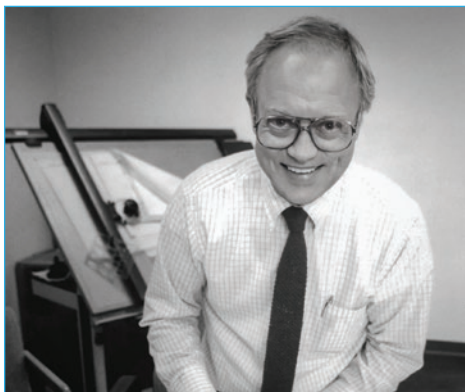




# TRANSFORMING PRODUCTION WITH EROWA AUTOMATION

Industrial Molds is an example of how technology and automation can solve today's manufacturing challenges and create a highly productive workplace where customers are the winners.

Industrial Molds is a division of the Pyramid Molding Group. With headquarters in Rockford, Illinois, they have been at the forefront of automation with an eye on the future. A typical American success story, they had humble beginnings. In 1962, Jack Peterson worked as a toolmaker in Rockford. Possessing an entrepreneurial spirit and a belief in his capabilities, Jack struck out on his own and leased a small space in his father's upholstery shop. With a Bridgeport knee mill and a small Landis surface grinder, he began taking on small mold projects.



*Jack Peterson Circa 1990*

Jack quickly built a reputation for delivering on time, with quality that exceeded customer expectations. As a one-man shop, it meant long hours and often sleepless nights. However, Jack's determination paid off. Customers loved the work, and shortly Jack had more work than he could handle. Jack hired his first employee within a couple of months, and the company began to grow. Over time, Jack leased more and more space in his father's shop. It was not long before the shop ran out of room.

By 1970, Jack moved into a 20,000-square-foot facility in a Rockford industrial park. While this provided room to grow, the demand for work continued to increase. Over the years, Jack added more and more space. He also invested in equipment and technologies that supported production and quality.

As Industrial Molds moved into the next century, Jack stepped down from running the day-to-day operations and passed the mantle on to his son, Tim Peterson. During Tim's time as COO, the company continued to grow, adding more equipment and another building. Tim served as COO until 2020, when he passed the reins of the company over to his son, Andy Peterson. Tim is still active with the company today, serving as the President of Pyramid Molding Group.

Recently, *EDM Today* had the opportunity to visit Industrial Molds and sat down with Tim and Production Manager Kris Grey to discuss their adoption of EROWA automation. Tim explained that this decision had its roots in the mid to late 1990s, when many companies were struggling to compete in an international market. Many of their competitors chose to move mold building and plastic injection molding offshore.

As an American Mold Builders Association (AMBA) member, and through other professional associations, they learned of mixed results and challenges some competitors experienced when offshore work was returned. It was not uncommon for molds to require rework in the USA.



*Three Generations  
From Left: Andy, Tim and Jack Peterson*

Having spent decades building a reputation for high-quality work, Industrial Molds decided to take a different path. They chose to add automation to allow them to do more with less.

At their peak in the late 1990s, Industrial Molds had a workforce of 110 employees. As they invested in automation, they were able to reduce the employee count while significantly increasing production. Automation also allowed them to improve accuracy and consistency, while greatly reducing the chance for human error.

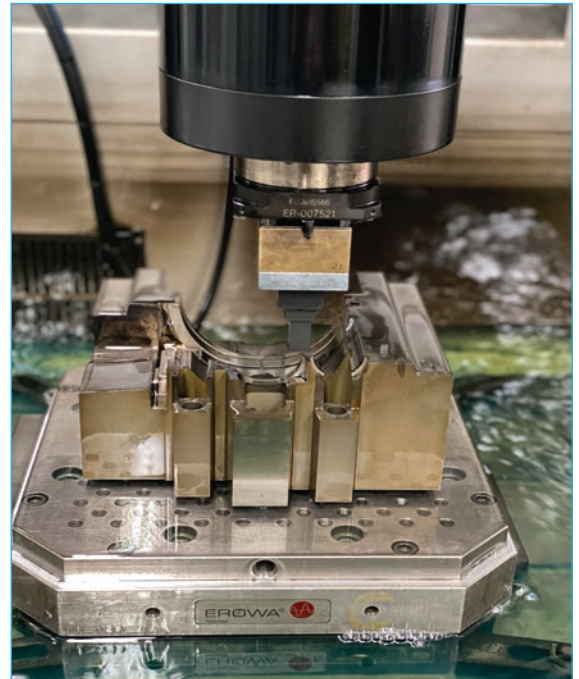
Tim recounted how they got started with automation to solve production problems. By 2005, Industrial Molds was dealing with a production bottleneck in graphite cutting. Their operators were running at full capacity, yet downtime between setups left the machines idle for too long.



*Kris Grey  
Production Manager*

The solution they chose was a stepwise integration of EROWA automation. They started with the use of EROWA pallets in a single graphite-cutting cell. "In using the pallet system, we quickly realized the benefits of automation," shared Kris Grey. The results were immediate: reduced errors, faster throughput, and improved consistency.

Zero-point tooling played a key role in this efficiency. Because the steel is positioned identically every time it is loaded onto any machine, and the pallet's built-in skew allows the machine to automatically find the center point, setups are faster and more precise - eliminating manual alignment and reducing mistakes. Errors that previously occurred were no longer possible.



*EROWA Pallet System*

From there, Industrial Molds expanded into their Sinker EDM department, then milling, and most significantly, into quality via their CMM machines. This evolution led to a full-shop integration with EROWA's Job Management System (JMS 4.0 MoldLine) software. Dan Pilolla, President of EROWA, stated, "Industrial Molds was an early adopter and embraces all four FMC segments: Tooling, Presetting, Robots, and Software. With EROWA's powerful JMS software, all operators work off the same platform, tying production together from start to finish."



*EROWA Robot and Electrode Tool Rack*

The results of the EROWA systems integration were profound. They achieved higher efficiency, better accuracy, and workforce agility. The results were measurable. As Kris Grey explained, "Before automation, we had a team of six operators in our Wire EDM department to run 11 EDM machines. With EROWA, Industrial Molds outputs more production with only two Wire EDM machines and only one operator. In addition, the training time for a new hire is condensed." Kris further explained, "Before EROWA, seven years of experience was required to work in our EDM department. Now we can get a newer operator up and running in about two weeks."

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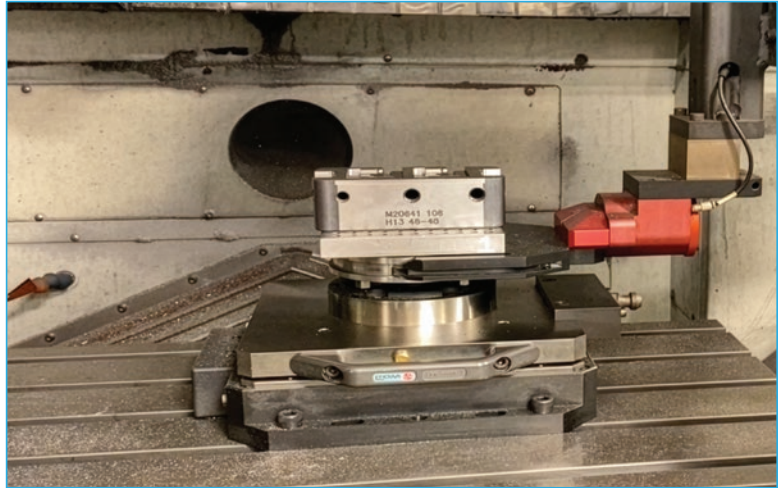
Dan Pilolla added, "With today's labor market, companies need to be as efficient as possible, which means maximizing machine uptime, including lights-out manufacturing."

For *EDM Today*, it is rewarding to see a company succeed at its goal. The primary takeaway from the visit with Tim and Kris is that their goal was met without any sacrifice in quality or levels of precision. It is important to note that, with each automation element added, improvements were made incrementally. In total, they adopted four FMC segments:

- **Tooling** – standardized pallets and holders reduce errors and setup time.
- **Presetting** – offline preparation ensures machines are cutting, not waiting.
- **Robots** – cells now run lights-out, maximizing spindle utilization.
- **Software (JMS)** – scheduling and data management orchestrate the entire shop floor from one platform.

*EDM Today* asked EROWA about their experience working with Industrial Molds on the introduction of automation. Brendan Perry, EROWA Sales Manager, stated, "Industrial's early adoption of our JMS system made them a cutting-edge mold maker in the U.S. market, with software capable of managing an entire shop floor." Dan Pilolla added, "Industrial Molds is among the rare shops to embrace all four FMC segments. While many shops use EROWA products, not all embrace all four FMC pillars."

As Brendan Perry noted, "Many shops, especially job shops, still today do not understand that automation is not exclusively for the realm of production manufacturing." Perry went on to emphasize how Industrial Molds' adoption of all four pillars was so unique, "Where most assume automation isn't possible, Industrial Molds demonstrated that even with unique, day-to-day work, automation can be fully leveraged."



*EROWA Robot Loading Pallet*



*EROWA Loading Station and Sodick Sinker EDM*

*EDM Today* asked Tim Peterson how he viewed the future. He explained that he was generally optimistic. He expects the industry to grow, but the pace of growth will be influenced by the amount of reshoring that takes place. Currently, many companies are reevaluating the true cost of sending work offshore. He further expects that many will find that, when all of the factors involved are considered, there may well be an acceleration in the trend to reshore.

Tim added that regardless of what happens as a result of current global conflict and trade disputes, Industrial Molds will be ready. They

are very proactive in terms of sales and will continue to provide their customers with the highest possible quality, on-time deliveries, and competitive pricing.



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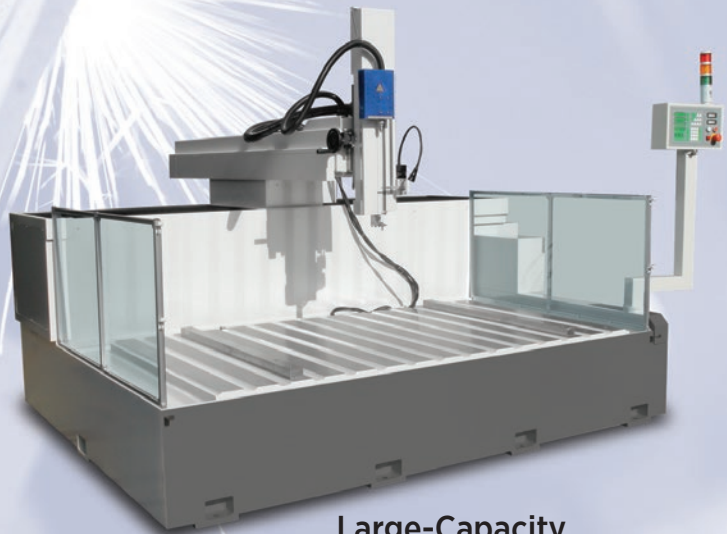
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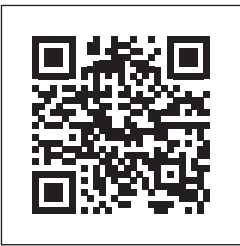


Kris Grey and EDM Team

Kris Grey added that he would like *EDM Today* readers to know that Industrial Molds is very adaptive to the changing needs of their customers. His department stands ready to meet all of their customers' needs.

*EDM Today* would like to thank both Industrial Molds and EROWA for sharing this inspiring story that demonstrates what is possible when a mold maker not only invests in automation, but embraces it across the entire value chain.

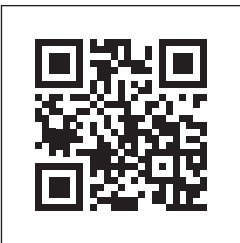
### About Industrial Molds



Industrial Molds, a division of Pyramid Molding Group, specializes in precision injection mold manufacturing, from design and engineering through tooling and advanced machining services. They support OEMs at every stage, whether developing new tools, optimizing designs for manufacturability, or reworking existing molds to extend tool life and improve performance. By combining disciplined project management, advanced technology, and uncompromising quality standards, they build tools that perform consistently and launch faster into production.

<https://industrialmolds.com/>

### About EROWA



EROWA - Your reliable partner for integrated system solutions

For over five decades, EROWA's "Flexible Manufacturing Concept" FMC has had a lasting influence on productivity in eroding and chip-removing metal processing. The flexibility of the systems makes it possible to produce small batches and even individual parts automatically. With modular solutions in the area of workpiece clamping, presetting and measuring as well as automatic loading and process control system, EROWA technology enables you to make sustainable investments in your production facilities. The extremely high level of manufacturing know-how, engineering expertise, and consistent service orientation are the driving forces behind EROWA's mission: to increase productivity and satisfy customers.

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