

The Art of Engineering with Denise McIntosh

Episode 008: Helga Salling, Senior Director at [IPS-Integrated Project Services](#)

[Helga Salling](#) and Denise McIntosh talk about what it takes to be a female leader in the pharma industry. Topics include the myth of defining a woman by what she wears, leading from the heart, and embracing who you are in the workplace. Helga shares what inspired her to begin writing about leadership in the workplace and how she deliberately works to raise others to success.

Denise McIntosh *So welcome, Helga Salling, to the podcast today. Helga is a senior director for IPS, which is an engineering firm in the Southeast. Well, IPS is all over the world. Helga is in the Southeast. So, Helga, welcome.*

Helga Salling *Thank you so much, Denise. I am very excited, yet slightly nervous, to be here, but talking to you can only be fun.*

Denise McIntosh *This podcast has mostly been with women in engineering, but, and our real intent is to make sure we can encourage more young women and young people into engineering and manufacturing and expand the horizons of a lot of people. I am at my end-of-career time looking at all I've done over the course of my career and wondering how we can encourage young people to choose better opportunities so that we close the wage gap and the gender gap. So, with that in mind, I'd like to know how, Helga, how you got started in engineering, and since you were a native of Denmark, how you found your way to this country?*

Helga Salling *Absolutely. So I found one thing meeting other female engineers. So we have one interesting fact in common, and I share that my dad was an engineer, and it gave me an insight where it wasn't so scary from it. "Ooh, it's so technical, and you have to be so good at math." But I saw him, you know, traveling, I saw him being really excited about new innovations. He was working on power plants, and biogas, and, you know, making more energy-efficient solutions. So I got that little bit of a hint and started exploring. And for me, I was pretty a generalist student. I wasn't just good at one subject. And I actually found that engineering was the best place to utilize that where you would use your language skills and communication skills when you were traveling and, you know, coming across with a point. You would use the math, and the physics, and the chemistry, and the biology, because you can choose for people in the technical field.*

It can be applied in any industry. If you become a doctor or a lawyer, you have to redo all your exams for a different country, but engineering is almost universally accepted. So it just became evident. I mean, people have asked since I was like eight or nine, and I have always said, "I'm going to be an engineer." And I did. I got Danish privilege. I got a free master's degree in industrial engineering. Not only that, the government paid me a stipend every month to study and help. And I worked on the site. And it just, I finished pretty early on, just turned twenty-four when I got my master's degree. And then the traveling came really as part of it, 'cause that's what I had seen my dad do. And it was part of why I chose engineering. So I started almost straight out of school with working on international projects.

I had done an internship for six months, before I graduated, in China through the EDU. I had been out there, and I had a chance to work in the Middle East, and India, and China, and Japan, Vietnam, all over Europe, different places in Africa. I did a project with my first job in Zimbabwe and then started working in the U.S. early on. I had already, in high school, actually, been an exchange student in Texas. So I already had a love for the country that, you know, I'm pretty loud for a Dane. And I fit in really well in America.

Denise McIntosh *Well and particularly in Texas.*

Helga Salling *No, I mean, I even had someone telling me that I had Texas hair, the blonde big, curly hair. So I'm like, "Well, I guess it's meant to be." I had the chance where it just happened that I had worked across. And then in 2008 with the crisis, the company I was working for out of Denmark was a sort of subsidiary, the engineering arm of [Novo Nordisk](#). So I've always been in pharma. My whole career has always just been pharma except for two years where I sprayed a little bit out into different industries. But they asked me if I would be interested in moving to the U.S., and it was just me, I was single, and I was working on a project, and I basically just stayed on. They packed up my apartment back home. I was just staying on the job. And I said, "Sure." And that was it.*

And then I've been back and forth, but now it's permanent. And now I'm with IPS. That's the first time I've been with a true, like, American company. Other than that, it's been a lot of the Scandinavian mafia connection that, you know, you kind of work for their companies. But it's been a great experience to work for an American company, and, but, still they appreciate my international perspective. And while I've been in the Southeast, I've been involved in things on the west coast, and recruiting in Germany, and recruiting in China, and "What are we going to do?" And I feel like I'm being involved in a lot of interesting things and can have an impact. So it's been fantastic.

Denise McIntosh *Good. So any particular route that got you to the pharmaceutical side?*

Helga Salling *I think it was just meant to be. I mean, one of the biggest industries in Denmark is biotech and, you know, Medicon Valley around Copenhagen, and it's, you know, it just came natural, and it made so much sense to me because, you know, you not only get to work international and work with interesting projects, but you can really see the impact that we're doing. So it made sense for me early on. And then I always share with people, I mean, a lot of people in my family have different illnesses, but my dad in particular, the engineer that inspired me, he passed away, he was only mid-fifties in 2007, from mesothelioma, and it's one of the cancers that there's still no cure for it. So other than my huge ambition about continuing on in higher responsibility roles, it's on my bucket list that when there is a treatment I'm building that facility. So I want to make that happen.*

Denise McIntosh *That's a unique bucket list, intentional thing to do.*

Helga Salling *I am looking at all the clinical trials, and what's going on, and who's doing what so that when it happens, I have a story. And I think even the most cynical procurement person or engineering director is going to have a very hard time turning me away from building that project.*

Denise McIntosh *Yes, yes. So part of what I wanted to have you talk about today are the things that I've read that you've written about women in leadership, women and being able to choose A) what we wear. And I'll tell you just a little story. I've been in, was in, corporate America for about 30 years before we started Custom Powder Systems fifteen years ago. And in 1977, read that John Malloy book "Dress for Success for Women."*

Helga Salling *I've read that.*

Denise McIntosh *Oh my gosh. You know, that guy, the authority to write about what we should wear, because, as it turned out, he just made us look like flight attendants.*

Helga Salling *I think that's so true. And I think fashion and clothing is only one part of that, Denise. I think what I've realized even, and I've done well in my career since like one year out of college I got my first management job, and it's not that I've lacked opportunities, but I still felt like I was for a long time I was, you know, I was always being sent to someone else's home field to compete. And I was always competing on the*

same terms so that it was one-on-one. And no matter what I did, I would never be as good at being a man as a man. So I think at one point I just changed to saying, "No, you know what? I'm competing on the wrong parameters, because there are already men that are great at what they do."

And I've had mentors that were, have been, instrumental in my career and have taken chances of pushing me forward. So it's my fight, but I realized that the rules for corporate America, or corporate anywhere in the world, or for engineering, was written by men for men. And like, "This is what you need to do. This is what you need to dress. And these are the factors you need to do." And I've always felt like I just got to have the courage to say, "No, I'm not going to do one-on-one what you do. I'm going to bring what I bring, because it's different." And that is just as valuable, but it's taken a long time to really have the full courage to take it all the way.

And the magic that happened when I did that and truly was, you know, myself in every shape and form, is that something just happened much quicker, and it wasn't all-of-a-sudden on someone else's terms, they were on mine. And that if I made it big, it was because of me and not pretending. And I've seen other women who are brilliant, and were promoted, and then they became phony. Like people didn't follow them because they were trying to, like, almost imitate what they've seen this "great male leader" do, and how he was charismatic. And it was, I saw that, luckily, early on. It was the saddest thing, because I think, in reality, this woman was much better than him, but she just didn't know it. She was trying to be a clone.

Denise McIntosh *Well, I read a lot of Brené Brown because I just get her, and the whole idea of authenticity and compassion brings credibility.*

Helga Salling *Yeah.*

Denise McIntosh *Because if we're vulnerable and truly who we are every day, that's noticeable, and people get it, and they get us, and we get to be who we are.*

Helga Salling *And I think I realized early on, Denise, that I think there's some people that can get away with kind of, you know, imitating or hiding. And I realized that it didn't matter what I did or how much I tried to fit in. You know, I'm taller than your average male by at least an inch or two. And I was always, you know, I had an accent, I was really tall, I was blonde, I, you know, I've always been a little bit loud and aggressive, especially for how they perceive women should be. So it really didn't matter. At one point I'm like, "Why am I trying this? I'm just going to embrace where I am, because they're going to think what they think anyways." And one of the things that I very, very*

rarely talk about, because, again, I was, like, so afraid that it was going to impact people's perception of me, is that I modeled for twenty years. It was what paid my way through college and beyond. And that sense of fashion and design, and that was a really a big part of me that all of a sudden I had to, you know, like divided into two different worlds, and it doesn't work. And it's not who I am.

Denise McIntosh *No. Well, and I want to give you credit for helping me look at all of this in a completely different light, because I have judged people and their clothing from time to time. And I had to stop and think about that. My sister, my older sister, told me I was a preppy before they had a name for it. So that's who I am, but that's who I am. So what you choose, which is Helga, and what other people choose, which is their true, authentic self, is refreshing. It won't change who I am. And, truly, my work clothing wardrobe when I was traveling so much was, "How much can I get in a carry-on bag that will last for a week?"*

Helga Salling *Yeah. I'm on a two day trip, and I bring the biggest suitcase, because I've got to make sure I have at least six different pairs of shoes.*

Denise McIntosh *I love that!*

Helga Salling *What if I feel like wearing green and not blue Monday? I've got to have the option.*

Denise McIntosh *Oh, that's perfect.*

Helga Salling *My colleagues hate me, because I make them wait for me while I have to go to the back claim.*

Denise McIntosh *Yes. So give me some of your thoughts about women in leadership.*

Helga Salling *So I had one of the things that really inspired me to start writing, and, say, even in the last year and a half, fully coming into, like, really embracing everything about who I am. So, I mean, it's a work in progress. I don't expect anyone in their twenties to have that courage, but it was actually a conversation with a very, very successful man, not in engineering, but someone who was very, very rich and who was trying to, in the very popular word, mansplain about how you should be successful and how you could achieve more. Just talking to a small group of people, mainly aimed at me, about how, you know, basically being a jerk, not caring at all, whoever, you know, had the least stake in something that was willing to walk away with when the negotiation, you know, you had to just be cynical.*

And if you need to let go of people, you know, remove the emotion from what you were doing and, you know, just be more cutthroat. And, you know, listening to it, there's a lot of things where I'm like, "You know what? That makes sense." And that's what we've been taught. And if you look at some of the CEOs, and the studies about how many CEOs have psychopathic or sociopathic traits I guess there is, there was some truth to it. But then I had almost a physical reaction of, I couldn't really explain what it was I reacted so strongly to, but it came down to, you know, after fifteen minutes I kind of stood up, and the discussion moved on. I said, "I disagree. I totally disagree." So, you know, where I am today, which I personally might not have been that multimillionaire, but for most people is fairly impressive.

I've gotten there by sharing the most, like hands-down everything. Like putting everything I have into knowing the people I work with, and looking at their potential, and their strengths, and seeing if I could put a spotlight on that, and make them blossom, and how satisfying that was. Or in 2008, where we didn't have enough work, laying awake at night, because what if they couldn't, you know, feed their kids? And that if I had raised my hand and said, "I'm going to be a leader," well then that was my responsibility. Like they didn't do that, ask for the increase, like I did that. So I had to put action behind that and make sure that they could take care of their families. And when you go to clients, understand what it is to drive some, what is the success of that new product to market, and caring about getting that to market or that, "Well, if the project goes wrong, your career could be in the tank."

What, like really, truly caring about people and showing that, and that has worked for me. And that's why people are working for me at IPS where that's the third company where they've worked for me, or that I have clients that no matter where I am, they come to me, because they know that I care about them, their success, and who they are as human beings. And if I have to be cynical, well then I don't want the success. And then I don't want to be the leader. That has been the biggest eye-opening thing for me. And that's, I think that comes into everything of showing yourself, and being authentic, and having compassion. Just care the most.

Denise McIntosh *Well, and I totally agree. And I think what we bring as women, Helga, to whatever industry we're in is that empathetic touch, the natural curiosity, the simply caring. I can't imagine not wanting to understand everything there is to know about what a client wants to achieve with what we're helping them build, whether it's an oral solid dosage plant, or we need to protect their workers from potent compounds with an isolator. Whatever that is, the question is, "What keeps you up at night, and how can we*

help you resolve that? And did we miss anything? And as we go along, don't be afraid to bring this up, or don't be concerned if you don't think we covered everything.”

Helga Salling *Yeah. And what I find too, Denise, is that caring deeply is such a great foundation for also thinking outside of the box, and being innovative, and doing, again, whatever it takes to make things work. And it's not just, “Oh, I can't do anything about that. I'm going to have to lay off people.” Like, that's not an acceptable solution. An acceptable solution is, “Well, what if we diversify the business? Or what if we create a project that wasn't there already?” Or, you know, just looking at all those opportunities. And that has been my inspiration. And I think it really helps. And when people talk about, like, what would turn around a business, I realized at one point they talked about, you know, cutting costs and making the numbers fit. And for me, turnaround is about growth and opportunity and, you know, building things up. I think that's very aligned with those two different perspectives.*

Denise McIntosh *Yes, yes. And there is a group called Conscious Capitalism that I believe are going in that direction to truly... And we started this spring really playing what's called the [Great Game of Business](#), which is opening the books, showing all of our employees all of the numbers, and asking for their input at every step, “How can we improve process? How can we make this clear to you? And maybe the problem is two steps ahead of you, but if you can help us see that, then please do.” So it's providing line of sight. Jack Stack is the one who created the Great Game of Business here in Springfield, Missouri with a company called [SRC](#). They were rebuilding engines for tractors, for International Harvester. But his whole thing has been to, if we move the bottom up, which means if we expand the knowledge of financial numbers and how everything impacts everything else, if you expand the bottom, you automatically raise the top, which means we're bringing everybody with us.*

Helga Salling *That really resonates with me, Denise. And I think, again, it comes back to the, you know, vulnerability where we've been so afraid that we've like, “Oh, we hide that. And we just need to have to worry on us leaders.” But people can handle it. And they want to know, and they want to have involvement in the input. And being a leader doesn't have to mean, you know it all alone. I think the most extreme example I've had was the two years I left pharma, and I ran a turnkey business. I was the managing director. We did agriculture, so recirculated systems producing fish on land, highly technical with, you know, a lot of, we had chemists, and biologists, and engineers, and architects on staff deciding these big facilities. But it was a company that had lost money for five years, because it was more like a budding industry.*

And I was brought in to do turn-around, and we were going to, you know, rolling it, not just cutting, because then we wouldn't have had the skill sets if we cut anymore, and they had been used to that over five years. But as a woman, and newly announced, I got pregnant with my youngest daughter. And at the end of year one, well, not quite end, but we were getting there, but we weren't at the goal yet of really turning around. And the board was very impatient because they had waited five years, which maybe wasn't fair to me, or anyone, but it was what it was. And I stood there in front of people, and I had to make sure that they weren't going to leave because then I could give up. I had to have them to win the project that we have identified.

And we were, you know, getting in, and I stood there with my big belly, and I just looked at them and said, "Who do you think, of all of us, the least would want to be in the unemployment line right now around Christmas time?" I'm like, "I'm just going to ask you that question. So can you please just believe me that there is no one more motivated to make this a success?" And we did. We managed to break even year one, and we were highly profitable year two, but I had to, I mean, I couldn't hide that. I had to just speak to it. I'm like, "Look at me, guys."

Denise McIntosh *"We need to make this work!"*

Helga Salling *Yeah. It was like, "Failure's not an option. And I need you to believe that I am doing everything I can." And they did. We didn't lose a single person. So it worked.*

Denise McIntosh *Great, great, great. So how can we encourage and get our information out to the younger ones in, in fact, even grade school, high school who are looking for that career path and those opportunities to make it in manufacturing, and engineering, and pharmaceutical, and food, and in all of these places? Because there are so many opportunities.*

Helga Salling *I think representation. I mean, that's really what it comes down to in every media and everything. And, you know, I've been going to my kid's school and talking about, you know, always say, "Hey, Career Day!" And they're little now, but I'm going to continue to do that. So they see someone who's, you know, who's not your traditional stereotypical engineer talk about it with passion and that, you know, I love what I do. I love going to work. I love the people I get to work with. We did, last night, with [IPS](#), we did a whole session with ISB and all the students from NC State talking about consultants and engineers. And I was so pleased that almost fifty-percent were girls there starting chemical engineering, mechanical engineering.*

I try to very deliberately also hire and really try to encourage other women. There's always been this myth that, you know, other women are, you know, I read somewhere that seventy-percent of women would prefer a male boss, and we gotta change that. We gotta do better with each other and lift each other up. It's not just women. It's also diversity. I think the whole, now about, you know, Black Lives Matter. And I saw a CEO of, I think from Wells Fargo said, "Oh, no, there isn't any talent." And I would say that is absolutely not true. There's incredible talent from all groups. And you got to show the way by hiring, and promoting, and pushing anyone who could come near that's willing to listen. That's the most satisfying part about being a leader is that. Seeing someone who, you know, who all of a sudden realized their own greatness. If you had been the one to help them see that, I mean, it's, everything is worth it.

Denise McIntosh *Yes. So I'll share just a little story of my own. I have a degree in economics, but I grew up on a farm in Kansas, and I really thought I wanted to stay in agriculture, but I didn't see, the production part of it was not of interest to me. So I looked on the business side of it and ended up with, well, three different Fortune 500 companies on the sales and marketing side of that and landed in Chicago at a corporate headquarters where I was one of maybe two or three women in the whole staff, or in the whole company that were not staff positions. So I've seen a lot of changes over the years, thankfully. We've paved the way for a lot of young women to come behind us and include the diversity piece, because that was never a part of agriculture either. Which, we all eat.*

Helga Salling *We absolutely do eat. And I would say I think we have come a long way, Denise, but I'm still gonna say, and let me make it clear that, for me, IPS has been like coming home. It's such a wonderful company and culture, and I feel completely appreciated for exactly who I am and what I bring to the table and acknowledged for having a different angle. But even that, you know, yes, we have, our chief of staff is a woman. You know, HR is normally a good field where they can show that we're diversified. And we have a woman who's a senior director in finance, but in operations, there's two of us out of a group of maybe fifty globally? So it's still very small, and I've been with companies where there wasn't a single woman who was in operations, you know, and I've been working for twenty years and, you know, still consider myself fairly young and just getting started with my career, but it isn't predominantly women.*

And a lot of offices have very few women engineers. And, again, it requires a conscious decision to look for the talent, and hire them, and say, "No, I want to build a team." Because the client side is better. Like the pharmaceutical industry is better, diverse. It's more diverse in gender, and race, and, you know, where you come from, and age than engineering, which is very conservative and traditional in many ways. But our clients,

they want to work with companies that match them and have people that they can relate to. So we've got to do better. And we've got to show that we can find that talent too. And I'm very pleased with the office that I run. We definitely have some incredible, talented people from a lot of different backgrounds. And that makes me happy. I only get to see them on meets, you know, meetings, or on Zoom like this these days. But I used to go into the office, just walk around and just get all worked up, like, "How did I get so many great people in here?"

Denise McIntosh *So, speaking of that, how has the impact of the pandemic been on relationships with your colleagues, with your clients, with your children?*

Helga Salling *So I think I wrote a piece that you might've read, Denise, about, you know, how women have been disproportionately affected with this as still the primary caregivers and having kids just homeschooled, pulling out our hair. And I've seen it. I've seen it firsthand with myself and it's stressful. I've become much better. I guess my kid could walk in right now, and I'd just say, "Well, it is what it is. I can't control everything. And it doesn't diminish the message or the contribution that I have." I try to tell that to everyone I work with. My female employees and I have some specific examples of things that we've done. But I think it's been working really well in terms of reaching out to each other. And we've had a weekly meeting. We've, you know, we've been very proactive and taking care of each other.*

I have a very talented up-and-coming woman in construction who works with me and has had to go onsite. And she's been reaching out a couple of times and expressing concerns that, you know, she has her kids at home, and going onsite, and could she maybe not go onsite every day? And it's been very stressful. And I feel humbled that she has trusted me enough to come to me. And, just today, we actually found a solution where we moved people around. So a young man who has no family is going to go onsite instead of her, and she's gonna do what he did, which was more procurement-related. She can work from home. And by communicating and trusting each other we've been able to, several times, find solutions that just somehow make it work for all of us.

And that comes down to company culture. That's everything. If you have that mindset, other places I think should just say, "Well, if you can't go onsite, then you can find something else to do." And I think that's short-sighted. IPS did one thing that I brag about to everyone, is when this started and we didn't know how it was going to impact us, and it has had an impact with people, you know, who used to go onsite, there were a couple months where they couldn't even though we were considered essential. It had a financial impact, but we very strongly went out and said, "We're gonna, you know, we're

going to give everyone three months to figure out a solution, and find work, and see how it happens. We're not going to furlough or lay off or do anything." And that gave everyone the space to breathe and find a solution. And we're doing better than ever right now. And I think the loyalty that you get from people is the best investment that you can get.

Denise McIntosh *Yes. Well, and I've mentioned to our colleagues here, this, in a strange sort of way, has given us the opportunity and the time to think more strategically than in the past when we were just simply moving from one thing to the next, to the next, to the next. We actually have some space and some time to actually think about things. So it hasn't all been soul-sucking, but there are parts of it. And I do really appreciate the parents, and particularly the women, who have taken on that added responsibility of making sure kids are still learning.*

Helga Salling *I will say that one of the things I give myself grace for, and I would lie if I said that I've been great at homeschooling and getting them on everything, because I'm on calls, and I work a very demanding job, and I have a very large group of people that I feel responsible for, that they can provide for their families. You know, so, well, even we work on almost every single project for bringing the vaccine to market, and that's important. I can't, and I've just been open with the teachers. I've said, "Hey, you know, this is what I'm doing, and I apologize. I'm doing my very best here. You know, please help me out, cut me some slack."*

And then I laugh, which is mostly serious, but I laugh and say, "Hey, what my kids will lack in, you know, academic excellence this year, they're going to make up for in independence, and self-sufficiency, and computer skills." So they've had to figure it out on their own. They can microwave their own lunch and they can, you know, do what they need to do. And they're nine and six, but those are important life skills that I think we underestimate. They say that, you know, independence, empathy, the ability to do delayed gratification, those are the three biggest indicators of personal success, not necessarily your grades or your IQ, but those other factors.

Denise McIntosh *And I totally agree. I was driving home last night, thinking, you know, this is a, I mean, we don't know how long this is going to last, but in a person's lifetime, if this is nine months to a year, those other skillsets that the kids are learning, that we're learning, that we're understanding the need for showing empathy and being empathetic, is probably way more important than the direction we were going.*

Helga Salling *Yeah. And I think kids understand more than we give them credit for. I think early on, you know, I have a boy and a girl, but for both of them, I tried to spend*

the time to explain to them why, because they're like, "Oh, some of the other moms are just sitting there next to them." I'm like, "Yep, but that's not your mom. I'm doing this and this, and this is why I'm doing it. And this is what, you know, is important to me and to a lot of people. And this is what makes me happy and feel like I am causing great things in my life." And hopefully I think inspire them to do that more than, you know, than just coddle them and wrap them up and cotton, you know?

Denise McIntosh *Yes. Real life lessons.*

Helga Salling *Real life lessons. And then I've had, I mean, I have had my daughter call and said she needed help wiping her butt when I was on a call with a former governor. But, you know what, he took it very well.*

Denise McIntosh *Well I'm, and you know, one of the things that I've noticed over this period of time, you know... Do you remember, it was probably two years ago, when there was a guy on television doing some important something and his child, you know, wandered in around the back and then...?*

Helga Salling *And then the wife came running in. I remember that, yeah.*

Denise McIntosh *No, it's a daily occurrence. It's just not that big a deal. We all have lives. And we all...*

Helga Salling *Denise, I try, when my kids walk in, instead of like, "No, go away, go away" and freaking out, I basically say, "Excuse me, my kid is here." I turn the screen and like, "Say, 'hi', guys!"*

Denise McIntosh *Yes. Once again, being authentic. And this is who we are.*

Helga Salling *It is who we are. And I think we appeal to more, you know, more broadly to others. I've had so many of my employees reach out to me and have the courage to share their situation. And I think it's because they saw that they would be safe doing that. And I was doing the same things. I wasn't just, you know, perfect person just because I happened to be in a different role than them. And being relatable I think is extremely important.*

Denise McIntosh *Yes. Helga, this was as enchanting as I knew it would be. Thank you so much for joining me. And I know we didn't get to all the questions. We may need to do a second one.*

Helga Salling *I would love to do a second one. You just let me know when and where.*

Denise McIntosh *One of these days we'll get to do this in person again.*

Helga Salling *Well, that would be even more fun.*