, but the perception [of the steel industry] is unfortunately bad. People look at what was a thriving

industry and maybe don't see it as that anymore. You drive from Pittsburgh to Buffalo or Buffalo to Chicago, and you see remnants of that great industry. When LTV went bankrupt in 1986, I was in high school, and it seriously affected the community because there were so many people who were scared because they didn't understand bankruptcy, and they didn't understand what it meant for jobs.

You can look at what is happening in the United States steel industry particularly; it has been a painful process, but like a phoenix, born from the fire, it has become a very healthy industry. The blast furnaces in North America are some of the best in the world, and the modernizations that have happened over the last 20 years are making higher-strength steels that make cars and bridges safer. The technological development amazes me. Within America as well we saw the birth of the mini-mills; because of the circumstances and the changing economy, technology found a way in. Being able to embrace new technology allowed the industry to have new life. Now with the challenge of sustainability, there is room for even more advancement in steelmaking technologies. While there were growing pains in the past, we're in a healthy place now.

The consolidations of the past took a toll on people, especially retirees. I had friends whose parents lost their jobs; but it's never just the mill that is lost — it's the suppliers, the maintenance shops, the service shops, engineering and even academia. Metallurgy programs have shrunk across this country, and there are some

incredible efforts being made by AIST's academic members like Ron O'Malley, Chris Pistorius, Chenn Zhou and John Speer; I mean, these are incredible people who have re-seeded the science of metallurgy. As I look at the industry now, it's poised to be better than ever, and especially with the recent consolidations from Cleveland-Cliffs and with U. S. Steel, I think we're seeing healthier companies emerge after what was a really tough couple of decades.

In the last three years, the pandemic has transformed not only our daily lives, but also the industry as a whole. How do you think it has impacted the future of the steel industry?

The pandemic was an interesting thing, right? The steel industry was considered a vital industry. During the pandemic, I know I worked more, our people worked more, so we didn't see the pandemic like a lot of people did. We worked through it, and there was a lot of concern at the beginning. We had to be respectful of our teams, and their health and safety was paramount. We weren't going to do things that were going to put them in harm's way. Whether it's their jobs and the exposures in the steel mills or exposures to the pandemic, people have to have that trust. I think the industry did a great job.

I was very proud of the Steel Dynamics team because there were people who had different levels of concern over COVID-19 and obviously there were places in that same time where there was a lot of public upheaval. However, our team was incredibly respectful of each other. I would say from our roundtable discussions at AIST, our industry handles that very well.

Going to AISTech 2021 a couple of years ago in Nashville, there were a lot of questions leading up to the event, but I think Ron Ashburn and the AIST leadership team came through and emphasized that this is our industry, our business, our careers, and we're going to do this. AISTech 2021 was probably the first big gathering for many organizations and AIST did that excellently. It was well attended, and people felt present and that their health and well-being was first and foremost.

The pandemic in a lot of ways brought us closer and I think AIST was that bridge in many instances. We learned a lot about our people and our teams and, like most things, adversity makes us better. I hope it's behind us, but it taught us a lot about the communities where we are operating because all communities look at this very differently. You have to think globally but act locally and I think we learned a lot of that during the pandemic too.

To what extent does SDI's technical know-how lend itself to aluminum making? How are you going to build technical competency in this arena?

While aluminum as a metal is very different from steel, the equipment and processes utilized are very similar. When it comes to personnel, we know we can create a top-notch team that will embrace the nuances of aluminum production. The raw material side of the business is already a competency of Steel Dynamics through our OmniSource metals recycling platform; we are one of the largest non-ferrous recyclers in America. On the steel side of the business, we have developed our mills to be able to directly supply the automotive manufacturers, high-quality pre-paint products, world-class rail, world-class special bar quality (SBQ), and numerous other demanding end markets. The essential operational know-how to be a world-class aluminum producer will be a combination of SDI-cultured people and experienced people from the aluminum industry. The opportunity and allure that a brand-new company presents is extremely exciting for people at various stages in their career. To truly be part of something of this scale, with the track record and culture of Steel Dynamics, is an excellent opportunity for a person to really create their legacy.

Are you aware of any U.S. steel producers at any time in history that have produced aluminum? Or are you venturing into uncharted territory?

When the aluminum industry was born (in Pittsburgh), it was in the hands of people from the steel industry. The Pittsburgh Reduction Company (later ALCOA) was started by Alfred E. Hunt and several other steel industry veterans. The scale and commonality of equipment opens the connection between the steel and aluminum industries. The two industries have, for the most part, developed independently up to this point. What makes this exciting in our time is the universal push to decrease the carbon and energy footprint of modern materials. The common need for recycled content and modern, high-efficiency processes opens the door for both investment and innovation. On our aluminum endeavor we are continually surprised at the common connections that our customers have in both steel and aluminum and their need to find a supplier that can connect with them on so many fronts.

SDI has said it hopes to bring a mini-mill mentality to aluminum making. Why do you think that philosophy can succeed?

Early on in my career, I felt a need to follow technology and my path took me to Steel Dynamics. At the time, there was quite a bit of division between integrated steel plants and the mini-mills. I didn't fully recognize it at first, but I have come to believe that mini-mill philosophy is hardly about the equipment or size of the plants — it is a business philosophy first and foremost. I'll speak to



the mini-mill philosophy that is Steel Dynamics because it is the culture in which I have matured over the past 28 years. Steel Dynamics' philosophy is about the balance of having the right team of people and providing the best training and equipment to safely build a business. Our philosophy is to have the people on the floor directly connected to their customers with the authority to directly impact their process and product. We believe the aluminum business will respond just as well to these philosophies as our fabrication, recycling and steel platforms.

AIST is focused on attracting the next generation. What would you tell someone just starting out today who might be considering a career in the steel industry?

I believe we have to impress them before they get to that point, right? As an industry, we need to do

better PR. People drive by those old facilities, and they form an opinion. For some of our locations, we were the first manufacturing facility. So it's very important that we are environmentally responsible, good members of our communities, and educate the community about the good careers we provide. We support the community as companies and AIST can support that too. I would love to host an AIST Road Show, which is a great outreach program; I would love to see the Road Show visit universities as well.

At SDI, we go to different schools and explain what engineers do. There's a lot of students, even in engineering school, who don't know what, for example, an electrical engineer does in a day, or what metallurgists do. AIST can be a great resource for that. We have to reach them young.

I always tell people we hire, whether they're engineers, or people coming into our production team, if you don't like what you're doing, work hard, but be looking around because there are so many other opportunities within Steel Dynamics. That's what's great about our industry: there's incredible diversity.

I think that message starts early. It's hard to compete when you hear about Google having snacks and playing games at work all day, but right now, the tech industry is laying off tens of thousands of people. I'm probably

not going to put in a bagel machine for everybody, but I'm going to enrich your mind and provide you economically with a way to raise a family and achieve your goals in life. I think things go in cycles, and I think we're ready for that cycle to kind of come back to what people can do with their hands, and I think the steel industry is a great place for that. I think that's the message to a young person today: do you want to make something of your life and make something of yourself? This is an industry where you can find that.

The steel industry is hyper-focused on decarbonization. What role do you see AIST having in this effort?

AIST is a true marketplace of ideas. The unique constituents of AIST (academia, producers and the supplier base) form a three-legged stool that will support our industry on the decarbonization journey. AIST's nine Technology Divisions and 29 Technology Committees provide the environment and avenue for our members to explore the leading technologies and solutions that are available. These technology groups are also a perfect setting to culture new ideas and approaches. Not only will our members further their own understanding and knowledge, but our companies and institutions will benefit from our individual growth. There has long been a saying in the environmental stewardship circles to think globally and act locally. The global reach of AIST and the Technology Divisions is ultimately reinforced with the sense of community and local aspects of the Member Chapters, the training sessions, and AISTech.

On behalf of the AIST membership, congratulations on your new role as president and chief operating officer at SDI! With this new perspective, is there a key goal you would like to accomplish during your term as AIST president?

I've trusted the people I work with to steer me in good directions, and I always tell my kids, you do the hard stuff and when there's a fork on the road, take the hard fork. That's what makes you who you are, and I describe it as tools in the toolbox. Whether you're an engineer or a neuroscientist like my daughter, do the tough stuff because that's going to teach you about a business. This role change is a little intimidating and a little humbling, but you can't do it without the support of a team.

People are the single most important element of any organization or business. We must continue to attract young talent and a more diversified workforce to ensure our industry has the right personnel talent to meet our challenges. The types of jobs in the industry are changing regarding skills and training required. AIST can support academic efforts through continued support and energy with the AIST Foundation. My teammate, Glenn Pushis, is the president of the AIST Foundation this year and he and the Foundation's board of trustees are passionate

about the role of the Foundation and are all committed to advancing the goal of scholarships and job opportunities.

There are significant demographic gaps that exist because of the massive changes in the North American steel industry over the past 30 years. The industry moved geographically, as have the consumers of our products. During the consolidations, many people outside the industry wouldn't consider a career in the iron and steel industry. I would like to further the engagement of the Young Professionals through AIST's Technology Divisions and Member Chapters to create a strong connection of professionals in all aspects of the industry. This is an extension of the Foundation's work. It's encouraging to see Young Professionals and young women coming into the organization; to see universities have places to put engineers, I.T. professionals and metallurgists; and to have healthy manufacturing in places that didn't used to.

The innovation and technology that will emerge in the steel industry due to decarbonization will lead many other parts of industry over the next decades. The steel industry can be the leading edge of electrification, process control, power distribution and so many other key technologies that are in all of industry. AIST is perfectly positioned to continue to be the marketplace of ideas. For me, that's the sustainable push — it has to be sensible; we should do meaningful things. What is the meaningful thing to do, and how do we quantify what these projects are? How do we make use of our dollars? Again, we work in a very capital-intensive industry, so how do we invest wisely today and make the best decisions for what's going to be 10 or 20 years from now? And AIST is that common ground where we can understand what type of technology is available. The academic side of our industry, and of our association, is looking ahead to 5, 10, 20 years from now. As producers, it is our responsibility to support these investments, to provide access to the academic community, to research, and then to do trials. That's the common ground that we all stand on.

What I want to do is make sure that we're meaningfully introducing these things, and we're not just following the wind. We want to change, and we want to change it in meaningful ways. ♦