# A Few Words from Women in the Shotcrete Industry

# **HOW DID YOU GET STARTED IN THE** CONSTRUCTION INDUSTRY?

I am part of a third-generation family-owned business that manufactures cement pumps and mixers as well as aggregate broadcasters. My grandfather started our business in 1954. My father learned at his knee and eventually took over the business, eventually leaving it to my brother and me. While growing up we would constantly be at the shop following dad or the employees (who were more like family) around. Each summer I would work at the shop in the office helping with secretarial work. Neither of us originally intended to take over the family business — we both actually went to college to become educators. After graduating with my Master's, I came back to the shop to work until I found a teaching position. However, I ended up never leaving, because I enjoyed the business and found myself totally immersed!. ~Barker

Growing up in a family business with a father who was extremely supportive helped me make an early decision (at 8 years old) to become an engineer. Going from helping my mom do payroll at the kitchen table and cleaning pools during my summers in high school to running the service department, helping my father with construction, and taking over the business when he retired (and passed away a month later), I have been in every position in this business. ~Brown

### I started in 2005 as a union laborer apprentice. ~Burkert

You could say construction runs in my blood. My dad was shooting pools long before I was born and a few years following me, they started their business. I studied landscape architecture because I love design, construction, and people. Seven years ago, I said "Yes!" to the family business. My initiation came in 2019, mixing 1,600 yd3 of concrete for the Park Avenue Tunnel. Since then, the challenges have only fueled my fire. ~Cruz

I've been mechanically inclined and a problem solver since I was young. My dad worked on oil rigs as well as various other hands-on jobs, and there was always something to work on or fix around the house. That desire to understand how things work and fix them continued through engineering school. I studied mining engineering because it was a more hands-on degree and, as far as I knew at the time, had the coolest equipment that I wanted to work with (that is still the case). Transitioning from the mining industry to tunneling and underground construction was simply a decision on location; I no longer wanted to be on remote sites. I've been in tunneling for over 2 decades now, so I think I've found my niche. ~Chastka

My journey into the construction industry began unexpectedly when I met Mike Klemp, the owner of Thorcon Shotcrete and Shoring LLC. Our engaging conversations about the industry and Thorcon's unique projects piqued my interest, and I found myself fascinated by the work they do. Recognizing the potential for growth and innovation, I decided to seize the opportunity. Shortly after, I accepted the role of Corporate Vice President for Thorcon, eager to contribute my skills and passion to the dynamic world of construction. This unexpected turn has been both rewarding and inspiring, as I've had the chance to be part of significant shotcrete projects and work alongside a talented team of industry leaders. ~Fox Nyarko

During my studies in civil engineering, at Université Laval in Quebec City. ~Poulin

At the age of 9, I visited jobsites with my father, founder of Coastal Gunite Construction Company. I never intended to work for/with him, but after obtaining my degree in Civil Engineering I wanted to gain experience for a couple of years before attending business school. After a year working as a safety engineer on a storm sewer job in Washington, DC, I became enamored with the shotcrete process. I loved how we could rehabilitate 100-year-old structures so they could continue to be used instead of demolished and rebuilt. Not only is it satisfying work, but it challenged me every day and continues to do so. ~Emmrich



Leah Barker Quikspray Inc.



Melissa Brown BonaVista Pools



**Cathy Burkert** Mentor



Maria Chastka Granite Construction



Ashley Cruz Cruz Concrete & **Guniting Repair** 

Growing up in a family where the males were predominantly working in the construction field, it just felt natural. My dad was always making improvements at home with renovations, so I really got to see it first-hand at a very young age. ~Da Ponte

After graduating from university, I saw there was a local masonry company looking for R&D staff, so I interviewed and was brought on board. I had amazing mentors and colleagues who taught me about the chemistry and formulation of cementitious materials, and I gained valuable insights on the construction industry and the manufacturing process - from there I was hooked. I loved working with building materials, getting my hands dirty, and designing and testing cementitious formulas to tame the beast that is concrete and mortars. ~Hechel

My background was in facilities management, with a focus on strategic planning - it dabbled in everything, so it was an ideal choice when you couldn't decide what you wanted to do when you grew up. Balancing the variety of needs as a facility manager was a natural steppingstone to the variety of needs I face at ASA. ~McComas

I never imagined I would find my place in construction, but life has a way of leading us to unexpected paths. After my husband's passing, I was focused on healing and supporting my sons. One day I met Evan, a superintendent at CROM, and our friendship grew through shared challenges training for a Spartan race, rebuilding our lives, and eventually creating new memories together. When Evan's project was ending, he asked me to move with him. Leaving behind the past, my sons and I took a leap of faith. Evan, passionate about CROM, encouraged me to join as his timekeeper. I refused about ten times before finally giving in. My first project was an 18-million-gallon thermal energy storage tank in Bartow, Florida, featuring the largest diffuser system in America. From that moment, I was hooked. Over the past ten years, I've grown far beyond my initial role. I'm not just a timekeeper — I'm my brothers' keeper, fully immersed in all aspects of the project, ensuring safety, teamwork, and excellence. Shotcrete and construction have become more than a career; they've given me purpose, resilience, and a second chance at life. ~Thomas

I was lucky enough to work side by side with my husband and grow a small construction business, which turned into a remodeling operation that I was heavily involved with. I joined CROM five years ago with a background in Business Management, but a passion for people and the quality of our work. ~Smith

I grew up with a metallurgist father on his mining sites, and he showed that you can take what others may see as "plain dirt" and make something special out of it. This holds true for any aspect of the construction industry. Architects have this mindset in undeveloped properties, and landscapers see this in any outdoor space. We as shotcrete specialists help make that "plain dirt" an oasis for a homeowner, constructing their get-away pool or spa, or making an agricultural property become green and lush with canal/ water retention management assistance. ~Spring

My entry into the construction world was far from conventional; I was the quintessential girly girl growing up, more at home drawing pictures than playing in the dirt. My family owns and operates a construction company doing concrete formwork, flatwork, and shotcrete After earning my business degree and having no luck landing a degree-related job, I asked my dad for a job over the summer. Little did I know that summer gig would turn into a lifelong passion. I came in green as grass, having no prior experience in the industry (my dad had very high expectations and was very tough on me). I started as a laborer, but it wasn't long before I found myself captivated by shotcrete. Today, I can confidently say I've turned that summer job into a career I am very passionate about. I can't imagine doing anything else! ~Unruh

My career began unexpectedly 15 years ago, stemming from a Thanksgiving dinner conversation with a family friend. I didn't know it at the time, but he was a recruiter specializing in hiring for technical and scientific roles. He set me up for the interview that started my career with calcium aluminates. I never imagined I would be working in the construction industry, and I am extremely grateful to our last-minute guest for introducing me to what turned out to be an exciting and fulfilling career in construction. ~Vawter



Stephanie Da Ponte Consolidated Shotcrete Inc.



**Randle Emmrich** Coastal Gunite Construction Company



Katrina Fox Nyarko Thorcon Shotcrete and Shoring LLC



Jisha Hechel Azelis



Alice McComas American Shotcrete Association

I was born into the concrete industry. My father started pumping concrete in the late 70s and my folks started their concrete pumping business in 1981. When the economy crashed in 2008, my father started Redwood Empire Hose Repair — that turned into a Schwing line pump dealership and is now the beast that it is today. We sell Schwing line pumps, Schwing parts, and shotcrete supplies, and run a concrete line pump repair facility in Northern California, which is easily one of the best (arguably the best in the nation). We eat, breath, and live everything line pump. ~Worden

### **DESCRIBE YOUR ROLE** IN YOUR COMPANY

Each day I wear a different hat or multiple hats at once. My main focus is sales and marketing for the business, but I am also HR, sometimes bookkeeper, purchasing agent, R&D project organizer, technical question responder, and material manufacturing demonstrator, which sometimes finds me with a shotcrete nozzle in my hands. It just depends on what that day needs. ~Barker

I am the one who smooths the pot holes to ensure that we run as smoothly as we can. As President, my job is to make the best business decisions for the business - which means sometimes getting on site and running the concrete pump or holding the hose on a pool shoot. As I am currently trying to step away from the day-to-day, my main role now is to build my team of managers to take on the routine business. ~Brown

I am currently a Project Engineer/Construction Manager for Granite Construction Tunnel Division, involved onsite in planning and executing daily construction activities. We have all manner of excavation; EPB TBM, roadheader, excavator, and drill and blast, as well as earth retention systems; secant piles, diaphragm walls, rock bolts, rib and lagging, segmentally lined, concrete, and shotcrete. I am in the field working with the crews to build our projects. ~Chastka

My title says Director of Operations, but that's only part of the story. I handle bidding, ordering, mobilization checklists, project flow, and billing - and I'm still learning every day from Michele Cruz, the trailblazing Woman in Shotcrete. Wearing many hats is simply part of the job. ~Cruz

My role as the Director of Deployment is to facilitate the needs of the corporation, the clients, and our field employees to make sure we are able to successfully execute our projects with the highest standards. ~Smith

I do health and safety, which involves writing and implementing procedures, completing injury reports, and implementing corrective action to help prevent these injuries from occurring, as well as completing site inspections, reviewing these inspections with the foremen, etc. ~Da Ponte

My current role is President of Coastal Gunite Construction Company, but I started out in sales 26 years ago and then went on to be a Safety Engineer, Project Engineer, Project Manager, Area Manager, and Vice President. It has been a fun ride! ~Emmrich

As the Corporate Vice President at Thorcon, I play a pivotal role in driving the company's strategic direction and ensuring operational excellence. My responsibilities encompass overseeing ways for Thorcon to simplify internal office processes and systems, and leading a talented team of professionals. I am deeply involved in ensuring we stay focused on our business and what we deliver to our clients. Additionally, I collaborate closely with my leadership team to implement policies that enhance efficiency, safety, and quality across all projects. My role also includes mentoring and supporting team members, fostering a culture of collaboration and continuous improvement. Overall, my goal is to contribute to Thorcon's success and reputation as a leader in the construction industry. ~Fox Nyarko

As the Assistant Director, I dabble in most everything! I administer most of ASA's programs: Shotcreter certification, inspector certification, contractor qualification, and convention and exhibitor programming. Since we are a small group, we are all involved in much of what you see happening in the Association. As such, I also contribute toward efforts



**Christine Poulin** Sika Canda Inc.



**Heather Smith** CROM Corporation



**Heather Spring** American Shotcrete



**Nina Thomas** CROM Corporation



Jacquie Unruh Unruh Construction

on the magazine, membership, finance, website, and as camp mom. ~McComas

I'm currently the Laboratory Manager for one of our construction applications laboratories at Azelis. My lab specializes in dry mortars containing cementitious binders. We offer to help customers optimize their concrete and mortar mix designs for better properties using our specialty chemical additives portfolio. We also represent a variety of raw material and additive suppliers and we support them by performing laboratory studies and benchmarking against market materials. ~Hechel

Worked all the way from apprentice, to certified shotcreter, to business owner, to sale of shotcrete company. ~Burkert

I manage the shotcrete division of our company, a role that brings unique challenges and rewards, especially as a woman in a physically demanding field. I manage and coordinate with other trades, and manage my prep and spray team, as well as nozzle. The work isn't just about directing operations; it requires strength, resilience, and a hands-on approach. Every day demands not only physical stamina but also the ability to problem-solve in a fast-paced environment. It's this blend of teamwork and grit that fuels my passion for what I do, proving that women can thrive in all aspects of construction. ~Unruh

I am the General Manager of American Shotcrete, headquartered in Mesa, Arizona, providing high-quality shotcrete services throughout the Phoenix metropolitan area. With a focus and commitment to excellence and safety, I coordinate the day-to-day operations in the office as well as occasional on-site project oversight. My personal goal is ensuring every job meets the highest customer standards from delivery to completion.. ~Spring

I built all our websites. I also actively update and add new parts and equipment to our online shop. I started Line Pump Outlaws on Facebook which is at 20k members and growing. I sell shotcrete and line pump-specific supplies to folks all over the nation. I run dispatch for our operators out in the field. I designed a bunch of cheeky stickers and shirts that are related to the line pump industry. I'm not working

the end of the hose, but I am in the background making the wheels turn, generating sales, and driving folks to our shop for repairs and line pump sales. I know this industry. And I love it. ~Worden

Technical support for shotcrete and tunneling technologies for my team in Sika Canada. ~Poulin

As an Infrastructure Sales Manager I work closely with owners, engineers, and contractors to understand and identify their rehabilitation needs and challenges. I travel extensively throughout my region sharing technical product knowledge and solutions across the heavy industrial, wastewater, and aerospace sectors. I can be anywhere from giving a technical presentation to an active jobsite sometimes on the same day! ~Vawter

As an Administrative Craft Labor Coordinator and Health, Safety, and Environmental Representative at CROM, I am deeply committed to both the craft and the well-being of my team. My role is demanding, working long hours in all weather conditions, side-by-side with my brothers in construction. I take pride in the physically intense work, assisting in all areas needed from finishing shotcrete to working at heights, installing diaphragm, operating the Vertical Mobile Access Platform (VMAP), and so much more. Safety is at the heart of everything I do. Authorized by OSHA, I lead by example in conducting toolbox talks, training my team on hazard identification and prevention, and ensuring compliance with safety protocols. I cultivate a culture where safety is not just a requirement but a shared responsibility, recognizing and uplifting my team while providing guidance when needed. Beyond the field, I handle critical administrative tasks, including preparing activity hazard analyses, confined space permits, payroll, and equipment management. I ensure our tools and trailers are maintained, our environmental impact is minimized, and our team is educated on caring for their bodies and minds. As certified in CPR and first aid, I care for my brothers and sisters as needed. My role is more than a job - it's a purpose. Every day, I strive to protect, educate, and empower the hardworking men and women who make our projects possible. At CROM, I am not just a leader for my team: I am my brothers' and sisters' keeper. ~Thomas

# WHAT DO YOU LOVE MOST **ABOUT WORKING IN THE** SHOTCRETE INDUSTRY?

Meeting new people and learning what type of job they are completing. I love seeing customers' job photos and learning about their experiences on the jobsite. I would have never dreamed of some of the areas where our equipment is used and the projects our customers are completing -Our customers may need a custom-sized pump to fit into a small space in a mines, or just building cool projects like pools, skate parks, themed amusement parks, repair and rehabilitation projects on bridges, and tunnels, etc. ~Barker

For me, it is not the shotcrete industry, but the pool industry. We only build shotcrete pools, and by narrowing our focus, we are lucky to be able to create beautiful pools for our clients. When I get to spend a day on a concrete shoot it is so much fun to be playing in the 'mud' instead of being behind a desk. ~Brown

### Educating others on quality shotcrete placement vs traditional form-and-pour. ~Burkert

The people in this industry are incredible. Everyone has been on a challenging job and needed to reach out to someone else in the industry to help solve an issue. It's a network of incredibly hardworking individuals who want to do their job well and will help each other whenever it is needed. The unique applications — stamped and dyed shotcrete on retaining walls to look like an exposed rock face rather than landslide prevention, for example - are also a compelling reason to enjoy this industry. But for me, it will always be the people. ~Chastka

I really love seeing things be built and finished. Most of our work is repair and reconstruction based, and with that, knowing that the service we provide is benefiting so many people is very rewarding. ~Cruz

I love the versatility of the trade; one day you're in a tunnel, the next you're doing a culvert, a pool, a parking garage, etc. ~Da Ponte

The people. Most people that I have met in relation to the shotcrete industry are fun, or at least interesting. We are a small group in the very large construction industry, and everyone has amazing stories to tell about their projects, or an inspector, or a new approach to the method. It is never boring, and I am always learning something. ~Emmrich



**Remy Vawter Imerys** 



**Nichole Worden** Redwood Empire Concrete Pumping Equipment

Working with passionate people — because people in shotcrete are the craziest, nicest, most hard-working and passionate people I know. ~Poulin

What I love most about working in the shotcrete industry is the unique blend of innovation and craftsmanship it offers. As I am new to the industry, I am learning every day. I am constantly inspired by the work my team delivers, pushing the boundaries of what's possible in construction through shotcrete techniques and a design-build approach. Additionally, I am passionate about the collaborative spirit within the industry, as it requires close coordination and teamwork to achieve the best results. Every day presents new challenges and opportunities to learn and grow, making my role both rewarding and fulfilling. ~Fox Nyarko

The shotcrete process is very fun to watch and be a part of. The crew run like a well-oiled machine and everyone has an important part to play — the final result after a successful shotcrete project is amazing to see. I am humbled to play a small part in some shotcrete mixture designs, and I love to serve the industry by helping to make their concrete mixtures more robust, higher performing, and more enjoyable to work with. ~Hechel

There is never a dull moment. I work and interact with a variety of people, from serving to soliciting service. There is always a unique problem or question that needs either my junior detective cap or a creative problem-solving solution. I get to work independently and on teams. I have co-workers and friends who will think through an issue with me and support me to make things happen. ~McComas

The vastly different applications in which our products can help transform a person's dream and vision into reality. ~Spring

I have enjoyed watching the industry grow, using new technology to improve processes, and not staying stagnant in our processes, as well as helping to identify crew members who have potential to grow within the shotcrete industry. ~Smith

Being on site remains my favorite part of the job, as it allows me to apply technical product knowledge to real-world challenges and offer solutions. Many of these visits are initiated by requests from our shotcrete contractors, and I value the relationships we've built. ~Vawter

What I love the most about working in the shotcrete industry is the lasting impact of our work, knowing that our craftsmanship will endure. The tanks we build are lifelines for communities, providing essential resources for families and standing strong for generations. These tanks built with shotcrete have lasted 70 years and more. These tanks support life in ways many people never realize. Beyond the final product, I love the journey shotcrete has provided — the transformation that happens both in the structures we build and in the people who build them. Shotcrete is an art and a skill, and I take great pride is seeing my team members grow. We take individuals from all walks of life, teach them how to shoot, form, and finish shotcrete, and in the process they develop confidence, expertise, and a sense of purpose. Most importantly this industry provides opportunities: Shotcrete gives my team members the ability to provide for their families, build meaningful careers, and take pride in their work. I love being part of something bigger than myself — a team that creates, protects, and sustains. Every day, we shape lives thanks to shotcrete. ~Thomas

My passion for the shotcrete industry runs deep. I thrive on the physical and mental challenges it presents; this field is truly not for the faint of heart. Every day brings new challenges, but we always find a way to win. When I leave the job site each day, I carry with me a profound sense of accomplishment and satisfaction that's hard to find elsewhere. What fills me with pride is not just the work I do — I'm honored to continue my family's legacy in this industry, and each project is a tribute to where I come from. ~Unruh

I love the comradery of this industry. It is such a small bunch of us who are out here working in this industry. Everyone I have met or had the pleasure of working with are big-hearted, hard-working goof balls who love what they do. I love the freedom this industry allows me, and I am fascinated and in love with the machinery. Want to know the specs on any Schwing SP? I gotcha. I love supporting the folks who are boots on the ground making the magic happen. I love making sure they are getting the best equipment out there. I love that my position allows for me to travel and interview shotcreters and pumpers out in the field doing what they love, and producing content for the industry. My background is in film, photography, video, and media, and I've been able to apply my creative expertise to the concrete world. I'm pretty unique when it comes to this industry - there aren't many women who even know what a line pump is, let alone a shotcrete nozzle assembly. I feel like I am only just starting to catch my stride, and I can't wait to see what I will be making in the near future! ~Worden

## NAME A CHALLENGE IN YOUR CAREER AND HOW YOU OVERCAME IT.

A challenge in my career is working in a man's world. I have experienced being put into a box and stereotyped by my looks and gender. The only way to overcome this is to prove myself by demonstrating I am knowledgeable and strong enough to work alongside the men. Respect is earned and I do have to prove that a woman is good enough in this male-dominated industry. I continue to educate myself with seminars and completing hands-on demos with the material and our equipment. I try not to shy away from new experiences or jobs that I can help complete. But the best way I find to help stand out in the shotcrete world is to physically perform right next to the guys. I can still throw bags of cement on the mixer and manipulate a shotcrete nozzle. ~Barker

After my father retired, I was wary that clients would not trust a 34-year-old to build them a stunning (and structurally sound) pool. We were working on a couple of large commercial pools at the time, and it was because of the faith that the project managers and site supers had in me that I knew we could carry on without a hitch. The next challenge was when we made the decision to get rid of a few of our seasoned guys from our shotcrete crew because of continued substance abuse. How could we do it without them? I decided that I would be the lead on the crew and run the pump and be there to make the decisions. Big decision, but it worked out well. ~Brown

### A challenge that I still strive to overcome is saying "Yes" to everything. ~Cruz

It was daunting to enter a male-dominated industry but I persevered despite the myriad challenges. I learned to know my audience and who I was able to trust. The diversity programs helped me succeed by allowing me a chance to get contracted work. From there, I was able to build my professional reputation by consistently cultivating skilled and certified personnel and delivering the highest quality work and to stay successful in a competitive market. ~Burkert

Safety is an ongoing challenge. You have people who have been doing things a certain way for so long, and it can be difficult to make them understand why things aren't done this way anymore. I find using real life examples help people understand the dangers associated with shotcrete and the construction field in general. ~Da Ponte

As the nature of our work requires us to move every few years to the next project, I am fortunate enough to be able to work with my husband on projects. While this has been a huge benefit personally (thank you Granite Construction), it hasn't always been possible with other companies, or the best option for my career. It was challenging to be seen as just someone's wife when we were newly married, rather than as an asset to a project. Some company's policies wouldn't allow us to work on the same site, and that often meant we'd need to work in different states. It was also easier to be overlooked by management for growth and learning opportunities. Consistently working hard, showing my commitment to the project being built, and leveraging my network in the industry helped me cement my position in our field. It took years of dogged determination to show that I'm here to stay. My goal now is to continue to help grow our industry as we bring in the next generations and support them in their careers. ~Chastka

A long time ago, I had an inspector (grouchy old man) that tried to run me off a job site. He threatened to have me fired — I believe because he thought I was too young, too female, and too blonde. Confidence has never been much of an issue for me, but he made me doubt myself and my capabilities. In the end I stood my ground, persevered, and did not allow him to scare me away. Not only was this a challenge in my career, but also one of my proudest moments! ~ Emmrich

One significant challenge I faced recently was (and still is) transitioning into the construction industry without prior construction experience. Stepping into the role of Corporate Vice President at Thorcon, I was determined to quickly get up to speed and make meaningful contributions. To overcome this challenge, I immersed myself in learning about the industry, attending ASA conferences, the World of Concrete conference, and the Bauma conference, seeking knowledge from my seasoned leadership team at Thorcon (as well as other professionals I have met), and leveraging my existing skills in leadership and business development. I prioritized building strong relationships with my team and actively listening to their insights and feedback. This collaborative approach allowed me to gain a deeper understanding of the process and skills it takes for us to deliver on a project from bid to closeout while fostering a supportive and innovative work environment. By embracing a continuous learning mindset, I am able to navigate the complexities of the industry and continue to drive Thorcon's success. ~Fox Nyarko

Collaborating on a tunnelling rehabilitation project to develop a unique shotcrete solution, and in return getting resistance from the customer and owner. After more than a year's investment with my team, we were able to demonstrate that our solution was the best, most suitable for their project and the most economical. Success with shotcrete requires perseverance and, above all, education. ~Poulin

We switched association management firms right before COVID hit. While I was able to set up our work-from-home office before everyone else was sent home, it was still a massive change. COVID shut down a lot of things, which gave us time to figure out how to regroup and learn new ways of working. The work continues to be significant, and working from home blurs the lines of working hours. Finding a balance is a very intentional goal that I am still working on. My family, friends, and faith have been huge assets in that process. ~McComas

We were excited to try incorporating natural fibers into shotcrete formulations because we'd heard great things about the benefits they can impart, from environmental sustainability to better rheology and texture. One challenge we ran into was the even dispersion of the natural fibers in the mortar, because they had a tendency to tangle and form clumps in the mixture that would not evenly distribute. We discovered that by using a 50/50 slurry blend of natural fibers in combination with fibrillated HDPE fibers in water, we were able to create a pre-dispersion of the fibers that were free of tangles and bundles, resulting in a high-quality shotcrete formula with excellent performance properties. ~Hechel

Upon joining CROM in October 2020, I quickly immersed myself in understanding the industry and the growing challenges CROM faced as it rapidly expanded. After carefully evaluating and collaborating with my teammates, I identified a critical gap: CROM's growth had outpaced its existing deployment strategy. Drawing on my experience and problem-solving skills, I developed a more efficient logistics strategy for CROM's field crews. With the support of CROM and their leadership, our solution not only streamlined operations and increased the company's field crew capacity, but also saved the company both time and money. ~Smith

Challenges are a daily occurrence in this industry, and the key to overcoming them lies in maintaining a positive mental attitude. When a project doesn't go as planned, it's all about putting in the effort; doing everything possible to get the job done, no matter the obstacles. Once the dust settles, I reflect on the experience: What went wrong, and how can I prevent it in the future? I believe in the power of learning, so I dive deep, researching, asking questions, and seeking insights. It's a continuous journey of improvement, and each challenge only makes me stronger and more resilient. ~Unruh

Working in a family business is really tough. There are a lot of strong characters, and it can feel like there are too many cooks in the kitchen. I'm proud of being able to serve my family by taking on a bunch of work myself while also being able to zone in on my niche within the family business and grow in my own way. I've always wanted to be creative, as an artist and musician. I had no idea how I was going to be able to combine my desire to be creative in the concrete industry. I mean, how do you do that? I'm finding it behind my camera lens and on my computer, creating content, graphics, websites, and visuals that are informational, fun, and a bit goofy, just like all us blue collar concrete folks. I'd love to create a version of "concrete pumping/shotcrete for dummies" type videos for folks who are starting out. I digress: I suppose I overcame the feeling of being worthless in a male-dominated industry by realizing that my take on things is original, interesting, and just as valuable. Keep your chin up — do your thing fearlessly. ~Worden

One of the greatest challenges in my career has been proving myself as a woman in the construction industry. In a field traditionally dominated by men, I had to earn respect not just by my title, but through my actions. Early on I was met with skepticism and knew that words alone wouldn't be enough. I had to show that I could work just as hard even at the age of 57 years. I had to show I could endure the same tough conditions and contribute just as much to the success of our projects. I overcame this challenge by refusing to be discouraged. I immersed myself in the work, learning every aspect of shotcrete construction from physically demanding tasks to technical details that ensure our tanks stand strong for decades. I didn't just do my job, I went beyond - leading by example, educating my team on safety, and proving that leadership is about capability, not gender. Over time my persistence paid off. I gained not only the respect of my team but also their trust. Today I am an award-winning leader. I take pride in mentoring others, showing that women belong in this industry and can thrive in it. My journey has made me stronger, and I am opening doors for more women to follow. ~Thomas

It was a challenge to move from a structured laboratory environment to the busy and ever-changing world of construction. I had to quickly adapt and use every opportunity to build my knowledge in the field. I knew it would be a steep learning curve and immediately began visiting project sites at various stages, before, during, and after completion. Directly engaging with owners, engineers, contractors, and even competitors accelerated my understanding of industry challenges and proved to be the most effective way to learn. ~Vawter

# **DO YOU HAVE A WORD** OF ENCOURAGEMENT OR ADVICE FOR WOMEN STARTING OUT IN THIS **INDUSTRY?**

Don't be afraid to jump in and help. We can do almost everything that men can do too. On multiple demos or jobsites, I will do anything that I can physically do - I will be the one picking up 50- to 80-pound bags and bringing them to the mixer. I have surprised and earned respect from men who would have never thought a woman could be industrious and capable of the job that was being performed. ~Barker

Stick to your guns. Know that you can do it and don't listen to any of the people who say that you can't. My guidance counsellor in grade 11 told me that I couldn't become an engineer — I stood up and left her office after telling her I could and would. Find someone senior who supports you 100%; it is their confidence in you that will both give you internal power and give others confidence that you can do it. ~Brown

I would say to these up and coming women to be passionate and confident. Always keep safety first and pay attention to details. ~Burkert

The best advice I have is to find your support network and be that network for others. Find a mentor or colleague that believes in you and will be a phone call away to console or encourage you when you have an awful day and want to quit (I promise you will have those days). And then pay it forward. Make sure other people know you are there for them as well when they have those days. Specifically for the shotcrete industry; vendors are an incredible resource. Most of them have been in the industry for years, so there isn't a question you have that they can't answer or at the very least find an answer to. There may be times you are in a bind on a project and need pump or material help. The vendors in our industry are amazingly resourceful and can solve most issues with a phone call. ~Chastka

Get dirty, ask questions and be curious. Women can see things in the field with a different perspective. Use your voice and offer what you see. ~Cruz

Working in a male-dominant field can be intimidating, but don't let this discourage you. Rising up to the challenge and succeeding is exceptionally rewarding. ~Da Ponte

Women have different ways of looking at problems and handling situations, and are an asset to the industry! My advice: Don't be afraid to ask questions. We were all in the same shoes at one point, ~Emmrich

Build a Strong Network: Connect with other professionals in the industry, both men and women. Attend conferences, join industry associations, and seek out mentors who can provide a wealth of knowledge and expertise as well as guidance and support. A strong network can open doors to new opportunities and provide a source of encouragement. ~Fox Nyarko

Find the helpers (to quote Fred Rogers). It may be intimidating being in the minority, but there will almost always be a friend in the crowd to welcome you in and make you feel at ease. Lean into anyone who can help you, ask questions, and learn what you can, but also don't be afraid to speak up. Share your knowledge and experience with others, because you have much to share. ~Hechel

Having a sense of humor and looking for the good in others will keep you sane. Own your mistakes, but don't let them own you. Give grace to others, but don't forget to give grace to yourself. We are all human and we move forward by taking one step at a time. These may sound pretty straightforward, but these are lessons that I am growing more into each day! ~McComas

My most powerful piece of advice is to believe in yourself. In a field where men may have a physical advantage, focus on working smarter, not harder. Identify your unique skills and leverage them. Whether it's your creativity, problemsolving ability, or attention to detail, find ways to use those strengths to your advantage. Remember, it's not just about the physical aspect; it's about bringing your whole self to the table and proving that you can excel in this industry. Embrace your journey and never underestimate the impact you can make! ~Unruh

Embrace learning, asking questions, reaching out, and finding mentorship within your organization and the industry. Women may be underrepresented, but those of us within the industry are proud of it, and we are happy to help encourage and grow anyone interested in learning. ~Smith

Never be afraid to ask questions. It can be intimidating to admit that you "don't know", but seeking clarity demonstrates that you are engaged and truly care about understanding the topic or concern. ~Vawter

Be fearless. There are plenty of resources out there to support you and help you grow in any direction that you choose to take your career! ~Spring

To any woman stepping into the construction and shotcrete industry, know that you belong here. This work is tough, demanding, and often underestimated, but so are you. Never let anyone tell you that you can't do something. Prove yourself through your work ethic, your knowledge, and your resilience. You don't have to be the strongest person in the room to be the most capable. Learn everything you can, ask questions, and never be afraid to get your hands dirty. Respect is earned through action, and the more you invest in yourself, the more you will gain. Most importantly, invest in yourself physically and mentally, and support and uplift other women in the field. We are breaking barriers, not just for ourselves but for the next generation. Stand tall, work smart, work hard, and remember you are not just building structures; you are building a legacy. Leave your life print everywhere you go. Enjoy life to the fullest. ~Thomas

We belong in construction, and without meaning to, we're making a big difference. The guys are our biggest supporters and want to help us flourish in this industry. So let's go queens — the doors are wide open for us! ~Poulin

It's crass; the boys probably have the inner monologue of a sixteen-year-old boy running between their ears most of the time. You will hear it all. But, one thing that that will get you to where you want to be is to just focus on yourself. Show up, work hard, play hard, and shoot it right back at them. There's nothing a woman with an indomitable spirit can't accomplish. ~Worden