



AMERICAN INSTITUTE OF MINING,  
METALLURGICAL, AND PETROLEUM ENGINEERS

**ORAL HISTORY PROGRAM**

**Harriet Dutka: A Pioneering Role Model in the Iron and Steel Industry**

## **PREFACE**

The following oral history is the result of a recorded interview with Ms. Harriet G. Dutka conducted by Lauren Keating on May 7th, 2019. This interview is part of the Oral History: Harriet G. Dutka.

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## **ABSTRACT**

Harriet Dutka has been a pioneering woman in the Iron and Steel industry during her three-plus decades in the industry. She has been a role model for women in STEM careers, showing them that a very successful career is at their feet if they put in the work. Ms. Dutka was born and raised in Saskatchewan, Canada, and later attended the University of Saskatchewan to obtain a degree in chemical engineering. It wasn't until she graduated that she began to work in the Iron and Steel industry, where Ms. Dutka took a job at the IPSCO steel mill in Canada. She worked there for 10 years and was part of a management trainee program while learning about the entire mill operation. After leaving IPSCO Regina, Ms. Dutka held a number of jobs at a Greenfield Facility in Iowa, at Gallatin Steel in Kentucky, Timken, Commercial Materials in South Carolina, ThyssenKrupp Stainless, RHI Magnesita, and, currently, SANGRAF. Ms. Dutka has also received her MBA since leaving IPSCO. Up until her last two positions, Ms. Dutka held managerial roles in steel factories, working on the floor. It was in that time that she has had her most interesting challenges, including having to deal with a radioactive material that was accidentally melted and creating her own team from the ground up. Ms. Dutka has since transitioned into a technical service role that she greatly enjoys.

Throughout her career, Ms. Dutka has also been deeply involved with AIST. She was on the original board of directors for AIST and had been deeply involved with the EAF committee for the last twenty years. For her work with AIST and the steel industry, Ms. Dutka was honored with not only the John Bell Award for EAF Steelmaking but most recently as a Distinguished Member and Fellow of the Society, and Ms. Dutka has been humbled by her recognition. What Ms. Dutka has taken most from her career has been the people she has worked with, and one thing she would like young professionals to do is stop and reflect on the small things that happen, as she says those will be the most important.

Readers are asked to bear in mind that they are reading a transcript of the spoken word, rather than written prose. The following transcript has been reviewed, edited, and approved by the narrator.

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## **00:14 Introduction**

Keating:

Today is Tuesday May 7, 2019. My name is Lauren Keating, and I'm here with Harriet Dutka in Pittsburgh, Pennsylvania at the Association for Iron & Steel Technologies, AISTech 2019. Harriet is the Technical Service Manager Americas for SANGRAF International, and she's been a prominent member of the iron and steel community for over 30 years. We are doing this capture for the American Institute of Mining, Metallurgical, and Petroleum Engineers Oral History Program. Thank you, Harriet, for agreeing to talk to us today, and share your experiences.

Dutka:

Thank you-

## **00:47 The Early Years – Starting in a Small Farming Community in Canada**

Keating:

So, let's start at the beginning. Tell me about where you grew up.

Dutka:

So, I'm originally from Canada. I grew up in a small town in Saskatchewan and spent my education, basically, all the way through college in Saskatchewan in Canada. So, I grew up in a small farming community. My father was a grain buyer. My mom worked at the post office. So, about as far away from a steel plant as you could ever think would happen. So, definitely not, from my colleagues' experiences, the typical start of somebody in the steel industry. But, maybe it was between work ethic and experiences and the type of environment that you encounter.

Keating:

So, what influenced you to become an engineer?

Dutka:

There was no influence. And, I always say to people, my career has been almost a wonderful occurrence of mishaps. I came out of high school, and it was the April of my year of graduation. My parents had always said, you will go to school. So, there was no doubt I was going to go on to university, but I had no clue what I was going to do. I was the first one in my family essentially to graduate from high school, let alone go on to university. So, the experience for me and my family was a little bit of hmm, what can you be?

So, I was in the library one day, and there were brochures, like every guidance center library in a high school, right? And, there was this brochure on chemical engineering, and I flipped through it. And, I was always good at math, and science, chemistry. I said, huh, I think I'll be a chemical engineer. And, that was how I started on my path. Would have always wondered why, but again, just one of those occurrences like, why? Something was in front of me, and there I ended up. So, my first desire was to go

into medicine, but I said, 11 years? I'm not going to school for 11 years. So, overall, I went to school for 11 years, but hindsight is 20/20.

## **02:58 Studying Chemical Engineering at the University of Saskatchewan**

Keating:

So, you studied chemical engineering at the University of Saskatchewan?

Dutka:

Yes.

Keating:

How was your experience there?

Dutka:

My experience, I would say is, it was hard to leave university. I was in my seventh year of going to university, and my parents said, please graduate. Just graduate. They said, we know you really like it here, but I think it's time for you to move on. University was great. Going into engineering in 1978 was a very small class. So, 7 percent women, which according to today's standards is actually high. So, there's a bit of decrease of women entering into the sciences, and in particular engineering, since I graduated. Which is really kind of strange given all the exposure that we've had with STEM and everything else. So, for me it's fascinating.

It was a great experience. Small class. First year class, 200 students. And then, going into chemical engineering my second year, you start to specialize. Class of 15. Most chemical engineering classes, by nature of the profession, I guess, are always very small. We were always particularly small group of people within the university. So, it was great.

## **04:16 First Professional Job in the Industry – Working at the IPSCO Mill**

Keating:

Do you have any internships or other experiences that shaped your interest in the steel industry?

Dutka:

None. Like I said, I grew up in Saskatchewan. You have to realize Western Canada was not known for the steel industry. Not from the east, not from big steel, not from big auto, or anything like that. There was a steel plant, which I discovered a year after I graduated because they had posted for management trainees. I said, a steel plant, what is it? But, it was a middle of a recession in Canada. Jobs were not easy to come by, and I said, well, it's just one more resume. I'd probably put out 150. My graduating class, actually, there were only four graduates that had jobs in chemical engineering when we graduated. So, most of us took between a year and two years to find full time jobs.

I didn't do internships. I worked for a financial planner, and did a variety of different things when I was in university, not even specialized in that field. So, I went and I said, steel mill. That's kind of interesting. Well, there was a steel mill in the middle of farmland three miles outside of a city. Didn't know it was there. Grew up 200 kilometers away. So, there is nothing but another mishap that someone put in front of me.

Keating:

And, what mill was that?

Dutka:

That was IPSCO.

Keating:

So, IPSCO was your first professional job in the industry.

Dutka:

IPSCO was my first professional job in the industry, and I worked for them about 10 years. As I said this morning at the presentations, I said, I went in there. It was a job. It paid really well. It was a management trainee position, so it was rotating through all the positions in the company. I said, this is great. Great experience. I walked in. I toured the steel mill and the pipe mill, and I said, five years. I will work here five years, and then I will go get a real job when I have some experience. So, kind of gives you what my first fight or flight was when I walked in the door, but it turned out to be a marvelous experience.

Keating:

So, what did you do?

Dutka:

So, as I said, I started in a management trainee program, and I worked all through the facility. And, the program was built, basically, sales, marketing. Then I started basically scrap yard, melt shop. I worked my way, two years through a rotation, through the entire plant.

Keating:

What fantastic experience.

Dutka:

It is, and it's not one you really get anymore. The interesting thing was it was a pilot project for the company. Two gentlemen, one by the name of Mr. Roger Phillips, who was president of the company at the time, and Mr. Milan Kosanovich, the vice president, said we need to attract young people. So, they hired two of us. Because it was a recession, and they had this grand plan for six or eight, but they hired

two. And, it turned out to be this wonderful program. We were the first two and the last two. Because the program, going through a variety of things in the industry at that time, never surfaced again, but it got us in the door.

### **07:28 Transitioning to the Steel Industry and Finding Many Mentors**

Keating:

Did you find it difficult to transition into the industry?

Dutka:

As crazy as it sounds, and I have a lot of people say, men and women, that they find it difficult to come in. Especially, not just the industry, but particularly into operations where I kind of found that I really wanted to be. I'm hands on. I like to do things, and I like to be away from a desk. I'm not the typical office worker. I find it very, very difficult, actually. So, they said that you had to be tough. You're going in. You're working shift work. I went, you know, it wasn't. I thought it really would be, and it was nothing but positive. So, I would say from the people on the shop floor, to managers I worked for, to the colleagues I had, it was nothing but supportive. In the plant I was everybody's big sister, little sister, daughter and treated accordingly. Everybody has a few awkward relationships, or whatever, but I honestly have to say for 10 years in that environment, I never felt like anything but a steel worker. So, I think that's what allows you to stay in the industry, and in that type of environment in operations is there were no roadblocks. There were the typical ones, but not that anybody said, you don't belong here.

Keating:

So, at that stage in your career did you have any mentors that stand out?

Dutka:

I had a group of them, and I would say from the gentlemen that hired me and guided my career for 10 years, Milan Kosanovich, to each of my individual supervisors, to the melt shop managers, to the people on the shop floor. So, I know when everybody was looking at this they said, have you got any pictures? And, I went through my files. So, there are actually photographs, before digital anything. I think there's a couple Polaroids in there, too. But, as I looked at it, there are very few pictures of me, but there are all these people and pictures of them, because they are me. So, yeah, I can count probably hundreds of them along the way at different waves throughout my career.

### **09:53 Finding the Right Focus – Working Melt Shops and Scrapyards**

Keating:

With all the experience and exposure you had, to the different areas in that facility, did you gravitate to one area, or one facet of the operation?

Dutka:

Yeah. I started basically in scrap yards and melt shop. And, I thought, okay, it was great. I worked shift. I did whatever, and I loved it. I was part of the commissioning crew for a brand-new caster, did a variety of things. Worked in melting, casting, and refractories, worked as basically a general foreman at that time. And then, I got told, literally told, because this is pre days of career planning. Nobody sat down and said, what do you want to be? Where do you see your career path taking you? They took your career path. And, I got sent to the rolling mills. And, I literally mean, I cried. I was so sad. I left all these people I was so comfortable with that had been with me for a long time. I knew everybody in the rolling mill. But, I'm going, I am the least mechanical person you want to meet, and it's a mechanical process. And, they all work in pulpits, and they don't really talk to each other, and it is so different. So, I felt like I had been sentenced to purgatory.

And, it was funny because I actually questioned, I went to the VP at that time that had kind of guided my career for so many years, and said, why are you sending me there? I don't want to go. He said, you are going to learn. You are going to learn enough so that as you move in this world no one can ever talk that you don't understand. And, hindsight says, what a great experience. In the present, what an awful experience. And then, they sent me to finishing and shipping after that. So that was even more mind boggling. But, navigated my way back.

Keating:

So, you truly had the whole.

Dutka:

I had the whole experience from slitting lines, cut to length lines, shipping, and even a wonderful stint in human resources.

### **11:52 Coming to the US – Working with a Startup Company - Earning an MBA from Katz**

Keating:

So, that stood out to me. So, after IPSCO, actually before IPSCO, you transferred to a Greenfield facility.

Dutka:

I did. I transferred to Iowa.

Keating:

In the US?

Dutka:

In the US. So, I picked up, left my family, left all my friends, and left the country I grew up in. So, you would think to my family I had moved to, you wouldn't even know, I think that they felt I moved to another planet. So, picked everything up, and took a job totally out of anything I had done before to be Director of Personnel for a Greenfield startup. And, the rationale behind it was, first of all, as an operator and spending all my time in operations, I needed a little softening. I needed the square corners



rounded out, and contrary to what most people think of me today, I'm very shy. I'm very introverted. I had a lot of trouble talking to people and making small talk that I didn't know. Once I knew them, I was perfectly comfortable, but send me into a room for a couple drinks or a meeting with 10 people, and it was traumatic. So, part of it was to get me to have to reach out and develop a level of comfort doing those types of things.

But also, I had the skillset to staff the mill, and bring forward candidates to the rest of the group quite easily because I knew what was required, and I knew what questions to ask, and what to look for as we were hiring. So, that was kind of the whole thing behind it.

Keating:

So, you were able to apply your technical background in a human resources environment.

Dutka:

I did, yes. So, it actually became a really good experience that I would have never thought. It was exciting. I wanted to move. I wanted to be part of another startup, and it was great to be part of a startup in a different way, from a different side. So, a lot of time spent on training and education, working with the community colleges in Muscatine, Iowa, doing safety and safety development, program development, and meeting people from all over. So, whether from the shop floor and interviewing hourly employees, and learning terms like... Iowa is big in the slaughterhouse industry. I learned what a chitlin chucker and a hog walloper were. And, there is a lot of similarity between a first helper and a ladle man. So, along the way it was great.

Keating:

During this time, I think, you earned an MBA?

Dutka:

I earned my MBA from Katz here in Pittsburgh.

Keating:

You and I have that in common.

Dutka:

Which was one of the great experiences I had because I went on to what they called a flex program. So, I was actually living in Canada at the time and going to school here in Pittsburgh. We went to school two weeks of every three months, and we lived dorm style in a hotel with 14 other international colleagues. So, you want to talk about a great experience, people from Taiwan, Brazil, China. I was considered foreign because there were two Canadians, and it was probably the most eye-opening experience I got to have to the world. We specialized in Asia, and international markets in Asia, at the time, that was where all the growth was going on, so it was fascinating.

**15:15 Transitioning to Gallatin Steel – The Challenging Nature of Startups**

Keating:

So, after your time at IPSCO you then worked as a manager of steel making at Gallatin Steel in Kentucky. What was that transition like?

Dutka:

The transition was kind of backwards. So, I actually decided, even though I enjoyed my time with IPSCO, it was really hard to leave. I was with them 10 years. They were my first real career job, and I said, but I want to go do this. And, I had some colleagues and former managers, that I really respected that, again, were there, and I said, I want to go do this. So, I took a step back, and I actually went as a shift manager. So, they had already started the startup, and it was a tough startup for Gallatin, and pretty well known in the industry, actually, that it was a struggle and hard. And, they hired four of us that were actually experienced melt shop people, to be shift managers. One gentleman I used to work for, one I'd known for 10 years, and a couple of others. So, it was a great experience to go and try and help develop this group of people that had never been in the industry, a lot of young people, a lot of college graduates, people from the farming and tobacco industry in the local area. So, yes. It was a step back, but for the right reason.

Keating:

So, you've been a part of a number of commissioning and startups, Greenfield and otherwise. I think most people were probably lucky to have one of those experiences in their career. But also, probably a pretty trying experience as well. I'm sure there were many challenges that come along with a startup. Does anything stand out?

Dutka:

I think the biggest thing that comes out of the idea of startups is they are challenging. They're technically challenging, and they're physically challenging; emotionally challenging because they are filled with ups and downs. But, I think the biggest thing, and there are a lot of people like me that look for them that they find it a fulfilling experience to go after them is, it is the only time you have that sense of family and community. The startup team is like no other team, and I think most of us chase the technical challenges, but what we really look for is the environment in which those technical challenges were presented. So, I think that's what's always memorable to me, and what I always look for. It's that team. It's that cohesiveness. It's that common mission that everyone supports.

Keating:

It's all about the people.

Dutka:

It's all about people.

**17:52 Evolving as an Employee at Timken – Learning to Take a More Executive Approach**

Keating:

You then moved on to Timken. Tell us about your career progression at the Timken Company.

Dutka:

So, again, one of those mishaps, right? As things go in my path, I would say, you know, Gallatin was not ordained. It was a phone call where somebody said, do you want to do this? And then, as things evolved at Gallatin, the Timken thing came along, and they said, look, we need a melt shop manager, and we're looking for somebody from the outside. We need to broaden the way we look because, at that point, they were very inward looking, comparing themselves to themselves, and that means you're great. It always means you're great.

Dutka:

So, they said, look, we want to bring in some new people. People that haven't necessarily grown up in this organization, and we have this melt shop. It was built in, I think, I believe, 1931. It's old. It has been revamped and stuff, but it's still an older melt shop, and it's struggling. And, that was the first, I [admit]. That's great. So, I don't necessarily like to go and do something that's stable. The challenge is to make it grow, make it better, look for the technical optimization. Look to see people become enamored and successful and take on their own success. So, that's how I ended up there.

Keating:

So, as you progressed in your career, you went from a very technical, or perhaps more narrow focus, and your focus got broader with roles of increasing responsibility. What was that like?

Dutka:

It's difficult. Being a technical manager is really easy. It's what you know. You're part of the process. You tend to be a little more engaged and involved. You're closer to the shop floor, so the change is easier because it's easier to guide and influence on the shop floor. So, as you step up, you start to learn the hard lesson, I think, that it's not easy to move up. It's not easy to let go, and be gracious, and to enable, and to coach, and to guide, and to not be hypercritical. And, some of those lessons come from wonderful colleagues that have, maybe, a polite, or not so polite, way of telling you that, you know, you're kind of cramping me. That wasn't really nice. You need to change the way you're doing things. To a company giving you experiences and exposures that allow you to work through that, whether it's executive coaching, going to business programs like we did at the Darden School of Business, doing a variety of things, being involved in the AIST, that help you change from that frontline middle manager as you move up and take a more strategic perspective.

## **20:48 Working for Commercial Metals – A Chance to Revitalize the Mind and Body**

Keating:

You worked for Commercial Metals Company in South Carolina. What was your experience like there?

Dutka:

So, my experience was wonderful. It's a bit of a strange story how I ended up there, but I'm a cancer survivor, and while I was at Timken, I went through probably the biggest battle of my life, and said, okay, I think right now it's time for a change. I need to change my location. I need to do whatever, and I'd like to move south. It was better for my body, and everything else. So, some wonderful people that I've known through time, in fact worked for one of them previously at Gallatin, and I called down and I said, I'm looking for a different opportunity. I'm happy, but I need a change. So, they said, we have a job for you. We have no position, but we have a job for you.

So, I was lucky enough to go work in Colombia at the Cayce Mill. It was probably the best time I needed to regenerate, recuperate, get my mojo back, for lack of a better definition, and just get back to what I liked to do, which was hands on, working with teams, working with crews on the shop floor, enabling them to be successful, and creating a new vision for them to move forward. So, I would say they gave me a safe place to be who I was going to be.

Keating:

It sounds like you pull a lot of your energy from that type of environment.

Dutka:

From that environment, and I pull it from people. The best part of this industry is not the technical side, by any means. It is the people that work in it, and it's the only reason I was here more than five years. I can't leave the people. They are engaging. They are funny. They are the hardest working, most talented, smart people that you could ever hope to be around. So, why leave?

## **22:51 A Feeling Like No Other – Building a Team from the Ground Up**

Keating:

So, I'm very interested to ask you about your role at ThyssenKrupp Stainless. You assumed the role of Team Manager for Raw Materials in the electrical arc furnace at ThyssenKrupp's Greenfield Stainless Steel melt shop in Calvert, Alabama. What was that like?

Dutka:

That was a little bit of a step off a cliff. So, first working for a multinational corporation not based here in the States, and going to be the only local melt shop hire, basically non-German, hire for the company. So, the real outsider, right? I had kind of a dual role. One was, I was local, and understood what was going on locally, and how business was done, and mainly how people function. And, the second one was my background, even though it was all in carbon from the technical side. My reason for doing it was I had never been on a startup that I hadn't come in to. This one, all that existed was a book, the initial contract book. So, it was to build my own team. That was really the draw, was to say I could nurture a team that grew from me to 25, 30 other people. That's a feeling like none other.

Keating:

How did you go about that? How did you find team members you were looking for?

Dutka:

It was interesting. I had decided early on, and my colleagues, we all worked together. There was four of us. And, I said, look, I want balance. I said, the exciting thing about the way I came into the industry was first, I was younger than a lot of the guys I worked with. Secondly, I was female. Thirdly, I was college educated. I was that person who knew absolutely nothing about steel making, but I had a different perspective. I said, the best thing you can have is variety, right? I want some experience. I want some age. I want some youth. And, I want a level of education. But I don't want it in every single person. So, I want this bundle of people that bring a different perspective and way of looking at the same problem, because at the end of the day that's what's going to make this an excellent venture.

And, that's how we went through it. I would say I staffed half my team. Basically, my technical team was 30 to 40 percent people I knew, people I had worked with before, and we'd worked together, and I knew their capabilities. Some of them worked for the Timken Company and had just retired and were looking for a new adventure. So, I brought 25, 30 years of experience, and they became the wise men. I went out and I hired college graduates straight out of engineering school. They had youth, they had energy, and they definitely had a different way of looking at things. Then we went and hired some professional people that had five years, six years of experience in the industry. So, it was this kind of board-based team from all over North America that could help get us through it.

## **25:05 Overcoming Cultural Differences While at ThyssenKrupp Stainless**

Keating:

Tell me more about the cultural challenges you saw while at Thyssen.

Dutka:

Cultural challenges are really interesting, and my colleagues and I used to talk about it all the time. So, we went from a very profit-sharing oriented, you know, this is my company. I'm responsible for my costs. I don't travel business class or first class when I fly to Europe. I just travel in the back. It's seven hours. Just some of these very fundamental things that are an expectation in German culture when I went. They said, we'll get you a business class ticket to go to Germany. And, I said, yes, but I opened the ticket, and it was 10,000 dollars. I go, I can't spend this. I said, I'll fly coach, and I got my coach ticket, and one of my colleagues came up to me. He says, you can't do that. You make the rest of us look bad, and it wasn't that he was reprimanding me or something. It's just how they viewed what was a benefit of being their level in an organization versus how some of the American colleagues viewed how they participated in business within the organization. The funny thing is we went into the financial crisis within a year of joining the organization, and suddenly we were all traveling coach. So, I said, it's amazing how business and challenges normalize relationships.

We communicate differently. So, English is my first language. My German is really, really bad, but I know enough to eavesdrop on conversations. My colleagues, English is their second language, and sometimes third, fourth, and fifth. So, sometimes how you relate to each other, how you make jokes, how you process information quick or not quick, you know, or have conversations, it slows the process down, and speeds it up, because sometimes there's a lot of translation that goes on. So, sometimes it's quite humorous what the translations end up being. But, I think that's the biggest one is, as well as, working

within ThyssenKrupp, it's a patriarchal society. Within ThyssenKrupp, it's not German. It's not whatever. It's ThyssenKrupp. So, where we were used to knowing what our budgets were, what we were accountable for, how much money we were making, we were told, more or less, that's handled. Don't worry about it. So, very trusting of upper leadership, and I mean everybody knows ThyssenKrupp is now going to be a bit of, I think, a business case study going forward. But, it's fascinating how decision-making works in that type of German company.

### **28:53 Creating High Standards to Achieve – Improving the Quality of Work Through Goals**

Keating:

Your Operations Management positions at Gallatin Steel, at the Timken Company, at Commercial Metals Company, and at ThyssenKrupp have all required an intense focus on continuous improvement. Can you share with us some of the most impactful lessons you've learned that have helped you to drive improvements in safety, in quality, and in production?

Dutka:

I think with safety and quality, in particular, they're really easy. One of the guys on the shop floor told me one day, he said, the manager's minimum is always our maximum. So, he said, if you want something, you have to teach people to expect it. He said, so you never aim low; always aim high, and we will meet the challenge. So, I think when people say, it's not right for you to say accidents don't happen. It is right to say accidents don't happen, because it's a noble goal, but it's the right goal. And, people will work incrementally to getting towards it.

It's the same with quality. The minute you accept something, it becomes the standard. I worked for a gentleman one day, and we had a heat stuck, and it was awful. It was probably already four hours in the refiner [and was] going to be five or six. And, the guy said, Harriet we can't do this. It's not going to work. They said, we're going to scrap the heat. So, I called my Manager, and I said, I'm going to scrap a heat, which was not a normal occurrence within the Timken Company by any means. He said, no you won't. I said, run that by me again? He said, you will make the heat. I don't care if it takes all day because we cannot afford, in multiple ways, to scrap the heat. So, we did. Seventeen hours later, we teemed the heat. I went to his office, and I said, I don't get it. You know, I just don't understand what that was fundamentally all about because we lost 17 heats to work this one. He said, if you would have scrapped that heat, you would have started a spiral that you could not stop because it would have been okay to scrap the next one for five hours, the next one for four hours, the next one for an hour, and then just because. So, he said, it's the expectation you create, and, therefore, people will work harder to make sure they never put themselves in that position. And, that was a valuable, valuable lesson.

He taught me two things. The one regarding the scrap heat, and, one day I said, we're struggling in finishing. We got this customer. They want this, this, and this, and this, and this is a getting a little crazy. And, he said, you're a value-added supplier. If the customer would like an orange bow on it, Harriet, put an orange bow on it. But, it makes sense when you see your truckload going down the road, and it's banded nice, and it's painted nice, and the tag looks right. It creates an impression on the customer, not only about quality, but the level of attention you paid to even the smallest details.

### **32:12 Traveling the World with Magnesita – New Experiences in Switching to Technical Sales**

Keating:

So, in 2013 you assumed the role of Technical Assistant Specialist for the electric arc furnaces and also Project Manager for iron making and reheat furnaces at RHI Magnesita. Please tell me what that was like, a little bit different?

Dutka:

So, when I made the conscious step to decide to leave the steel industry, I said, am I going to go do something I know nothing about? Am I going to go be an accountant? Am I going to go work for a consulting firm? And, I went, that's probably not going to work. What I am going to do is take what I know, and try and apply it in a different way from the other side of the desk. So, I said, okay. I talked to some former colleagues, people I knew, and I'd always been attracted, done business with Magnesita, who was the former JE Baker Company, and liked the way they did things. They were a technically driven organization. They were technical sales. They had great technical support, and used people like me, historically, to help their customers, who used to be me.

So, I thought, I was thrilled. I truly say the five years I worked with Magnesita, before we merged, or were acquired by RHI, so I'll just go with Magnesita organization, were the best five years. It is challenging to be able to go to different mills all over the world that you never, never would have gone to. I was in Vietnam. I've been to Australia. I go into Germany, Mexico, Canada all over, and the US. How much better can you get? That's like a whole bunch of startups in one year. You have to like to travel a lot. You have excitement. You see different things, and at the end of the day all you have is opinions. So, you have to be comfortable enough to say, I am secure and comfortable enough to only have opinions, and the execution is left to you. And, that's why you leave the operating side of the desk, is you are comfortable to have only opinions.

Keating:

In your travels, I guess this is a two-part question. In your travels, is there a particular location, or a particular facility, that stood out to you as something you were particularly interested in? Or maybe a favorite?

Dutka:

So, I have to say, like I said, because of this I've probably gone places in the world I'd never have gone. So, my opportunity to go Vietnam was fascinating from a cultural perspective. It's somewhere I would have never gone on my own. Never would have bought a plane ticket, or thought I could go. So, to have the exposure to the culture, to the country, to the people, to the people in the industry was amazing. So, that from a fundamental location.

Dutka:

I think to go back to the plant I started in, in Regina, which is now EVRAZ, and see people that I started my career with that are now near retirement, moved up in responsibility and changed roles. It's like looking back in the looking glass and saying, could it have been me? Did I make a good decision to leave when I did? And, it was, yes, I liked it here. It was a great career, and a great time in my life, but I did it the right way.

Keating:

So, can you describe your current role at SANGRAF International?

Dutka:

So, my SANGRAF role is exactly what my Magnesita role was. I still do the same thing. I have a little more of a technical development role because SANGRAF is a relatively new company, and, as that happens, policies, procedures, something as small as the forms you fill out, or the people you need to do work with. So, I do a little more on the business development side that way, but it is functionally the same role. Maybe more targeted at electric arc furnaces and ladle furnaces than a broad, overarching view. There's a lot less pieces and stuff to keep track of, so I have to say, it's a little bit easier that way, but it's the same job just really a different company and a little bit different role.

### **36:34 Technical Challenges – A Radioactive Mishap - Developing a New Profit Model**

Keating:

So, I have to ask you, as an engineer, we pride ourselves on being able to tackle technical challenges. What stands out to you as some of the biggest technical challenges you've faced in your career?

Dutka:

I have two, and they're both really different. When I worked for the Timken Company, the Faircrest Steel Plant, we melted a radioactive source, which in terms of electric furnace steel mills is the biggest tragedy you can have that doesn't involve individuals. So, when we got the news that a truck was hot at the gate, we kind of went, yeah, sure it is. And then, you go get your radiation detector, and you go, oh boy, it is really is. So, as I said, I've been very lucky through my career and experiences with AIST.

You never realize how important the people you know, and the people you meet, will be to you one day. I met a gentleman called Mr. Ray Turner at a training seminar which we do for the EAF [Electric Arc Furnace], and he had been lecturing on scrap and radiation. I got to know him personally, and he's also on the UN Council for Radiation, and is well known around the world and respected. So, I got on the phone, and it's kind of like 1-800-I-IS-HOT. I'm going to call this guy. Who do you call, right? So, I called him, and he said, I'll be there. He lives in Cincinnati. He says, I'll be there. Within four hours this man pulls up in his pickup with all his radiation detection equipment and everything, and he goes, yep, you're hot. And, I went, okay. Now what do I do?

But for him, we would have never recovered and done the things that you could not have imagined one team of people can do. So, with his help and guidance, we were able to hire a remediation firm, do a few things, walk through it. He gave us great guidance on running the facility versus shutting the facility down to scrub the radiation out of all the duct work. Basically, we were down seven days from power off to power on. The last mill prior to that was down over 30 days. So, you want to talk about a challenge. We built a city within the plant.

The other one was we developed a new way, within my group and my team at the Faircrest Steel Plant, to look at throughput in the facility. We actually drove and developed models to run the [facility] based



on profit velocity philosophy. So, rather than looking at how much per ton do I make, what's my gross margin, how do I do this, because of activity based costing, we were able to change the philosophy of how we scheduled, how we priced, and how we took orders through the facility. So, it was really interesting to watch people change the mentality of, I worry about how much profit per minute I make, not how much profit per ton I make.

### **39:40 Honors and Achievements – The John Bell and Distinguished Member and Fellow Awards**

Keating:

Harriet, you've had a wide array of achievements at various facilities and operations. Which stand out as the achievements that you're most proud of?

Dutka:

Wow. I've never even thought of that one. Achievements I'm most proud of. I think the one I'm really proud of is the formation of the team we built at ThyssenKrupp which turned out to be everything we thought it would be. The sad part was, when I left, and the team kind of steps off and does whatever, but the whole formation and able to bring that group of people together, and watch them grow. So, probably three quarters of them had no steel mill experience, had no melt shop experience. And, to watch them become steelmakers is amazing. So, I think that is probably one of the most fulfilling things I've done, and the reason I wanted to do it. It was what I thought it would be.

Keating:

You were the recipient to AIST's John Bell Award. The award was presented in recognition of the major and significant contributions to the innovation, improvement, and education of the engineering design and metallurgical process of electric arc furnace technology. Tell me about why you received this recognition, and what it meant to you.

Dutka:

So, first of all, if you take on something like the John Bell Award, it's probably the biggest set of melting shoes you could ever want to fill in this industry. As well as the people that preceded me in it, which included Eugene Pretorius and Jeremy Jones, and I believe Dr. Larry Heaslip. So, I always say my companions are, it's like Harriet and the intellects. And, I truly believe that along the way is that, part of what's helped me and ground me is the network of people that I've been able to count on to provide me expertise, and knowledge, and check ins, and everything else that you need in this business. And, to realize you don't know everything, and you don't have to know everything because somebody does.

So, I can't really say why... I never figured that I was deserving of any of those sorts of recognitions, so that part for me is like overwhelming, especially an award that is chosen by your peers. When you have a group of steelmakers who have done as many startups, been part of high profile projects, worked in equipment design, and done whatever, to recognize you for what you've done, but also what you give. And, I think because of everything that was given to me, I like to give back. So, to teach, and to share, and to guide, and to share your knowledge is what this profession is all about. So, I think, I've never considered anything I've had to be mine because it was given to me by someone.

Keating:

I heard this morning at the president's award breakfast you were awarded this Distinguished Member and Fellow Award.

Dutka:

Yes.

Keating:

Congratulations. What an honor!

Dutka:

Ah, that it really is.

#### **42:48 Involvement in AIME/AIST and Career Benefits –Networking Opportunities**

Keating:

When did you first hear about AIME and its member society, the Iron and Steel Society?

Dutka:

So, my exposure to the AIST and the ISS were from the first days of my steel making. So, ISS was always kind of the place where steel making professionals, melt shop people, spent their time, and then the AISE was really introduced to me by the Timken Company, and the Timken Company had one of the former presidents of the AISE, at that time, Lee Sholley. So, they had always had an involved role with the organization, and they were strong proponents of us being part of the technical committees, the local sections, and everything else. But, they had a little hitch in there. They just didn't expect you to attend, they expected you to lead. So, I really count them as the main reason, and thank them every day, because I would never have gotten as engaged if it was not for their influence.

Keating:

How did your involvement progress over the years, including up 'til now, with AIST, which, as you said, was formed from the ISS and the AISE merger in 2004?

Dutka:

Exactly. So, I started, I was on inaugural board, board of directors, for the AIST, and my involvement with them had stayed the same, committee work for the EAF committee. So, I've been part of the EAF committee probably now for nearly 20 some, almost 25 years, probably. With many of the same colleagues, in fact, that I count myself in today. We fondly said that we used to talk when we were young. We'd sit and go, yeah, when all the old people retire, we'll really show them what we can do, and they're kind of holding us back a little bit. A couple of us were sitting and talking about a year ago, and we said something. We looked at each other and we went, we are the old people. And, when you look

around the room, and you look at all the young people coming in, it really is a transition and an evolution. So, the history with the AIST goes back a long way, particularly on the EAF side, the training seminar, study tours, and just trying to bring knowledge and give back to the industry.

Keating:

How has your membership benefited your career?

Dutka:

It has benefited my career mainly because, and probably the biggest way, it's my network. I've never counted myself as the smartest person or the most creative or innovative that you will find in the steel industry. But, what I do have is a great phone book, and I'm not afraid to use it. So, what I count the AIST for is the comfort and the camaraderie to pick up the phone, look in the directory, and say, I heard they know about this. Let me call them. There is nothing better than a network in this business.

#### **45:53 Attracting Young Professionals to the Industry - Being a Role Model for Women**

Keating:

Harriet, in your opinion, what can we do to attract young people to the industry?

Dutka:

I always struggle with that question. And, I look at it and I go, and I heard a lady on Sunday, probably place it the best way. The industry does not have to be the one we came in to, doesn't have to be rough, it doesn't have to be tough, and it does not have to be gruff. What it has to be is welcoming, and compassionate, and kind. What that means is it needs to be flexible where flexibility wasn't welcome before. It needs to be open to new ideas, to creativity, to innovation, just like the ones that we brought 20, 25 years ago, and people welcomed us in. So, I don't think young people have changed. I really don't. I think what we have to do is to realize they are just like we were, and we have to make it as exciting, and rewarding, and provide the things they want, and not look at how we came up.

Keating:

You've certainly been a pioneer as a woman in the industry. What are your thoughts on being a role model for other women, and do you have any advice specifically for young women in the industry?

Dutka:

Being a role model, that's kind of unique for me. I'm not really sure about that because I think the best role model you can be is to do what you love, and if you do it, it shows. And, if you give back, it shows that you've made a contribution to the industry. I think for young women coming in, it's like any other profession. It's never easy, but what makes the accomplishments even sweeter is, it's not easy. So, I think, like everybody, it's not any harder to come into this world than it is into any other one that maybe used to be. If you look, it was challenging to be a physician at one time, and there were women who, they got through that. Try being a lady welder. Try being a millwright. Try working on an oil drilling rig. They all have challenges. So, I think what we just really need to do is, you have to be as open to what is

there, and want to change what is there, and not to say, well, if it's not the way I want it, I'm not going to go there.

#### **48:21 Favorite Part of Working in the Industry – the People and Advice for Young Leaders**

Keating:

I know this is a difficult question, but I have to ask. What has been your favorite part of working in the industry?

Dutka:

Oh, that's easy. That's probably the easiest question you asked today. Yeah, my favorite part is the people. I mean, if I look at how many people, I consider friends, how many people I see from my career and plants I worked in 25 years ago, and I can still see them, or their kids, or now their grandkids. It's almost frightening. That's the best thing. So, I think what will attract people to this industry is like mine. You find out it really is your dream job after you meet the people.

Keating:

What advice do you have for today's young leaders in the industry?

Dutka:

Ooh, I have to think about that one. I think, just savor the small things. Everybody looks for the big moment, whether it's the big startup or the big promotion. Those things are great, and they're rewarding, and they're great financially, or they help you along your way to build your credibility, but I think you have to sit and just savor the little things. I worked for somebody that once said, you know, once in a while you just have to go sit on your bucket. And, what that meant to him was, and it's still what I do today is, you get a bucket, you get a five-gallon bucket, sit it against a pillar or a wall somewhere safe, and you just sit and watch life go by. And, in the steel mill it's amazing what you'll see. So, I think sometimes you just have to sit back on that bucket and enjoy things for a little while.

Keating:

Much of what you said today resonates with me. Your positive attitude and enthusiasm are outstanding. How do you think that's influenced your career?

Dutka:

I think it's what sustained me through it. It is. Every day you get up and you can take on a challenge is a great day. So, like I said, it's the little things. So, if I can get in my car, drive to work, see somebody I like, be part of a process that's dynamic and ever changing, how can you do any better to get paid to do what you love?

Keating:

Is there anything else that you'd like to discuss?

Dutka:

I would just say, you know, you talked about young people and women, and I think we do a really poor job of selling this industry. I think we undersell it. I don't think, as we try to market it, we don't look at the positive. You know, it's not all about technology. It's not all about the stuff. It really is the people who are contagious in this industry, and the more we can expose people to that broad dichotomy of landscape, of people, the more people will come into this business.

Keating:

I think we see that at every year at AISTech and are reminded of that. Harriet, what a pleasure it has been to spend this time with you today. You've had a fascinating career, and you certainly served as a pioneer and a role model for the next generation of engineers and industry leaders. Thank you so much for your willingness to share your experience.

Dutka:

Thank you very much. It's been a pleasure.