



TRANSFORMING

the Art of

Mold Making

into **a Science**

Xcentric Mold and Engineering is a provider of custom injection molding, CNC machining, and 3D printing services headquartered in Clinton Township, Michigan with two manufacturing facilities located in the greater Detroit area.

Written by Samita Sarkar

Known for its quick turnaround times, Xcentric was founded by the Weaver brothers, Brendan and Damon. Both working for different Detroit-based molding companies at the time, they decided to take the plunge into entrepreneurship by transforming their craft into science. In 1995, Xcentric was born.

"The story is the American dream. It is about two brothers who found that there wasn't very much differentiation between mold makers back then. Everybody did it the same way—a heavy manual process. They got together and said, 'we're going to transform mold making through technology and we believe that there's a better way,'" recounts Petro Tsarehradsky, Chief Marketing Officer.

Xcentric proudly serves all industries. Tsarehradsky tells us that the leading industries are medical, industrial components, consumer electronics, aerospace, and automotive, but the firm regularly serves over 50 different sectors with its quick-turn custom injection molding and machining services for a wide variety of plastic and metal custom parts. Basically, where there is design complexity and tolerances are critical, Xcentric excels. Its company values are integrity, mutual respect, service honesty, to be a manufacturing partner to its engineering customers, and to conduct all work in-house.

There are many industries that demand Xcentric's standard of repeatable precise manufacturing – for example, in medical where parts need to be both stronger and smaller as equipment standards increase and products become more portable. Ultimately, medical products must meet these high standards.

"At Xcentric design, speed, and quality aren't compromised. That's easily said, but hard to do when an engineer has a very complex part that needs to be created without compromising the design," says Tsarehradsky.

However, in the 90s, the molding process was completely different. The Weaver brothers automated their process and all of the backend operations through proprietary code and technology, using their prior experience and knowledge of the industry to change mold making in a way that nobody else could.

"It's one thing to be a computer science major who understands the mechanics of how to cut a mold, but what they did was add in the proprietary processes, which they understood because they were mold makers themselves," Tsarehradsky explains. Moreover, the duo was careful to employ a sales team with an exceptional understanding of the manufacturing process. In a nutshell, they employed a sales team that was trained in production, serving as more of a technical advisor.

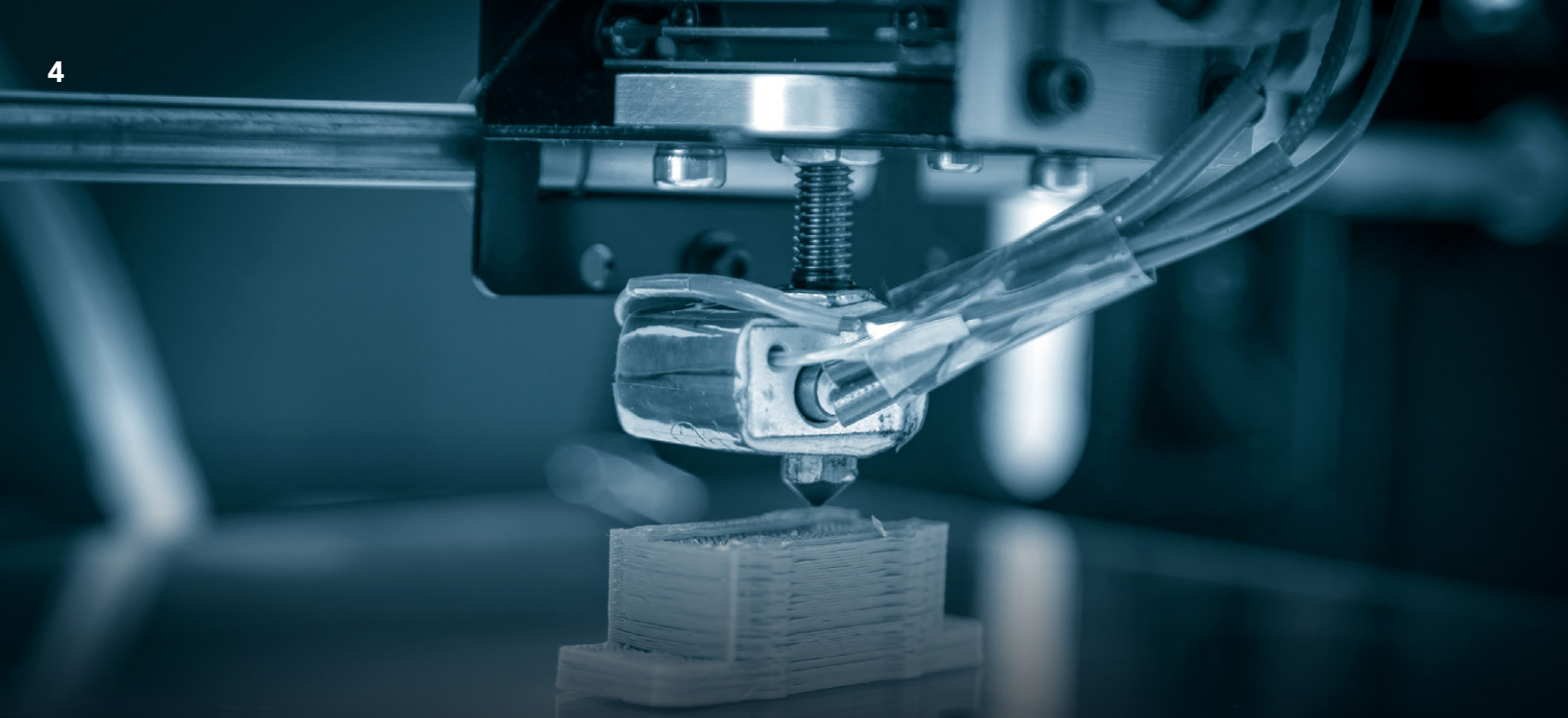
"Where there is design complexity and tolerances are critical, Xcentric excels."

"Every sales person here is technical. Before they talk to any engineer, they must live through being on the production line, on the floor. They understand what it really takes to create a mold and create a part," says Tsarehradsky.

This has proven to be a successful training process, as engineers appreciate the technical knowledge of the sales force; they want to talk to those who know what they're doing—and they can tell when someone doesn't.

In fact, just over 10 years after the manufacturer's founding, during the notorious economic crash of 2008, the manufacturing »





"Xcentric has earned a reputation in the industry as being quick and dependable."

► industry experienced great pressure from overseas firms. But even during this period of economic depression, Xcentric Mold and Engineering continued to perform well. It was one of those telling moments for the Weaver brothers, another sign that they had truly created something special.

Over the years, its fast production techniques and great customer service have made Xcentric a well-known and reputable manufacturer among engineers from all sectors. It even offers its customers a "lifetime mold guarantee," which is essentially a warranty that never expires. No catch, no fine print. "This ties back to why Xcentric was created in the first place. We believe in our ability to create a part to such an extent that if we make the mold—which we do in-house—we will guarantee it for the lifetime of the mold or the project that requires it," says Tsarehradsky.

Xcentric expanded its 3D printing capabilities in fall of 2017, a technology much desired by its customers and engineering base due to increasing pressures on engineers to create a design that both works and meets its time to market. Understanding the form, the fit, and the functionality of the part as early in the design cycle as possible is an effective strategy for engineers who want to get a new product to market, or iterate an existing product successfully in a timely manner.

"Integrating 3D printing as a process early on in the design cycle so an engineer can quickly and cost-effectively understand the full functionality of the product, and use that as a method to accelerate moving that part into production within whatever

process it is—whether injection molding or something else—is a method to accelerate an engineer's path to reaching that time to market with the design they had intended," Tsarehradsky explains.

The manufacturer's 3D printing services include Stereolithography (SLA), Fused Deposition Modeling (FDM), Selective Laser Sintering (SLS), MultiJet Printing (MJP), PolyJet Printing, ColorJet Printing (CJP) and Markforged (MKF).

The mid-sized business continues to invest and innovate with commitment to the American economy. It recently launched a second facility, further enhancing its automated processes bringing a new competitiveness to off shore manufacturing. This will make the business even faster and more productive, as the two facilities are well integrated. Xcentric has earned a reputation in the industry as being quick and dependable, able to produce and deliver complicated part orders in as little as one to 15 days, serving inventors to top tier companies.

When asked why the team decided to open a second facility in relatively close proximity to the original location, Tsarehradsky says, "We are proud of our heritage. This is a company that started in Michigan, and we want companies to consider Xcentric as an off-shoring alternative."

The business' expansion into a second facility came months after Xcentric received an investment from The Riverside Company, a global private equity investment firm focused on high growth businesses in a variety of sectors. As Riverside

strives to make companies bigger and better, this new partnership will help move the innovative mold maker past its next growth curve.

"Founders can take a company to a certain level, but then they want to grow even more. We are proving our ability to scale," Tsarehradsky adds.

There are many qualities that Xcentric seeks out in its employees, including a strong technical background, a sense of urgency, and a pragmatic approach—the ability to understand how to go from design to delivery, transforming a design into something that's manufacturable—qualities that speak to the company's beginnings: "These two brothers rolled up their sleeves and lived through being mold makers, then went on to transform mold making itself at Xcentric," says Tsarehradsky.

Moreover, an ability to communicate clearly with an engineer and have honest discussions around their designs is essential to joining the Xcentric team, where salespeople take on an advisory role with their engineering clientele, discussing how

their design can turn into a reality, without compromising that design itself.

Lastly, Tsarehradsky says it's important to have a pure sense of passion for the love of what manufacturing is all about. "You've got to love it."

"Even during the recent period of economic depression, Xcentric Mold and Engineering continued to perform well."

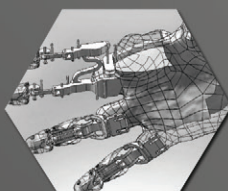
With its new facility, added capabilities, and investment from The Riverside Company, Xcentric is poised for growth in 2018. Its focus as it grows is to provide as much opportunity as possible to its customers to

reach their time to market needs. Xcentric is also continuing to innovate by shortening turnaround times for its CNC machined parts services and introducing two to five day turnaround times in 2018.

"That is what we see as the ultimate opportunity. We want more of the world—more of our customer base and prospect base—to understand what we offer. And in that growth path, we want to ensure that engineers can obtain the parts they originally had in mind – design it as you dream it," Tsarehradsky concludes. ■

Fusion
— Prototype Manufacturing —

THE BEST TECHNOLOGIES



INDUSTRIAL
DESIGN



3D
PRINTING



CASTING



CNC
MACHINING



SHEET
METAL

From receiving your files to shipping your parts, you can rest assured knowing that our team of experts will make your prototyping and production project the best experience you've ever had!

But don't just take our word for it....

TAKE A LOOK



Toll Free (888) 827 5945

www.fusionpm.us

RAPID
PROTOTYPING



24541 Maplehurst Clinton Twp, MI 48036 | **P:** (586) 598-4636 | **F:** (586) 598-5704 | **E:** sales@xcentricmold.com

www.xcentricmold.com

..... **SUPPORTED BY**

FUSION

www.fusionpm.us

