

-- Speaker 0 00:00:05 Welcome to the clear impact podcast brought to you by PGT university. Thanks for joining us today. My name is Sherry Conner, and I am your host.

Speaker 1 00:00:19 Come up with some pretty cool ideas that are phenomenal from an aesthetics perspective or what we gained from the product. And then we go put it in our lab and shoot it with a missile and have our, our dreams crushed today

Speaker 0 00:00:32 On the clear impact podcast we met with Dean Rourke, our vice president of engineering and innovation. We learned the unique value of having an entire team of engineers here at PGT innovations and how each one is encouraged to try new things. We learn how ideas become reality and where Dean got his inspiration to be the solid leader that he is. Well, good morning. Thanks so much for being

Speaker 1 00:00:55 Here. We're here with Dean. Hey, good morning, Sherry. Really nice to be with you, Dean. Did I say your name right? Yes, he did. Awesome. Can

Speaker 0 00:01:03 You tell us a little bit about who you are and what you do here?

Speaker 1 00:01:05 Yeah, sure. So, like I said, I'm Dean Ruark, I've been with the company for about 14 years. I oversee our engineering teams, so it really from the product side. So I oversee all of product development for our brands as well as innovation. So, you know, the future of what's coming out, futuristic new product development. Ooh,

Speaker 0 00:01:25 Sounds exciting. And kind of even top secret.

Speaker 1 00:01:29 Yep. Some of it is, and, and some of it is something that we just keep close to our customers and, you know, we talk through them, we bring them in, you know, it's an inviting environment. There's always the things that are, you know, special or under NDA or, you know, under IP review. So we can't always share all of it, but we can certainly share a lot mean, I'm not

Speaker 0 00:01:47 Sure what those letters mean. What is IP?

Speaker 1 00:01:50 IP is intellectual property. So when we, when we find something that's pretty unique or solves a major challenge, we'll often seek patent protection on that to just create a little bit of differentiation for our products in the industry. We find that as the market leader, there's a lot of fast followers. The things that an amazing team of engineers really spends time comes up with and puts a lot of their creative power into it. We'd like to try and be able to protect those things.

Speaker 0 00:02:15 Right. That makes sense. Okay. So tell us a little bit about,

Speaker 1 00:02:19 Yeah, sure. So I grew up in Medford, New Jersey, which is a little suburb of Philadelphia. I went to school there and in high school, my parents decided they really wanted to be in warmer weather and out of that environment. So I got to come down, they lured me with golf. I was big into golf and on the golf team up there moved to Florida at the age of 16 and have been here ever since. So I went to school in Sarasota. I, you know, I feel like I'm a more from Florida than New Jersey. At this point. I spent more of my life here than up there. And I have a little family, my wife, Becky, and I have two children. I have Jonah who's nine and Nora, who is five. Aw,

Speaker 0 00:02:59 Those are perfect ages. I mean, wait, do they have

Speaker 1 00:03:03 Absolutely no cell phones? No, just a little, except they know how to work everything on a cell phone and know how to do it better than mom and dad. Right. Very self-sufficient and how they can navigate that thing. Uh, but no, no, it's kinda like that fun time of that's coming, but just a lot of family time, uh, a lot of outdoor time. Yeah. Everybody

Speaker 0 00:03:22 Can tie their own shoes and off you

Speaker 1 00:03:24 Go. Right. Exactly. Yeah. Those are, those are really fun ages blessed right now. We'll see what happens. Yeah.

Speaker 0 00:03:30 And I do know that if you've been here for 20 years or more, you can consider yourself a local

Speaker 1 00:03:38 I'm in. Yep.

Speaker 0 00:03:39 Me too. So I am curious, how did you land at PGT innovations or in the fenestration industry as a whole? How did you land here?

Speaker 1 00:03:48 Yeah, no, it's, it's kind of, kind of an interesting story. So I, I went to school for engineering. I have, I have some engineers in the family. It's always one of those interesting things when you're pi --

-- cking a career path or what to major in. I don't think we collectively do a good enough job of really teaching youth, what, what that job's really going to be like. So I, I majored in structural engineering and, you know, the junior senior in high school, me always liked home design and building design. Uh, I worked in the construction industry, uh, doing masonry and holing block and just kind of being around contractors. So it seemed like a good career path. So I started in structural design. So I did building design for kind of custom homes or commercial buildings in the Sarasota area at a company called Snell engineering.

Speaker 1 00:04:34 And we worked with, uh, windows and doors to some extent, but it wasn't the focus of our design ever. I had also known from high school about a company called PGT. And in my mind it was a very small window company. Uh, I went to high school with Benji Hershberger and, uh, Benji's dad. Rod is, is our current chairman of the board. He's one of the founders at PDT, but I never knew it as a large window company or producer. And as I was with Snell engineering is a very small mom and pop company. And I was there for a couple years and in my eyes, I really wanted to be at a larger company with more facets of other departments other than just kind of technical engineers. And so I saw that PGT was hiring and I scheduled an interview and then was just blown away by the size and magnitude and scale of what PGT was.

Speaker 1 00:05:26 It was just massive from the small firm I came from. And I was, I was surprised that they needed engineers just because, you know, you don't, you don't think of window and door companies in general as engineering centric. However, when you're designing for hurricane impact resistance, kind of defending against the toughest elements on earth, there's a lot of engineering needs and it's V you know, structural engineering certainly as application to what we do, but it rounds out far beyond that to work with markets and customers and sales. And that's what I really loved about the attraction to PGD. Hmm.

Speaker 0 00:05:58 So when you began here, did you start on the production floor? Like others have, or did you begin as an engineer?

Speaker 1 00:06:06 Yeah, so I started as I actually started as a architect representative for, and, and it was interesting. So I got hired and it was a little bit rough timing because the downturn of 2008, 2009 started nearly upon my arrival. So I started in a new area of the business, uh, at the time called architectural systems. And it was to do, you know, really a commercial platform out of PDT. And the timing was just rough. So I left a technical engineering organization to work as an architect representative, and I knew all the architects in town and was really excited about it. And I did that role for probably two weeks and I thought it must have been the greatest failure of all time at any role, because after about two weeks, they talked to me and said, Hey, we'd love you to join the engineering team. And I thought, holy cow, did I stink so bad at front end selling architect? You know, cause it was kinda like a technical sales representative, right. But it was really just around repurposing. You know, it's a tough time for the industry as a whole, a very tough time for the state of Florida and the state of construction. There just wasn't the time to focus and grow this business. So we, after two weeks, yep. I started as a design engineer doing product design for, for PGT products

Speaker 0 00:07:24 Is a fabulous story. I'm so glad you shared that. Um, but I'm curious, so your current position is the vice president of engineering and innovation. So walk us through what a typical day looks like in the work life of Dean.

Speaker 1 00:07:40 Yeah. So what's kept me here for a very long time and many, many years to come is that, you know, the typical day has a lot of variability. I love people. I have a great team. It very much depends if you know, it's pretty wide berth of responsibilities. Uh, I'm very involved in each different company that, that we acquire and getting engaged with those companies, understanding their product lines, their challenges, their unique and cool and innovative things that they've done, uh, to bring product to the marketplace. So I really get to see a lot every day varies during hurricane season, for instance, uh, we're right on the front lines of that af --

-- ter any major storm that hits the U S or makes landfall, we're tied into the national science foundation and university of Florida, and we go out firsthand and act as the experts on what failed, why it failed and, and what needs to change in the code, what are the things we're doing, right?

Speaker 1 00:08:35 And what are the things that we need help with and just through having a sound engineering team and get to do that work with major organizations to just provide on bias feedback and serve as the experts to the windows and doors, we really know what products were in these houses and what openings made it and what failed and what the pressure ratings or system in might've been. So there's just a huge array of rewarding work. I also get to spend a lot of time in our test lab where we're shooting two by fours at product impacting it in every way we can finding the weak points and innovating around that. We have our innovation lab that launches new and specialty product to market through dealer partners. That really like to be that front end early adopter, try out the systems in partnership with us where maybe we haven't tested everything out to the level of full scale commercialization, but they know that we can count on them and they can count on us to work through the kinks, get it right and put out much greater product into our main production facilities as a result of doing these pilot phases in our innovation lab.

Speaker 1 00:09:41 So there's a lot, you know, it's, it's just all different things on any given day, all around creating better product, all, all driving toward continuing to innovate, continuing to be in front of customers, listening, understanding where the market's going and trying to put product that, uh, people really demand or, and trying to anticipate the trends and where things are going. Wow. That

Speaker 0 00:10:03 Is a lot. So it sounds like there really isn't a typical day because every day is unique.

Speaker 1 00:10:09 Yeah, I think so. You know, like I like to be really active. I like to be really busy. I like to be engaged with a lot of people and, you know, if I compare it to, uh, structural building design or kind of the vision I had through college, you know, that was a little bit more routine. It was, you know, here's the next building. Here's how you run the load paths on them. Here's a couple of things to solve on the, you know, on that particular structure, that site condition, but it felt very repetitive very quickly. This never has. It's what keeps you motivated and excited and keeps it going

Speaker 0 00:10:40 Really fascinating because when I think about engineering or even engineers in general, I don't tend to think of it in terms of excitement or personality. It all kind of seems very bland and exact and not very exciting, but this, this is amazing. I'm really enjoying our conversation today.

Speaker 1 00:11:03 Yeah. Yeah. We love talking product. And as he gained more and more knowledge of any large business products, not the only thing, but the products that we, we make, you know, this team fully designed every part, piece component of that product, you know, that the foundation of everything that we sell. So there's a lot in product design, what we come out with, the nuances of that design and what makes it the market leading product versus a, an imitator or a me too product. And there's so many facets that you really blend between. How do I make a product that's easy to manufacture, but it also has to be a product that architects want and that's beautiful. Uh, and that's sleek and that's also strong and stands up to a hurricane. So this there's this real balancing act of how do you do everything pretty well, that checks all the, not just of the simplest product to produce or not just the most beautiful product in the world, but really that, that serves all of the functions that it needs to needs to serve, to be a mass scale product leader. And

Speaker 0 00:12:06 We're in such an interesting and diverse market because, you know, we have homes that are 200, 300,000, and then we have homes that are 2 million and up. And, you know, those are not even uncommon in this area. So you have to be able to meet the needs of that entire range of homes and buyers and

Speaker 1 00:12:27 Markets. Yeah. The, the channels and the scale of our WinDoor and many PGT products that are spanning to high-end luxury homes. In the, --

-- some, I looked at, uh, a house that's a 48,000 square foot house. That's probably a \$20 million type build. We see those all the time now. And we also serve corporate builders that are building track homes. And there's a, there's a different set of needs between those customers. And you really have to know who you're designing for. And, you know, not just on the product, sometimes the same product can serve a pretty big breadth, but how you market to those customers, how you serve those customers, how you control lead time on time delivery, service, and warranty with those customers. There's just a very different set of needs between those, uh, types of construction.

Speaker 0 00:13:16 Be sure to tune in for upcoming episodes to help you understand the fenestration industry, what you need to know when buying windows and doors and other related topics, you can find out more about us@pgtuniversity.com. You can also find us on Facebook and LinkedIn. So I'll bet. Sometimes it feels like you're just playing in a workshop. You know, like, I don't know, will this work, maybe, I don't know, let's try it. Let's see

Speaker 1 00:13:41 What happens. Yeah. It really is that combination. I love to have this innovation lab and we sell product out of here. So we've launched several high end products and we generate revenue and that revenue really just funds future innovation. And, uh, I love having an environment where I can encourage my team to take some risks and to fail somewhat often because I think that's where innovation starts. If you have, uh, everyone that, you know, there's gotta be a deep capital investment or something, you know, some huge upfront cost to taking a risk, then you, you have to get it right. And when you have to get it right, the first time you can't take those risks. So in the operational world, you might say, Hey, you know, just hit singles, be consistent. We hear that a lot from our operational team. And I think that's absolutely the right way to drive mass production, be consistent, be predictable, make minor incremental improvements.

Speaker 1 00:14:35 Don't change too many variables at once and be repeatable and innovation. It's a little bit different than that, where I'm willing to take a shot on something that might not land and have a team that feels encouraged and empowered to do those things. And even if it that we glean some learning and, you know, maybe pick a piece of, of something. We try a lot of things that don't quite work. And I think of it a lot when we, when we acquired Western window systems, I thought of them because they serve the high end California market and they have beautiful product for modern contemporary construction, indoor, outdoor living, and they don't require impact. And they don't really care about structural loads on product. So we've come up with some pretty cool ideas that are phenomenal from an aesthetics perspective or what we gained from the product.

Speaker 1 00:15:22 And then we go put it in our lab and shoot it with a missile and have our, our dreams crushed. But then as you acquire a company like Western, some of those applications can absolutely work for a company like that because they're not shooting their product with a missile. Uh, they need a beautiful product. That's energy efficient. That's easy to install that also gives mass expanse, large views for nearly all glass homes. Again, I, I think you can scale that learning to every time I failed at something, I've learned an awful lot off of that. Uh, and I have a team that does that as well. And so for every, every one great thing we come out with there might've been one or two failures along the way, but we can do that on a scale. And this I lab that's, you know, we're 3d printing components, so we're not spending a lot of money on tooling. We have very flexible system set up where we're using a CNC to make all of our parts and pieces. So even if I get a profile or a system that doesn't quite work, my upfront costs are really small as compared to what I do in a main scale commercialized mass production facility. So I think this blend is something really powerful. The PGT innovations to really allow it to be innovative, take risks, and then prove out product that much further before it goes into main scale production.

Speaker 0 00:16:42 The little mantra that is on the wall, just outside the podcast room that says we should probably put on safety glasses. It just --

-- makes me smile. Every time I walk in here,

Speaker 1 00:16:54 That was from Kenny, Kenny leads, all of our new product development design, Kenny and his team have really designed pretty much every product for the PGT family of brands over the long haul. You know, Kenny's been here over 20 years and his team has a lot of tenure as well. So they're phenomenal designers, but again, they love this new area of the company to be able to blend great mature product design for all the brands with a little bit, a bit of a play area for them to try new and innovative things. I think, you know, we're seeing a lot of changes coming to the window and door industry or just the building products, industry power we'll get to windows and doors. And when it does, I think we want to think about, you know, the key elements of what we want to enable and enact on product.

Speaker 1 00:17:40 Once power gets to windows and doors. So we're working with switchable glass and glass that changes from linear to opaque, a smart windows controlled where we have Keala century on all kinds of products that wouldn't otherwise offer keyless entry. Cause they may generate specialty multi-point locks. So there's a lot, that's kind of niche for the impact industry where components have to be different to serve the, the life safety function. Right? And so we're having an awful lot of fun in putting those products to market, working with pilot dealers and being that much more ready for the five years, 10 years down the road, when power to windows becomes something. We talk about all the time in the mainstream market. This

Speaker 0 00:18:20 Has been a great conversation and we need to kind of wrap it up. Um, our time is coming to a close with you today, Dean. Uh, but I do have one last question and I'm asking everyone on our introductory series, this question, what is an event or who is a person who has had a major impact life,

Speaker 1 00:18:38 A person that's had a major impact on my life. I think it's affected some of my leadership style and who I am. So my grandfather, his name was Sterling. He is one of the smartest people I've ever met. He worked hard for a living with the same company for his whole life. He has two sons that are both engineers and he wasn't an engineer. He was more of an engineer than a lot of folks with a degree. He could build equipment from the ground up through his career. He always answered to engineers that maybe looked down on him a little because he wasn't the degreed engineer. He was the school of hard knocks engineer. I've really taken that into my style. I went to school and got the engineering degree and got a master's degree. But through my grandfather, he told me two things that always stuck with me a lot.

Speaker 1 00:19:25 And one was, don't go into an industry and be the academic that hasn't actually done that work. Or actually, you know, in this case actually built and installed windows through college. It was actually built and designed, you know, built homes. So through college, I worked as a labor and carried block and late block and put in tide steel. Kate isn't entitled. It was really get to know the industry from the inside out, not just from the top. And two was, he really encouraged me to go get my engineering degree. But he also said when, when you get that degree, always know that there's probably someone that didn't that smarter than you and has more technical experience or experience with the product. And I have, I have folks on my team just like that. I consider them an engineer as much as any of us that, that went to school because they can do all the calculations, but they've come up through the production line, working here, learning through just hard work, grit, problem solving. And I love to have that combination of the really smart school educated engineer and the hard knocks engineer. I think that makes a heck of a team. And I love to have that blend. And I have that in large part because of my grandpa. That

Speaker 0 00:20:38 Is such an inspiring story. What a great guy. I'm so glad that he influenced you the way that he did. It's always good to remember that there are people smarter us regardless of their degrees, and then the letters behind their name. It's always a good idea to be willing, to get your hands dirty. And to remember our roots, I have enjoyed our conversation today and I am excited about doing an entire series around innovations may --

-- be later this year. I'm sure we'll have you back and we can talk about patents and we can talk about some of the other things that we didn't quite get time for today.

Speaker 1 00:21:11 Awesome. No, I love the conversation. Thank you.

Speaker 0 00:21:13 Um, I look forward to our next conversation. Thank you so much. PGT a university is the customer education team for an entire family of brands. We began with the original easy breeze port and closure line then became PGT. America's leading brand of impact resistant windows and doors. We then added CGI, CGI WinDoor, Western windows, new south windows and echo windows and doors. We create products built to withstand major storms, keeping people safe, secure, and prepared. Our exceptional brands give you the protection you need without compromising design or functionality. PGT university is here to educate you our listener so that you can be a more informed consumer of window and door prizes.

--