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Precision Decision

Precision Molded Plastics' David VanVoorhis Switched Career Tracks Midstream to Take on the Family Business

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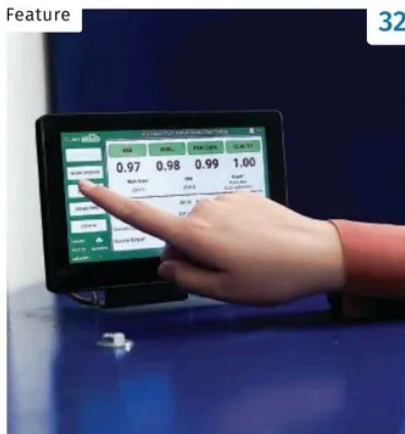
Back in the Family Business

In its 45th year, Precision Molded Plastics has carved out a technology and market niche, growing not just when opportunities arise but when they make sense, after its leader changed careers to keep the family business from changing hands.

By Tony Deligio, Executive Editor

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As an injection molder, Windmill Plastics sought an economical production monitoring system that could help it keep tabs on its shop floor. It's now selling the "very focused" digital supervisor it created, automating many formerly manual tasks.

By Tony Deligio, Executive Editor

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By Tony Deligio
Executive Editor



Back in the Family Business

In its 45th year, Precision Molded Plastics has carved out a technology and market niche, growing not just when opportunities arise but when they make sense, after its leader changed careers to keep the family business from changing hands.

Precision Molded Plastics has 14 injection molding machines in total, ranging in clamp force from 20 to 300 tons. Source (all images): Plastics Technology

After studying in school to pursue an alternate career path and then establishing himself in a different field, David VanVoorhis' return to the family's custom injection molding business was as sudden as it was unexpected. Following an unfortunate confluence of events, VanVoorhis' parents, Ted and Patricia, then proprietors of Precision Molded Plastics, Upland, California, faced a tough decision.

Established in 1979 by VanVoorhis' father, Precision had started in moldmaking, added molding and solidified itself as a highly capable custom manufacturer. Fast forward to 2005, and after seeing its top two customers

(who accounted for 90% of its business) pull molds and molding to Puerto Rico and Juarez, Mexico, VanVoorhis' brother Greg, who had been groomed to take over the company, passed away suddenly and unexpectedly from a heart attack while flying home from a business trip.

"The two major accounts were gone and then with my brother's passing, it just kind of took the steam out of my folks," VanVoorhis says, recalling the conversation that occurred over a Sunday dinner. "They had made the decision — they were just going to shut the place down and auction off all the equipment. They were down to themselves and two part time employees."

In his mid-30s at that time, VanVoorhis was working in construction management for a division of Halliburton, overseeing the building of oil refineries, offshore platforms and other heavy industrial sites. "I've been to college," VanVoorhis says, "and yeah, essentially, I don't want anything to do with manufacturing."

It was VanVoorhis, however, who talked his parents back from the brink at the dinner table and stepped in to run the business, before eventually becoming its owner in 2008. In those early days, he viewed operating Precision through the lens of the sector he was leaving and might have underestimated the breadth and depth of the task now at hand.

"It's kind of funny — I went into it thinking, 'Shoot, it's only one facility, this will be really easy,'" VanVoorhis says. "I have a handful of employees versus 200 spread out across the West Coast." The inherent complexity of running a custom injection molding operation, however, became evident soon enough. "Yeah, it was a little more challenging," VanVoorhis says with a laugh, "but today I look at it and success really comes down to the team and system that you create."

At Precision, that team and system feature operational transparency through a homemade ERP system, as well as in-house toolmaking, lights-out production capabilities, vetted customers and projects from a variety of markets; and, tying all those together, high quality employees. "It really comes down to good tooling, a good system and good people," VanVoorhis says. "When you have all three, everything meshes together into an efficient and effective organization."

'DIVERSITY BY DESIGN'

VanVoorhis was 10 when Precision opened, with contributions to its earliest operations limited to pushing a broom from time



Precision Molded Plastics serves a variety of end markets and customers by design, focusing — as its name attests — to precision components.

to time, sweeping around the two molding machines and moldmaking equipment that it started with. Today, Precision's molding, warehouse and moldmaking spaces are spread across four buildings, covering approximately 30,000 square feet. It operates 14 presses ranging in size from 20 to 300 tons, with efforts in recent years made to swap out older hydraulic machines with newer all-electric Toyo presses. The company installed two new work cells in 2023, after adding four new presses the year before. The plan in 2024 is to add five more machines to the building across the parking lot. All the machines are equipped with Yushin robotics and serviced resin via Matsui handling and drying auxiliaries.

Focused on small, precision parts with a minimum annual program demand of 10,000 units, Precision molds a variety of components for an eclectic array of industries, including electronics, computing, automotive, medical, aerospace, defense, plumbing, irrigation, construction, agricultural, sports, consumer goods, and food and beverage.

As VanVoorhis and Precision's vice president of business development, Ash Brown, lead *Plastics Technology* ➤



Precision Molded Plastics has a fully functioning toolroom with the ability to build new molds or make adjustments to molds that have transferred in.



on a tour, VanVoorhis describes the amalgam of applications and end markets as “diversity by design.” Precision wants no more than 10% of business coming from any one customer or 20% of revenue coming from within any single market. With about 500 active molds, VanVoorhis says Precision has roughly 100 total customers with 80% of revenue generated by 24 leading accounts. Its operations run 24/7 with a head count ranging from 25 to 30 employees. At present, 21 of its 24 production hours are manned with the rest being lights out for certain jobs.

“If the tools are adequate for what the program requirements are,” VanVoorhis says, “and they’re matched with the machine, then we’ve got good process people that should be able to set up controls to verify that we’re going to have conforming product throughout that lights-out period.”

At-the-fingertips insights into any one those machines, molds, people or part runs comes via Heartbeat, the proprietary ERP software that Precision built in-house to help manage its operations. “We didn’t like what was out on the market,” VanVoorhis says, “so we developed our own proprietary system, which we’ll eventually probably take to market.” Module based, Heartbeat could work for a variety of manufacturing operations with new sectors just requiring a new module, VanVoorhis notes.

MATCHMAKING

Not unexpectedly, the lessons learned at the onset of his stewardship of Precision — which began in the crisis mode of rebuilding a customer list after two clients with an outsized impact on regular orders pulled out — remain top of mind for VanVoorhis. In addition to cultivating a diverse catalog of customers from an array of end markets, Precision undertakes an exhaustive vetting process when it considers entering into business with a new customer, including a three-page quote screening document of the different criteria for what it will and won’t bid on. The vetting applies whether the customer approached Precision or it won the business through acquisition of another molder or a transferred tool (many of which come via reshoring these days).

“I think we’re very efficient,” VanVoorhis says, “and we execute well on our business model, but we also don’t take on stuff that’s not a good fit.”

“We execute well on our business model, but don’t take on stuff that’s not a good fit.”

Regarding acquisitions, Precision has absorbed the business of seven different companies over the last 15 years, mostly smaller shops in Southern California or Arizona and many with a background familiar to VanVoorhis. “Generally, it’s smaller companies,”



Precision Molded Plastics’ adoption of automation enables it to run lights out on some jobs for portions of the production shift.

VanVoorhis says, “where it’s a mom-and-pop proprietorship. They’re at or nearing retirement age, and they just say, ‘We don’t want to go and start molding machines anymore.’”

As it absorbs the tools and orders of those companies, it reaches out to the customers to familiarize Precision with the new client and the new client with Precision.

“Data-driven decision-making is in our DNA. Investing heavily into data mining, we take a holistic, interdisciplinary approach when analyzing a program with a focus on optimizing part design, tooling fabrication, the molding process and overall production. That allows us to excel in what we do and to exceed customer expectations,” Brown says. “Additionally, we believe that being a valuable partner in a supply chain means realizing that manufacturing is not about independent transactions. We look to develop lasting, mutually-beneficial relationships, not just for one big bite of the apple.”

Some of those new, hoping-to-be-long-term relationships were initiated with transfer tooling. VanVoorhis says a baseline level of discontent with current production is requisite to prompt a customer to move its tool, but recent years have added another wrinkle: interest in suppliers closer to home.

“If you talk to a lot of bigger companies, and they have existing relationships, maybe they’re not happy,” VanVoorhis says. “Maybe




It wasn't David VanVoorhis' plan to join and eventually take over the family molding business, but he has led and grown the firm since making that move in 2005.

they have a new project, and they're not super thrilled with their existing supply base. Since COVID, everybody's like, 'Maybe we shouldn't keep all our eggs in the China basket.'" In these cases, not everything might come back stateside but enough jobs do so exposure is limited and there's a mix. At the end of the day, the transferring of most tools can be tracked back to one cause.

"I would say the vast majority of the molds that transfer in here are from molders that aren't supporting their customers properly," VanVoorhis says. "You know the horror stories that you hear about customer service, not returning phone calls, just the basics. There's a quality issue and no one has responded to them in two months."

This is where Precision appreciates the value of its vetting system, which Brown and VanVoorhis admit is thorough to the point of being a pain "because we're trying to gather so much information on the front end," VanVoorhis says. "That information enables us to tailor our approach and to really make robust systems to support them down the road."

During VanVoorhis' tenure at the helm of Precision, the company has enjoyed average annual growth of more than 17%, with 98.6% on-time delivery in 2022 and a total of just 11 customer complaints for that year. Running the company might not have been in his initial plans, but VanVoorhis has definitely settled into the role and the industry.

"A few years ago, I was foot on the gas pedal all the time," VanVoorhis says, "But, because the team is so efficient and the overall operation runs so well, I'm not compelled to say, 'We have to do this,' and 'We have to expand,' and all these other things. We will continue to grow to meet opportunities that make sense for us. We have good, loyal people that work their tails off and do a fantastic job — I would put my people against anybody in the industry." 

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