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Message From The Chair



Division Chair Message – FALL 2025

Wow, it is hard to believe that our first quarter of the 2025 – 2026 Operating Year has come and gone. Yet here we are at the beginning of November and are already zeroing in on the coming Holiday Season.

This first quarter has been extremely busy for me personally, for our division corporately, and for our industry as a whole! And with busy times can come long Chair's Messages - Hold on to your hat - because here we go!

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If you hadn't heard already, a longtime friend of the division and mentor of mine passed away quietly in late July of this year. **Mr. Glenn Beall** was a member of our "Founding Committee" on then, the "Mold Making and Mold Design Division" of the SPE. Glenn's mark on the division and the plastics industry is indelible. Through his career, he touched more than 30,000 plastics professionals by way of seminars, topical conferences, trade articles, and personal interactions

To say that he will be missed is an understatement as he cast a "Long Shadow" in the World of Plastics.

I was fortunate to have been a mentee of Glenn's and that meant that I was invited to his Celebration of Life last month in Chicago. It was a true honor to be included with Glenn's many colleagues and lifelong friends from around the country. There were moments of laughter and of tears as we all celebrated a man who truly lived life well.

For those of you who are still wrestling with the "Value Proposition" of SPE Membership, let me point out a few things learned during Glenn's Celebration:

- There were at least fifty folks that made the trip to Chicago for the celebration of life. These folks are plastics professionals that in one way or another were impacted by Glenn's caring personality and ability to communicate the complexities of Molding and Mold Making in ways that everyone could understand. *You do not get that from Google™ or Lexus-Nexus™ or Yahoo™.*
- There were pieces of memorabilia from Glenn's career that spanned 6 decades. That memorabilia included things like Glenn's iconic "Plastic Slinky" and the first Aunt Jemima Squeeze Bottle. *Both products that Glenn left his fingerprints on.*
- The stories and memories shared at the podium and the emotions that were evident among the attendees showed a camaraderie that was built through a lifetime of Society Interactions. *Personal and Professional Networking, while some say is passé, is alive and well and is an integral part of being a member of the SPE.*

Editor's Commentary

– *Berg's Eye View*



One of our industry's most influential and inspiring trade events wrapped up activities on October 15th in Dusseldorf, Germany. I was fortunate to have the opportunity to work **K2025** as the guest of Dynamic Tool's partner, Plastisud, in their booth in Hall 1 (the mold-making hall). Being surrounded by leading injection mold-related businesses, all touting their technologies and services, makes for an exciting and informative time. In many cases, companies use large global events, like the K-Show, to introduce new products and services.

The scope of the event is most impressive - Messe Dusseldorf houses 18 exhibition halls, adding up to nearly two million square feet of display space. According to stats published after the show, over 175,000 visitors from an estimated 160 countries attended. There were 3, 275 exhibiting companies from 66 countries.

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We are very pleased to present the third installment of **Women Making the Mold**, in this, the 2025 Fall Issue of the MTD Newsletter. One of the prime motives behind this series is to acknowledge and promote the positive industry impact these women have. It is also our hope that these brief Q&A sessions will inspire the next wave of female engineers, designers, programmers, project managers, and shop owners to consider how they can help the plastics industry become more progressive, efficient and effective.

As you read each interview, you'll see the common thread - their journeys are their own and their success has been driven by their initiative and attitude, not by their gender. Another common theme is the importance of guidance and mentorship - reminding each of us that our interactions with our new-to-the-industry colleagues can be very influential and even impacting. Never forget to pay forward the value of tribal knowledge and learned perspectives and insights taught to you early in your career development.

If you work with an outstanding woman making / designing the mold, running the mold, or running the shop, please consider submitting her name for our series.

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Coming up fast is **MD&M West**, in Anaheim, California, February 3-5 - very likely one of North America's most well-attended manufacturing expos devoted to the medical device industry. MD&M West is somewhat unique with the expo hall housing the usual list of exhibitors - contract manufacturers, custom molders, tool shops, processing and automation equipment OEMs - you will also find significant displays by many of the healthcare industry's prominent brand names. They are there to promote their new technologies to the industry, the media, and hospital . clinician buying groups.

And then, before you know it... **PTXPO 2026** in Rosemont, Illinois, March 17-19. There'll be a bit more on that in this issue right here.

John Berg - [Dynamic Tool Corporation](https://www.dynamic-tool.com) - MTD Newsletter Editor - john.berg@dyntool.com



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Message From The Education Chair



Division Education Chair Message – FALL 2025

Yes, the leaves are officially changing in many areas, and we reflect on what to expect from Mother Nature from previous years and we probably have the same reflection about the manufacturing Industry.

It would be remiss to not mention words like; tariffs, global trades, industry 4.0, cyber security, and workforce development to name a few. Each one could be discussed in multiple environments and if you think you can ignore them as an individual and/or organization, please allow me to point out the obvious. Our industry will evolve with our participation or without our participation.

The key is not to believe you, or your organization needs to be the resident expert. However, it is important to embrace the evolution. That can come from many forms of understanding because each scenario varies for all of us. All the communication we observe in the industry with the assistance of social media and the multiple trade resources keeps these items in view.

From an educational chair perspective, the manufacturing industry has been one of the forerunners when it comes to advanced technologies. There are extensive resources that can be researched to highlight that vary perspective. AI (artificial intelligence) & ML (machine learning) will have an impact on our industry in one capacity or another. It is how we or our organizations decide to utilize that technology to create that one thing all of us are looking for in a career. What is that may you ask? Longevity comes to mind. That word could be interchanged with many others, but for this conversation we will go with longevity.

Examples of longevity by using AI or ML; “predictive maintenance to prevent equipment failure, quality control using machine vision to detect defects, supply chain optimization through demand forecasting and inventory management, and generative design to accelerate product development. AI also automates tasks with robots, improves energy efficiency, and creates "digital twins" for virtual modeling.” This is one example of the power of technology and being in an industry where technology is a foundational piece of the puzzle.

When you are researching these advanced technologies remember to validate the resources, research how it affects other industries, talk to others that are engaged in the technology, and have conversations within your organization. I know I am preaching to the choir for many in the manufacturing industry, but What is Next? The goal is to have an answer.

Respectfully,

Joe Karpinski – SPE Mold Technology Division Education Chair



So, for me, at least, the intrinsic value of being a member of the Mold Technologies Division of the SPE is born out in the 3-Point Proposition of:

- **Information and Application** through direct contact with industry experts.
- **Historical and Current Product Review** through peer-to-peer interactions.
- Deep and abiding **Lifelong Friendships** built through personal and professional networks.

So, what else is going on in our group you might ask...

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A member of our board, Mr. Darryl Gratrix – Inter-Society Liaison Committee/International Committee, started out in a new career direction as an **Industry Training Advocate for the Skilled Trades** (that means us as Mold Makers, Mold Designers and Precision Machinists in case you are wondering). Darryll took his new show on the road to Hannover, Germany, for the **EMO Show**. What a wonderful place to showcase his new company and the SPE Mold Technologies Division.

The EMO Show is the “Global Event for Machine Tools, Metalworking, and Manufacturing” showing the latest in development of new technologies for the Metalworking Trades. One thing that Darryl has been working on with the Canadian Association of Mold Makers (CAMM for short) and the Ontario Labor Ministry is a new “Virtual Training System” that employs V/R Headsets and allows the trainee (or trainer) to assemble molds, hang them in presses and get “Hands On” V/R Training on the manufacturing industry. This is “Way Cool” from my perspective and will hopefully engage the next generation in ways that will draw them into manufacturing as a career choice!

Darryl will be speaking at the **Top Shops Conference** next month in Charlotte, NC. Why not look him up on November 11 or 12 and see what he is up to!

We wish Darryl every continued success in his pursuit of Next Generation Skilled Trades Training and his advocacy of our industry! You can reach him at Darryl@NextGenSkilledTrades.com.

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Unfortunately, due to personal time conflicts, the MTD did lose four board members. We wish them all the best in their career and family lives and hope that at some point in the not-too-distant future, their life balance will afford them the opportunity to rejoin the leadership of the division.

With that said, we bid a temporary farewell to:

- Mrs. Susan Huang – Track the Apprentice Chair
- Mr. Kerry Kanabara – Social / Golf Chair
- Mr. Craig Crossley – Inter-Society Liaison Chair
- Mr. Stephen Hansen – Associate Newsletter Sponsorship Chair

As a board, we wish them all the best and thank them for their service and support of the Mold Technologies Division. They all leave “Big Shoes” to fill! Now is a wonderful time to consider how you might add to the leadership of the division and our industry on a global scale!

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We held back on publishing this edition so that John (Newsletter Editor in Chief) and I could attend the **K-2025** in Dusseldorf and bring back new insights and product information.

This was the first time that I attended the K-Show and let me tell you, the juice is worth the squeeze. Spanning 18 Halls and 8 Days, this show puts a new meaning to the description “#1 Plastics and Rubber Event in the World.”

First travel insights –

Staying in Dusseldorf can be quite expensive, especially if you don't book early (more than a year early!) – Staying in Wuppertal, I learned valuable commuting lessons. Renting a flat near the Schwebebahn is a cost-effective choice.

- UBER, while very personal, is extremely expensive (upward of €180 round trip to Wuppertal)
- The Rail System in the region is very convenient. Taking the S-Bahn #8 Line to and from Wuppertal Hbf / Dusseldorf Hbf and then transferring to the U-75 Line in Dusseldorf puts you out right at the North Gate of the Messe Dusseldorf Complex (all for a meager sum of €7.40 each way). And an average travel time of 45 minutes puts it right in line with a private car...

On to the show...

The time spent combing the halls and interacting with colleagues from across the industry and around the world is an excellent investment in both information gathering and network building. I spent time with old friends chatting about the changes in our industry and making new friends, learning about their career paths and how small our world really is.

Additive Manufacturing was everywhere. From Mold Makers, Component Suppliers to Hot Runner Manufacturers, the technology is gaining widespread acceptance in the our Industry. We should be seeing “White Papers” and potential ANTEC Speakers in coming editions of the newsletter. These will include Hot Runner Manufacturing, which allows the closest pitch I have ever seen in a full-manifold and still highly controlled temperature profiles.

Our friends at **HASCO** rolled out a new 2-Material Manifold that can produce 2-color parts on a single face tool – look for that in a coming edition. I am sure our colleague Brenda Clark is already at work on the copy!

Progressive Components had a multitude of Alignment Components, Side Actions and other highly engineered products on display during the show.

I spent time in the **Education Hall** with students and professors from three German universities that specialize in Plastics and Plastic Processing. Those were –

IKV – Achen (Achen, Germany). In past years the students from Achen have provided research papers for the ANTEC (SPE Annual Technical Conference) and have been active within the SPE.

IKV – Stuttgart (Stuttgart, Germany). The students and professors are heavily involved in the “Circularity of Plastics Economy” and finding new and exciting ways to recycle materials or break them down into non-offensive compounds in the environment.

Technische Universität Dresden (Dresden, Germany). The team at this university had an exhibit called “Molding on the Fly” that consisted of two travelling injection machines that followed an electric cord allowing for continuous encapsulation molding of the cord while maintaining a uniform feed rate – this was quite interesting to me and something that would be very useful in “Bead Chain Molding” among others.

One thing was certain, the Students, Professors and Professional Attendees all saw the need for personal networking in building their career paths forward.

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Of course, the BIG NEWS of this publication is the merger between **SPE and Plastics Industry Association**. And, if you are like me, there are many questions swirling about in your head.

While in Dusseldorf, I had a chance to chat with **Lynzie Nebel (President Elect of the SPE)** and to gain firsthand answers to some of those questions. Here is a short snippet of the discussion for your review:

Lynzie Nebel – "The future of SPE is bright. This merger gives us a new platform and deeper reach into the corporate halls of the plastics industry – It is good for us and good for the PIA (Plastics Industry Association)."

Question: How could this merger happen without the involvement of the primary stakeholders, the members?"

Lynzie's response: "The oversight of this merger was managed by the SPE Executive Board and a Cross Functional Team of Members that reviewed all concerns and voted to move forward. This was a long process requiring a great deal of discussion and deliberation. Not all the team came into the discussions ready to make the merger a reality. However, in the end, the team did see the merger as the best way forward for the SPE and PIA combined."

The following are some of the other questions that I posed during our chat:

1. How will merging with the Plastics Industry Association affect our status as a 501-C3 versus the PIA 501-C6, will there be a change in the tax-deductible contribution status for our sponsor companies and members?
2. The PIA is the largest "Lobbying" organization within our industry and seems at odds with our education ONLY charters and bylaws.
3. What, if any, reorganization will be required of the Divisions, and potentially Sections, because of the change to a Sub-Sub Section of the PIA and a Political Action Committee?
4. What, if any, changes will be required in our Financial Record Keeping and reporting to PIA?
5. How will our Endowments and Investments be treated as Sub-Sub Sections of the PIA?
6. How will the Mold Technologies Division be affected in terms of managing our membership and our technological focus?
7. For the last 6 years we as a division have been working on Inter-Society Relationships. We have been able to achieve some success in these endeavors because of "Non-Political" positions on trade lobbying. What will change in those relationships?
8. We as a division have board members in the International Community, from Canada, to India, to Australia, to Mexico and now interest from China, Taiwan, and Korea. Being aligned with the PIA as a "Division" will in our opinion adversely affect those relationships and hinder the attraction of potential new members. Is the SPE becoming a "US Only" organization through this merger?
9. While the US has historically been a country of Innovators in the Mold Making and Design Industry, we have seen fewer published research papers within the community. We see a higher number of presentations at ANTEC and other events from the International Community. Last ANTEC, we had papers from

IKV-Aachen and IKV-Stuttgart as well as universities in Taiwan, China, and Korea – with PIA lobbying for US Trade, should we fear losing those presenters and thus the ability to freely exchange information across the globe?

Lynzie's short answer: "There will be no changes to the reporting or financial management of the divisions or SPE in general. We will remain a Not for Profit Organization and will still allow members and sponsors tax deductible contribution status. All relationships should be intact and should not be hampered by our merging with the PIA. In fact, the PIA sees the merger as a good fit toward their current global growth focus as the premier Plastics Industry Association."

Well, as they say, the proof is in the pudding, and we now move forward with a new sense of SPE and the future of our organization. As a board, we are united towards the future success of the division and the SPE as a whole – and we hope that you are as well!

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What's coming down the pike at this point:

1. Our Division is working with the Cleveland and Akron Sections as well as the Injection Molding Division as co-exhibitors at the **AMI Plastics World Expo**, November 12 – 13, 2025. The show will be held in Cleveland, Ohio, at the Huntington Convention Center near the lake front and will host over 300 exhibitors. It is a fantastic opportunity to meet suppliers and colleagues and to forge new relationships in the industry.
2. The call went out for nominations for the **Mold Designer, Mold Maker, Mold Repair Technician and Apprentice of the Year Awards**. Nominations close on January 31, 2026, for this year's class. Presentations are slated for March 18, 2026, at 2:00 PM Standard Time in Chicago, IL. These presentations will be in the SPE Mold Technologies/Chicago Section Booth at PT-XPO 2026. We hope that you will visit us at Booth 1321 during the show!
3. **ANTEC 2026** is shaping up to be another fantastic event for the Division and SPE. Our division will host a half-day session of technical presentations and co-host a second half-day with our colleagues from the Injection Molding Division. Look for more information from Professor Peng Gao in this newsletter. ANTEC 2026 will be in Pittsburgh, PA March 9 – 12, 2026.
4. The **Mold Technologies Division** along with the **Chicago Section and Plasti-Van** will be exhibiting at **PT-XPO 2026**. The exhibition takes place at the Stephenson Center in Rosemont (Chicago) IL March 17 – 19 2026. We hope that you will visit us at Booth 1321 during the show!
5. It is time again to solicit **nominations for members of the board of directors** for the division. Every year we hold elections and with the four resignations this year, we are eager to gain new members on the leadership team. Why not submit your name as a candidate to serve in leading the division for the years to come? It is a great opportunity meet some fantastic people, build lifelong friendships, and help to guide the Mold Technologies Division into the future... Nominations close April 30th and elections will be in May 2026 for the coming 3-year terms.

Well, there you have it, another busy quarter and what appears to be a busy year for the division. As always, I am open to comments, questions, and suggestions at any time as I serve at your behest.

Have a great rest of the Fall and see you in the Winter Edition!

Scott L. Peters
Division Chair 2022 – 2026
Honored Service Member - Mold Technologies Division, the Society of Plastics Engineers, Inc.

Women Making the Mold

Meet Nicole Vlanich, Executive Director at Canadian Association of Moldmakers (CAMM)

What drew you to mold making as a Career Choice – how did you get to where you are?

When I first joined the Canadian Association of Moldmakers (CAMM), I didn't come from a manufacturing background. My education is in the social sciences - I hold a Bachelor's degree in Developmental Psychology and another in Family and Social Relations. What I quickly discovered, however, is that the mold making industry is driven by an extraordinary sense of passion, dedication, and pride. That energy has inspired me from day one and continues to guide my work today.

CAMM represents Canada's mold-making sector - a vital part of the economy that contributes significantly to our GDP and supports industries ranging from automotive to medical technology. Our members design and build the molds that form the backbone of countless products used across the globe. Their innovation and expertise are world class, and I am proud to help tell their story.

How has your career choice been rewarding to you? What do you see as a "High Point" in your career?

Over the past several years, I have worked to strengthen CAMM's position and expand its reach. Through focused efforts, we have increased sponsorships, secured government funding, and launched marketing campaigns that have grown our social media presence and profile. Perhaps most importantly, I have built meaningful partnerships with secondary schools, post-secondary institutions, government agencies, and industry organizations. These collaborations open doors for our members while helping to build the workforce pipeline we need for the future.

What do you see as the biggest challenge in your career?

The industry has faced real challenges - the ongoing transition to electric vehicles, a skilled labour shortage, and most recently, the impact of tariffs. CAMM has been at the table throughout, ensuring that the voice of Canadian mold makers is heard. I have participated in numerous roundtables with government leaders and decision-makers, sharing the concerns and strengths of our sector. Advocacy is at the heart of what we do, because our industry is not only strong and resilient, but essential to Canada's economic success.

We have also focused on showcasing member capabilities through events, trade shows, and new platforms. One exciting development is our new website, which will feature a comprehensive capabilities map, job postings, and resources designed to connect members with opportunities.

How are you working to promote careers in manufacturing?

Looking to the future, our TechBridge initiative is a project I am especially proud of. TechBridge is designed to bring mold making and manufacturing training into the future through innovative tools and supports. Highlights include:

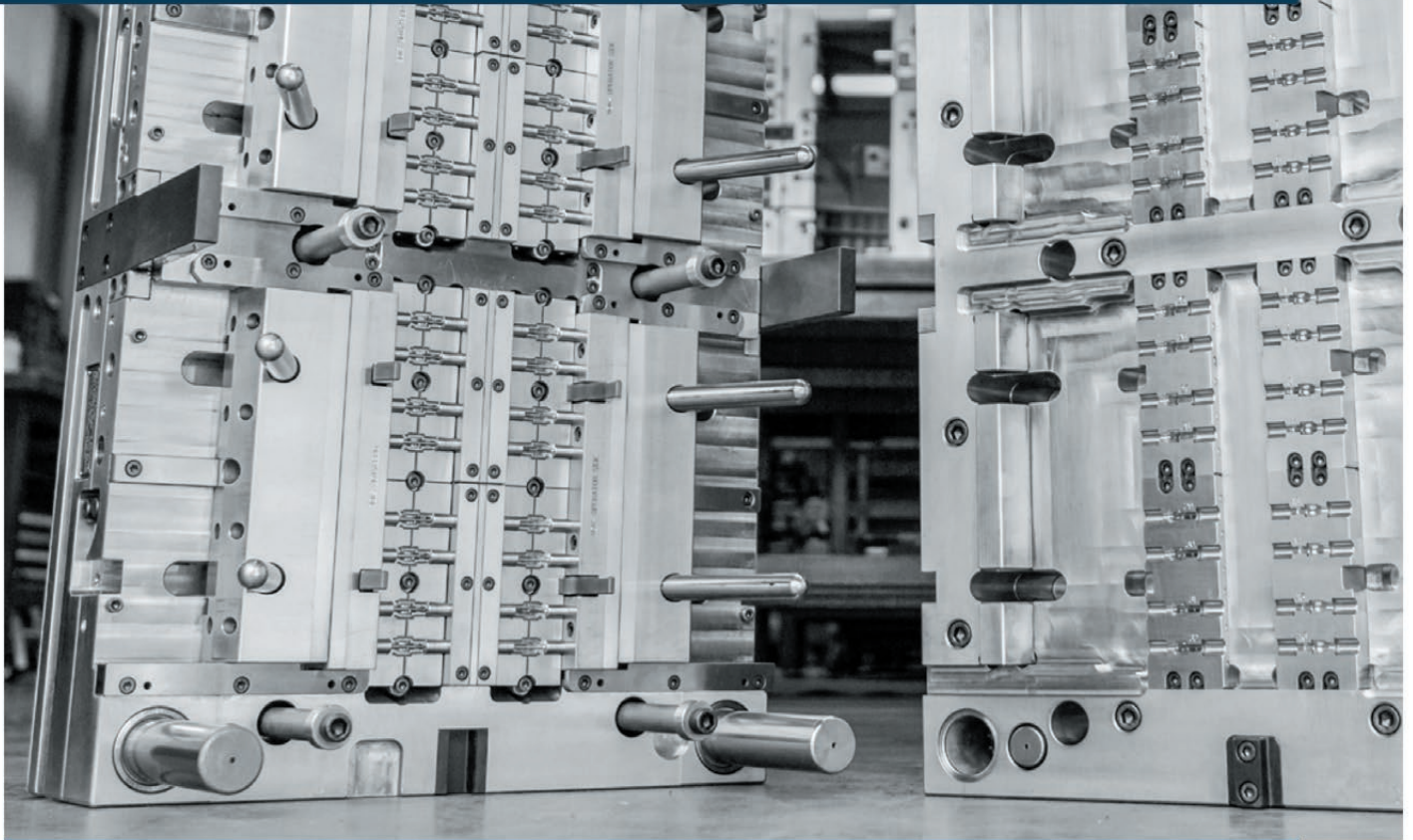
- Mythbusters Campaign - addressing misconceptions about careers in the skilled trades
- Information Hub & Resource Center - for industry, youth, parents, and educators



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PROGRESSIVE C O M P O N E N T S

Progressive Releases ProFile® v5 - Advanced Asset Monitoring Platform

Progressive Components (Wauconda, IL) announces the release of ProFile v5, the latest evolution in cloud-based asset tracking and management software for the production tooling industry.

ProFile v5 integrates asset management, real-time data analytics, and comprehensive key performance indicator (KPI) reporting from Progressive's suite of monitoring products. It can be used as a basic tracking system to organize and locate tools and equipment globally, or as a robust solution paired with Progressive's Cve Monitor RT and ProFile v5 for complete real-time monitoring.

Key advancements include:

Enhanced API Connectivity: ProFile v5 allows seamless data sharing between mold management systems and manufacturing infrastructures such as manufacturing execution systems (MES) and enterprise resource planning (ERP) platforms, facilitating real-time data synchronization. This integration removes the need for repetitive data entry and ensures real-time synchronization across all connected systems. Production managers can easily access mold utilization data directly from their ERP dashboards, streamlining the decision-making process.

Intelligent Mold Health Monitoring: This feature compares current mold life against projected performance, providing health status indicators that help manufacturers schedule maintenance proactively and prepare replacement tooling.

Enhanced Mobile App Functionality: The upgraded mobile app provides access to KPI data and mold performance metrics. Designed for integration with Progressive's new Cve Access Monitor (Cve AC), the app connects via Bluetooth pairing with smartphones, eliminating the need for wires or additional hardware. The Cve AC efficiently tracks historical cycle counts and time data, generates comprehensive reports for detailed analysis of performance metrics, preventive maintenance tracking, and efficiency data, which can be accessed through the app when needed. The mobile interface retains the user-friendly design of the primary platform while optimizing the experience for smaller screens and touch interaction, making it ideal for field engineers, remote managers, and multisite operations.



For more information on ProFile v5, the Cve AC, or any of Pro's mold monitoring and software solutions, visit www.ProFile-System.com or contact us at SystemMonitoring@procomps.com.

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These initiatives show students and career seekers the exciting, high-tech reality of modern mold making, while helping our industry attract and train the next generation of skilled workers.

I am deeply passionate about CAMM and the opportunities ahead. Over the next five years, I envision continued growth - raising our profile with all levels of government, engaging youth, strengthening our partnerships, and representing Canadian mold makers nationally, locally, and internationally.

None of this would be possible without the support I've received from our members, Board of Directors, and partners. Their guidance and encouragement have given me the knowledge and confidence to lead CAMM forward. Together, we are not only supporting today's industry - we are shaping the future of Canadian manufacturing.

Meet Natalia Stephens, Founder at Compound Metal Coatings

What drew you to the plastics industry as a Career Choice?

As the founder of Compound Metal Coatings, I have dedicated my career to metal finishing, metallurgy, and material science. Our company's mission is encapsulated in our iconic slogan: "We don't make molds; we make molds better."

Compound Metal Coatings was established on September 1, 2001, during a challenging time when the world witnessed the tragic events of 9/11.

Initially, our focus was on coating molds and dies, primarily in blown film technology. However, a pivotal moment occurred in June 2003 when I attended my first NPE in Chicago. The experience of witnessing the intricate machinery and the captivating processes of plastic product creation left an indelible impression on me, igniting my passion for the plastics industry.



Since then, we have diligently developed a range of products and coatings tailored to the specific needs of the plastic tooling industry. Today, approximately 60% of our work involves coating molds, tools, dies, and hot runners, for closure molds, thin-wall containers, and lids molds just to name a few. Our coatings consistently enhance the performance of these components, providing improved corrosion protection, reducing cycle times, and enhancing wear resistance.

The plastic tooling industry holds a special place in my heart, and I am deeply committed to its continued growth and success.

How was it entering a traditionally “Male Dominated” industry in a technical role?

I have been always working in a male dominated industry. In South Africa, I had a few colleagues that were technical women, so it was not as evident as when I moved to North America.

Here, I have noticed that there were far less women in the technical roles, at least it was so 30 years ago. But that is changing. Growing up in Romania, which was communist at the time, we did not have the boy-or-girl “set” professions. If a girl was good at science and math, she will go for a technical university; it was as simple as that. In same ways, that helped me later when I entered the male dominated industry here, as I did not think anything of it, it did not scare me, and I did not think that I cannot do it. There were times, at the beginning, when I noticed that the guys would ask me question - when they already knew the answer - just to test me, but it did not bother me.

How has your career choice been rewarding to you? What do you see as a “High Point” in your career?

Having my company was, and still is, very hard work, but it is very rewarding as well. Being asked to sit in meetings with my customers and advise them on technical issues and solving problems for them, that is the most rewarding part of my job.

The other part is creating a great team, and a good working environment for my people.

What do you see as the biggest challenge in your career?

Going through ups and downs in the economy is worrisome every time. As a business owner, one never gets used to it. Finding skilled people to work with is a big challenge as well.

Balancing work and personal life have been difficult for me. I probably sacrifice my relationships for my career. Looking back, I do not think I would change it though. If I must choose, I will choose my career any time.

How has the industry changed during your career?

The industry has changed a lot in 30 years since I started!

Initially, globalization posed significant challenges for the industry as businesses relocated to China, India, Mexico, and more recently, Indonesia. In the plastic industry, these challenges were effectively addressed by most international companies through increased innovation, which helped them maintain their competitive edge in the field of their expertise.

We are seeing more competition, both domestic and international, leading to change in a firms’ behaviour. The purchasing is driven more by price and less by loyalty.

What do you see as opportunities for other women making the mold?

There are lots of opportunities for technical women in the plastic tooling industry. Careers in design, management, ownership, but also in CNC programming and machining. Tool and die making requires attention to detail, at which women exceed. Organizations like Women Breaking the Mold offer inspiration for other ladies to pursue careers in mold making.

What is your advice to any young person considering a career in plastics?

What I would say to young women is this: Do what you love and stop thinking gender.

Gender, in 2025, should not even be part of conversation.

If you love science, go for a technical job, the experience is very rewarding!

Meet DeAnn Springer, Director of Product Management at Progressive Components

What drew you to Mold Making and manufacturing as a Career Choice?

It wasn't a choice that I made, really...it was a paycheck I needed at that time! Let me explain: I was in college studying to be an architect, taking all the first-year core requirements plus several math and statistics classes while my internship at a construction company was ending. I could draw on the board—yes, before CAD!—and understood technical details beyond building and construction. I loved to tinker with products and was one of those kids who took things apart to put them back together—and most of the time they still worked! So, when my uncle, who was a veteran mold maker in the Chicago area, mentioned he wanted to bring mold design in-house due to his growing workload, we talked, and he thought I could help his company and encouraged me to give it a try. I started working for him not knowing what an injection mold was, but he taught me design, programming, and how to run the CNC machines in his shop. The mold makers at his company were very patient with my many questions as well, and, after visiting his customers and watching the molds actually run, I was hooked—and did everything I could to keep learning about the artistry and the technical details of this industry. So, what started as a job to just get that paycheck turned into a career that I am very grateful for!

How was it entering a traditionally “Male Dominated” industry in a technical role?

At first, I was considered the “second girl in the office” but the guys in the shop quickly learned that I was more than that. I wanted to learn, and I was very lucky that these guys wanted to teach. I left architectural studies and went to the local college to learn machining and CAD, and the more I brought back to the shop, the more I became a reliable resource for them. Don't get me wrong, it was still 1980s mold making in a very intimidating Chicago environment, and you had no choice but to be confident and have a strong work ethic. Male or female, you were held to very high standards and had to do everything correctly. You had to be accountable and learn from your mistakes because you could not hide from them in a small shop! Everyone in the shop knew if something didn't go well, and, as a female, you worked harder to not let that mistake happen again for many reasons--but mainly because you wanted to remain that solid resource for everyone in the shop.



How has your career choice been rewarding to you? What do you see as a “High Point” in your career?

After I left my uncle's shop, I went to a full-time mold design firm. From there, I was very fortunate to meet Glenn Starkey who was starting Progressive Components after his father, Don Starkey, Sr., was shifting gears from D&L Incorporated to take on another venture. The shop and the design firm gave me a great foundation of industry knowledge, but working with Glenn and Don Starkey, as their first employee, really gave me a perspective that I hadn't experienced before. I was able to talk to mold makers daily as they placed orders for components and I was able to listen to Glenn on the phone during sales calls to explain how our unique new products worked. I was able to visit mold makers and molders and go to trade shows to truly understand the systems and technology and what

pains were experienced in their shops so that we could come up with different component solutions for them. Over the months and years that followed, we started hiring and created new departments, but we always had the same core values with the most important aspect being to respect our industry and to help it grow. I am grateful to be part of Progressive Components' story for 35 years (and counting!) and everything I have learned and experienced has been so very rewarding to me. I am still excited to go to the office every day to work with my very strong Product Management team to design and develop new products for our customers. So, right now, I feel I'm at the high point of my career because I've hired and developed this team, created processes and systems to do our jobs efficiently but with proper validations of design and functionality along the way. And, we are able to see the results in the ads and catalogs that Progressive creates to promote all those new products. Nothing beats hearing a positive comment from a customer about a new product during a sales call or at a trade show!

What do you see as the biggest challenge in your career?

The challenge is finding the time to improve those systems and processes. We hire great people to lead projects, but sometimes managers still have to be involved in the day-to-day, which doesn't allow much time to make the day-to-day tasks easier or more efficient. We have to choose to spend that time to improve how our teams do their jobs, or we will become inefficient or complacent long-term.

How has the industry changed during your career?

The technology has impacted this and so many other industries in the past few decades. I mentioned I designed molds on the board and many designers today have never even seen an electric eraser. CAD has really changed how we design, well, everything, and it has evolved to be so easy to go from a single idea to a physical part you can hold in your hands. It's exciting--and also scary--but the industry has embraced that, and all of the other technological improvements, over the years. As a very specific example, the introduction of 3D printing has truly been a remarkable change to our industry.

What do you see as opportunities for other women making the mold?

Find your passion and go for it. Doesn't matter what the job is or if it's "traditionally" for men. That isn't even part of the conversation anymore, which is great! If you're in this industry already, the opportunities are there—just seek out resources and talk to people and find what makes you happy. And if, over time, you aren't happy with your choice, don't be afraid to make a change. Even within the same company you may find roles that are more suited for your skillset—even if you haven't considered them in the past.

What is your advice to any young person considering a career in Mold Making, Mold Design and Mold Repair?

Just learn and absorb everything that you can from every resource you can find. Go to trade shows, go to events, visit local associations, and take classes or attend webinars. Find out why other individuals got into this industry, even if it wasn't what they thought they'd be doing for their careers. Different perspectives can lead you down different paths as there are so many options...and that is what makes this industry so great.



Meet Dana Harris, Manager of Program Management at Atalys

What drew you to the plastics industry as a Career Choice – how did you get to where you are?

I landed in plastics by pure accident. Growing up I was good at math and obsessed with Legos. I went into Mechanical Engineering thinking I wanted to design Corvettes, but learned during my first co-op that design was NOT for me. I made a slight transition into Industrial & Systems Engineering, and after graduation the goal was to find a job so I could begin paying off student loans. I was fortunate to join a company that not only molded parts, but performed mold design and build as well. I progressed through different aspects of the business, actually departed injection molding to explore other manufacturing operations for almost a decade, but fate eventually returned me to plastics.

How was it entering a traditionally “Male Dominated” industry in a technical role?

It's been an adventure. I've certainly experienced doubters and annoying attitudes along the way, but you learn how to manage those encounters and move through. For the most part, if you work hard and provide value, respect follows. At times it's been lonely, but it is incredibly exciting to see more and more females joining the industry. I'm proud that my current organization includes women in all roles, from our tool shop to our executives. I have also been fortunate to work with some excellent allies and mentors throughout my career, who were a great support along the way.

How has your career choice been rewarding to you? What do you see as a “High Point” in your career?

It took many jobs for me to realize that I really enjoy seeing things “get made.” I'm still pretty fascinated by seeing a hunk of metal get sculpted into something that you can push tiny pellets through and pop out a life-improving part. My current employer molds components for minimally invasive surgical devices. It is very satisfying to know that our team has a hand in affording millions of patients a recovery time of days vs. weeks.

What do you see as the biggest challenge in your career?

It can be tough to know when to stick it out, or move on from a role you're not loving. Similarly, it's difficult to decide when to enjoy the status quo, or push for growth or jump to a whole new opportunity. I do feel pressure to continue advancing my career, while also ensuring that life outside of work does not get compromised.

How has the industry changed during your career?

Ever-evolving technology. There are so many more options for resins and coatings. Process monitoring capabilities have become more sophisticated. Inspection methods have evolved from hand tools to automated CMM and Smart Scope programs, and now to CT scanning. Data collection and analysis can be performed in a snap. Parts and their features continue to get smaller, with tolerances tighter. The ability to collaborate with team members, vendors, and customers has never been easier. Unplugging has never been more difficult.

What do you see as opportunities for other women making the mold?

The plastics industry truly touches a plethora of career paths. The possibilities are endless! Especially in the trades, the industry needs skilled machinists, mold makers, and inspection technicians.

What is your advice to any young person considering a career in the plastics industry?

Do it. Plastic is everywhere, and it's not going away anytime soon. There are so many different avenues related to the industry to explore. Stay curious, ask questions, don't fear being told “no.”



Meet Cynthia Petrucci Kustush, Technical Writer and Marketing Communications Specialist

What drew you to Mold Making and manufacturing as a Career Choice?

I entered this industry professionally in a roundabout way. I was raised in the mold making industry because my father, Alan Petrucci, is a mold maker and founder/owner of B A Die Mold, Inc. in Aurora, IL. While I was always fascinated with his shop and all the machinery they used in earlier years, my talents were stronger in writing and spelling and associated skills. I liked mathematics, don't get me wrong, but the written word seemed a better fit, so after I graduated from Indiana University with my degrees in Journalism and English, I honed my skills as a news reporter, a PR specialist, marketing specialist, etc. It was my talent for capturing stories and understanding technical aspects from those in the industry that drew me into becoming a technical writer for mold manufacturers and suppliers.

Besides helping in the office at my dad's shop during summer breaks, my first professional stint was working with the late Steve Bales, president and cofounder of Bales Mold Service. Steve was a wonderful man and a real pioneer in the art of developing and applying coatings and finishes to injection molds to improve plastic part production. I was enthralled. I worked with him and his then sales representative Harry Raimondi, a former mold maker, for more than a decade, and from there, the stage was set for my journey into the world of mold making, metalworking in general, and all that goes into this remarkable industry. I dedicated my talents and career wholeheartedly.

How was it entering a traditionally “Male Dominated” industry in a technical role?

It was not a problem. But this isn't much of an issue when you're a technical writer and promoter with a desire to help give exposure to these incredibly talented craftsmen. For more than 25 years I have watched as more and more women joined the industry, whether in support roles (sales, management, and so on) or as actual mold designers and mold manufacturers. It's been challenging for them, I know. My own sister, Francine Petrucci, was the only female student in most of her manufacturing engineering classes at Northern



Illinois University back in the 90's, but she excelled and is now president and part owner of B A Die Mold. I'm so proud of her. I have established solid friendships with other women who are blazing trails for still more talented women to join the mold manufacturing arena. They are incredible mentors and role models. More power to them!

How has your career choice been rewarding to you? What do you see as a “High Point” in your career?

I have had the most fun in my career while working in the manufacturing industry! I love the people and I am intrigued by the technologies they use. I appreciate the personalities and the craziness and creativity they demonstrate both on the shop floor and while socializing with colleagues at trade shows and conferences. These are passionate people. These are some of the smartest people I have ever met.

As for a particular high point, I have more than one. First it was the opportunity to help found the Save American Manufacturing (SAM USA) grassroots movement in 2004. As an employee of a supplier company member of the American Mold Builders Association Chicago Chapter, I worked with several AMBA member companies to

launch this country-wide initiative to unite mold manufacturers to educate state and federal legislators about the destructive nature of trade agreements made with China and with NAFTA countries. I had the privilege to make multiple trips to Washington DC to meet with legislators and (hopefully) persuade them to understand that “free trade” was not fair trade for U.S. companies and workers. We held a conference that featured several speakers including the undersecretary of trade under President George W. Bush. The president considered attending as well – secret service personnel were there inspecting our location!

Another high point was joining the editorial staff at MoldMaking Technology Magazine as Senior Editor. I was a frequent contributor to the magazine, doing PR and ghost-writing technical articles, and over the years developed a close relationship with Editorial Director Christina Fuges. When she asked me if I would like to work with her, I jumped! What a rewarding four-plus years I spent, attending every relevant trade event in the U.S. and Canada, touring mold manufacturing companies and supplier companies and meeting the most incredible people. I learned so much and appreciated Gardner Business Media’s trust in me and my experience covering the industry.

What do you see as the biggest challenge in your career?

Unfortunately, I left Gardner right before COVID struck. While I had opportunities for work at other publishing companies, everything stopped. I have been freelance writing, creating mainly technical articles like case studies as well as company profiles, website copy and many press releases since that time. I also lost my husband in 2020, so that understandably had a toll on life and work. I would love to find a new opportunity with a company that would benefit from my experience and knowledge of manufacturing, not to mention my connections. I am still very passionate about it and have the desire to contribute in any way I can.

How has the industry changed during your career?

There have been many changes in our industry, many of which make me sad. I remember seeing stacks of auction notices arriving in the mail due to mold shops closing for lack of the ability to compete with foreign competitors. Many were excellent shops and leaders in their field. On the other hand, there are many companies who have managed to survive and even thrive, and for that I am glad. It hasn’t been easy for them, but then American manufacturers are accustomed to challenges and do not give up easily.

Technological advancements in automation, machining and standardized mold components have helped make the mold manufacturing process more efficient and cost-effective. Where the skills gap has widened for lack of promoting the trades as viable careers - not to mention the offshoring of manufacturing to lower-wage countries - I have seen many US-based companies stepping up to train future leaders internally, led by the veteran workers who will eventually retire. Sharing that tribal knowledge is so important. Many high schools and universities have been working to reestablish traditional machine shop courses and other related curriculums, and I hope that continues. One fine example is Cardinal Manufacturing in Strum, WI. This student-led manufacturing company operates out of Eleva-Strum High School and provides an amazing learning opportunity for youngsters who desire careers in manufacturing. They learn not only machining and fabricating skills but administrative and management skills, too. They are learning important soft skills like customer relations, sales and promotion, problem solving and more. These young people know that there are other rewarding career options besides those requiring a four-year college degree, plus they earn while they learn!

What do you see as opportunities for other women making the mold?

I believe more young women must be exposed to the manufacturing industry to see how they can contribute and hone rewarding careers. Opportunities exist on many levels of the industry, from sales to product and/or mold design to machining and molding. Just because moldmaking is male dominated it doesn’t mean women can’t break into the field. With the types of tools and technologies available today, it doesn’t take brute strength anymore to build molds. Women who are already working in mold manufacturing, for instance, should be talking up their profession and

offering to mentor any young ladies who show interest. Shop tours and trade show visits get both guys' and gals' attention and can go far in creating lasting impressions for those who like to work with their hands and design and make products that can literally change lives. A wonderful example is the student pavilion at IMTS. The Chicago AMBA Chapter hosted student tours with our members guiding the youngsters through the show and we have had booths there to specifically teach kids about mold manufacturing. Seeing their eyes light up when they see how products they use every day are made is quite rewarding.

More media attention (mainstream media, including social media) is also needed because that's where young people get their information most of the time. As mentioned previously, schools should continue to budget for machining classes and bring in industry leaders to teach students. Field trips to leading companies for a close-up look at how popular products are made is always a good idea, and maybe it's the manufacturers who need to promote this to the schools in their regions.

What is your advice to any young person considering a career in Mold Making, Mold Design and Mold Repair?

Go for it! I come from a long line of manufacturing professionals, including pioneers of machine tools, plastics and related. Sometimes it is already in the blood (as it was for my father and sister), calling you to the trade, but there are times when other influences prevent an early connection to it. It's okay. I found my way back and so can any other men or women who desire to enrich their careers by being more hands-on, creative and excited about what they do. That's mold manufacturing and all that goes with it. Imagine working on the tooling that produces critical-to-function parts for medical devices that save lives. How would you feel if you were walking down the aisle of a store and you saw a product that you had a hand in designing? What if every time you saw a young person playing a video game you could tell them you built the mold that made the housing for the fancy controllers they use to have a higher experience? How cool is it that major automotive OEMs turn to your company for the precision molding and/or mold maintenance they require to keep their parts functioning safely and effectively? There's so much opportunity and variety in the mold manufacturing industry – you will never be bored!

Our sincere appreciation to our Women Making the Mold participants - your experiences and insights inspire confidence and optimism that our industry, and manufacturing in general, will continue to evolve, improve, and progress!

We encourage our readers to submit our next rounds of female leaders / engineers / mentors / educators - we're working with several candidates for our Fall 2025 Newsletter, and we want more.

Please send your nominations, along with their contact information, to:

John Berg - john.berg@dyntool.com

Scott Peters - scott.peters@moldedmarketing.com

HASCO

New French Coupling System Z8012/... from HASCO

As the pioneer of Moldmaking with many years of experience in the field of cooling technology, HASCO supports tool and mouldmakers in the efficient cooling of injection molding tools. Through the extension of the product range with a **new mono-coupling system with a French profile**, HASCO has once again improved its service for customers throughout the world.

The new modular French coupling system Z8012/... offers **exceptionally simple and adaptable solutions for applications in the low-temperature range**. The couplings have been specially developed to meet the demands of moldmaking and **allow reliable and efficient media throughput** – irrespective of whether the work is carried out with hot or cold water, or with cooling oil.

Maximum throughput with minimum effort

Thanks to the free passage on both sides, the system guarantees **optimum throughput rates** without additional flow resistance. The proven ergonomic single-handed operation enables **fast and reliable coupling and decoupling**. A reinforced locking system ensures reliable sealing of the circuit at all times.

Safe handling through color coding

For **maximum process reliability**, the plug and socket are available in **different colors**. The colored rings make it easier to differentiate between the media circuits and minimize the risk of incorrect connections – especially with complex molds featuring multiple cooling lines.

Modularity for maximum flexibility

The new French coupling system is available in **numerous connection types and designs**, and can be **integrated seamlessly** into existing cooling concepts. An **exchangeable fluorinated rubber O-ring** additionally increases maintenance friendliness and ensures a long service life for the coupling, even under demanding conditions.

With this extension of the cooling program, HASCO offers a forward-looking solution for **precise, reliable and efficient cooling processes** – once again underlining its expertise as an innovative partner in international Moldmaking.

Competent partner in cooling technology

HASCO offers the **most extensive range of products for cooling in Moldmaking**, extending from nipples through couplings to sleeves and hoses. The exceptional variety of combination possibilities within the range opens up future-oriented solutions for all challenges in cooling technology.

Alongside **high-quality products**, we also offer **first-class service**. At HASCO, this means competent and individual consultation from the very beginning. **With over 50 years of experience in cooling technology, HASCO is the leading partner for its global customers.**



Who Will Replace Our Retiring Mold Designers?

Addressing the Skill Gap in Plastic Manufacturing Through Training and Community Involvement

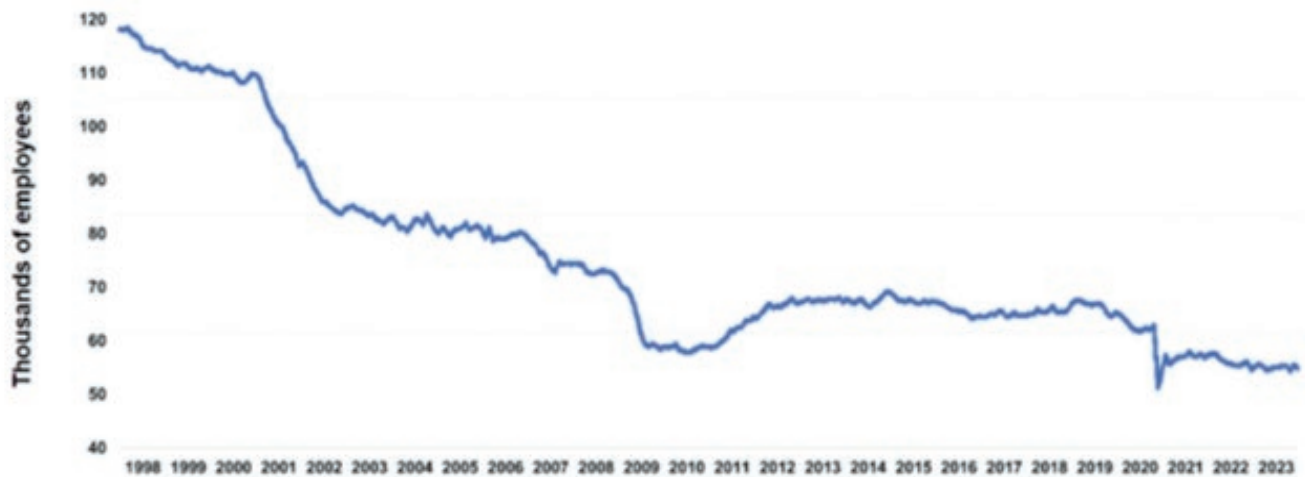
Contributed by: Michael Guistino, Technical Director (Independent Contributor)

Executive Summary:

This paper explores the urgent need for skilled plastic Mold Designers as the current workforce ages into retirement. It highlights root causes of the gap, including negative preconceptions of a career in the trades and offers community involvement to a specialized training course. But together they form a ripple effect that can retain talent in the plastics Industry.

Introduction:

The 1990's brought a mass exodus of tool shops across the United States. It's fair to say the most innovative survived due to hard work and foresight by risk-taking mold makers and business owners. Reported in 1997 by the Economic Policy Institute, 394,835 jobs were lost due to net trade with Mexico and Canada and closely tied to manufacturing jobs migrating to China as cost pressures and competitiveness ensued by US consumers. Thus, it contributes to a negative stigma with trade schools. Reported by the Bureau of Labor and Statistics, the United States manufacturing industry employs 4.2 million (20-35) aged people while the wholesale and retail industry employs 12.7 million. And yet we still have 840,000 open jobs in various trades.



Number of employees at toolmaking companies on a dramatic decline over the 2000s. ²

Our most experienced mold designers are retiring. Great for them, but what about us? With the recent plastic re-shoring turmoil, the industry has been faced with a Mold Designer shortage. Or at least the beginnings of one... I work closely with many Northeast Ohio tool shops and not one has an apprentice aged designer. What is their succession plan? What does the plastic industry have to offer for training? These same innovative mold shops may not have the resources and or time for training. We all know that the mold making industry is feast or famine. With shorter lead times becoming the new normal and new mold builds are in demand, mold shops often struggle with spare employees to send for training. But when business is slow, sometimes it's the best option to freshen up old workhorse machines by cleaning and repainting surface grinders and radial arm drills until things pick up again.

Why does training matter? Our gurus in the workforce today are from the old school of hard knocks and are leaving. Enthusiasm and empathy towards training a younger generation might not be at the top of their bucket list. Thus, creating a skill-gap. But for that business owner it is top of mind. We must capture that tribal knowledge of mold design and mold making, like as a Mold Designer, why you need to convince a product designer to include ejector pin bosses in deep ribs to why it's best to find an alternative design for feeding water into a tall core without using O-rings. With proper training these lessons won't be lost.

Imagine if the tool must be reworked to add that ejector pin, some or all the profits from that mold will most likely be absorbed. Well trained mold designers can optimize tool builds through the shop. Thus ensuring the new-normal lead times are met and earning the confidence of your customer for returned business. This is why training matters.

Solution:

How do we close the skill gap?

What can be done to address the negative stigma some parents have?

Convincing a parent that the trades are an acceptable career path is easier said than done. But, it doesn't stop us trying... For instance in April a new Engineering and Advanced Technology Center opened in Northeast Ohio featuring some of the most advanced technologies in the field of manufacturing.

The center is focused on computer aided design, engineering technology, electronics, and robotic programming. Our community is taking a step in the right direction by introducing complex technologies to high schoolers and their parents an ideal way of addressing the negative misconceptions surrounding a career in the skilled trades. There still remains a critical need for targeted, industry specific training.

In response to the need I have developed a specialized (1) week course in Plastic Mold Design. Akron Institute's Mold Design Standards is a course that allows Engineers/Technicians to have a broad understanding and foundation of disciplines in Mold Design Theory. The course aims to build up communication skills through hands-on exercises and classroom discussion. It leaves no stone unturned.

I call it Following The Plastic. As the title explains, I plan to teach the student why and how plastic flows into the mold beginning at the Sprue orifice. At the end of the course, the student will be equipped with the following: • Plastic part design basic standards • Mold design fundamentals • Best practices for customer relations • What to expect after first shots of the mold.

Conclusion:

I am a firm believer in the ripple effect. Small, intentional actions, whether it's a community introducing advanced technology to students, or an individual creating a specialized training program, can lay the foundation for long term impact.

By investing in education, raising awareness, and providing hands-on skill development we can close the critical skill gap and inspire the next generation of mold designers.

The ripple effect begins with one step, this is mine.

Contributed by: Michael Guistino

Citations:

1. Economic Policy Institute
2. US Bureau of Labor Statistics

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Scott Peters – Division Chair: scott.peters@moldedmarketing.com

John Berg – Newsletter Editor: john.berg@dyntool.com

CAMM TechBridge Project Update



The **Canadian Association of Mold Makers (CAMM)** is making strong progress on our **TechBridge** initiative, an immersive, high-impact program designed to connect today's students with the realities and opportunities in moldmaking and advanced manufacturing.

What's Happening Now

VR Integration: The new virtual reality experience now allows students to put a block of steel in a CNC mill and start it up, load a mold into a press using a crane and start it up, and even virtually assemble a mold from start to finish.

School Engagement: This fall, the TechBridge team will begin visiting high schools with a mobile VR set-up, giving students a first-hand look at what a career in moldmaking looks like today.

Industry Partnerships: Several CAMM members have stepped forward to supply real-world project examples and digital assets for the VR experience, ensuring accuracy and relevance.

Career Path Mapping: The VR tool now includes an interactive career map, helping students and guidance counselors see how apprenticeship pathways lead to advanced roles in the industry.

Why It Matters

The skilled trades shortage is not just a statistic. It is a challenge impacting every mold shop across North America. By showing young people what's possible through engaging technology, we are making the industry visible, relatable, and exciting.

What's Next

Expanding VR content to include more specialty processes like EDM and high-speed milling

Rolling out the TechBridge program to regional skills competitions and career fairs

Building additional resources for educators to use alongside the VR experience

The TechBridge project is a prime example of CAMM's commitment to promoting the moldmaking trade and inspiring the next generation. We will continue sharing updates as we move from pilot to full-scale rollout.

The Canadian Association of Moldmakers (CAMM) is Canada's leading national association representing mold makers, Service providers and Suppliers to the global mold making Industry.

An active Board of Directors and Advisors made up of industry leaders provides the strategic direction for the organization. New board members are elected annually by the membership to ensure the interests of both the industry and our member organizations are at the forefront of our strategic vision.

We have represented Canadian mold makers for over 40 years!

Four Strategies for using Mold Simulation Software to Compensate for Part Warpage

Written by David Lindemann, application engineer for Cimatron Technologies, and John Sand, mold engineer. The techniques explored have been tested and used extensively by John Sand in his manufacturing field. Cimatron Technologies provides all images.

Commonly referred to as "Kentucky windage" in the U.S. moldmaking industry, the art and science of compensating for part warpage predicted to occur during plastic injection molding processes are greatly simplified thanks to the ongoing development of simulation and design software. Derived from the sport of marksmanship, Kentucky windage applies to the act of adjusting the aim to compensate for the wind or the motion of the target.

In moldmaking, this colloquial term entails first using simulation software to determine the final part's condition after molding, and then adjusting the sights—in this case, the mold design—to prevent warpage and ultimately meet target specifications.

Understanding material behavior

"Kentucky windage" is a term well suited to what moldmakers do when they adjust the mold design to account for plastic material warpage. That material behaviors differ among the plastics being molded, and that some plastics will shrink in dimension based on their specific properties, has been a fact known to moldmakers since plastic was first used in the molding process. As shrinkage is a known factor, adjusting to ensure an optimal result is not a significant challenge.

Some materials shrink uniformly (isotropic) across entire parts, while others shrink depending on the direction (anisotropic) in which the plastic flows into a mold. As the plastic enters the mold through the gate, its shrinkage can be measured in the "flow" direction — noted by a simple straight line that moves forward from that point.

Eventually, however, it must change direction as it fills around the mold's internal geometry and can only flow 90 degrees in the "flow" direction. As the plastic then flows in the "converse" direction, we observe slight changes in pressure that push the material into the cavity. As with uniform shrinkage, this variable shrinkage can be easily measured and accounted for because the properties and material behaviors of most commercial plastics are well understood in the industry.

There are, however, additional variables that contribute to the part warping, including the part's geometry. A part's geometry may have areas that are thin and others that are thick, which can cause some of the thinner areas to "freeze," or solidify, before the thicker sections.

Connections to cooling

Cooling system design often goes hand in hand with part geometry and can significantly influence material behavior. The purpose of cooling systems is to remove heat from the mold as uniformly as possible, with a particular focus on areas where heat is likely to accumulate.

Part warpage is often caused by inadequate or unbalanced cooling. Sometimes, due to the shape of the part, there may not be enough steel in a critical area to allow for the placement of a cooling line, or that area may be simply unreachable by a standard drilled channel.

Challenges inherent to the design of complex-geometry molds, particularly in cooling systems, inspired the introduction of conformal cooling capabilities. Created by 3D-printing the cavity and core block, the conformal cooling design allows waterlines to bend, twist, and wrap around parts, mold components, and even the line itself.

Some moldmakers have adopted conformal cooling processes, even when simple drilling is possible. Designers typically create conformal cooling channels and repeatedly test them using injection-molding simulation software to determine whether all "hot spots" on the part are eliminated and whether the part has a uniform cooling rate.

Cooling rates in conformal lines are often faster than those in standard cooling systems because they can access areas that are difficult to reach, significantly reducing cooling time and overall cycle time to produce a part of higher quality.

Many moldmakers cite the benefits of conformal cooling systems as the most important factor in their decision to purchase a 3D metal printer. Despite ample evidence that conformal cooling channels can benefit a variety of different projects with challenging geometry, results vary.

Not all jobs are ideal candidates for the inclusion of conformal cooling channels. Because the results cannot always justify the cost and time required to design and produce conformal cooling channels, they have limited applications. Ultimately, the moldmaker may produce a warped final part, regardless of the cooling system design and the effort invested in prevention.

The high cost of error

In the past, a moldmaker could rely only on firsthand experience to make informed decisions. It was not uncommon to build a mold solely to determine how badly a part would warp, and then alter the mold to counteract the warpage.

For example, if the part was initially drawn as a flat shape but the final part was a "U" shape, the moldmaker would recreate the cavity steel to make it look like an upside-down "U"—an effort that was difficult and might require several attempts. This becomes even worse as the part's complexity increases.

Additionally, in the past, standard CAD drawing tools that produced basic prismatic models were unable to handle oddly shaped parts, such as warped models. Additionally, CAE-based simulation software has provided this analysis for years, including a meshed model and an STL file. This greatly limited what could be done in CAD software. Redesigning the mold and creating the cutter paths to machine it was essentially a matter of experience and trial & error; hours would be spent redesigning the part in CAD, using the STL file as a template, as if tracing over the STL with arcs and curves to patch together a usable CAD model—a true horror story. Moreover, after all that, if the moldmaker quoted that he could get the part right after three attempts, but it actually took him four or more, he was losing money.

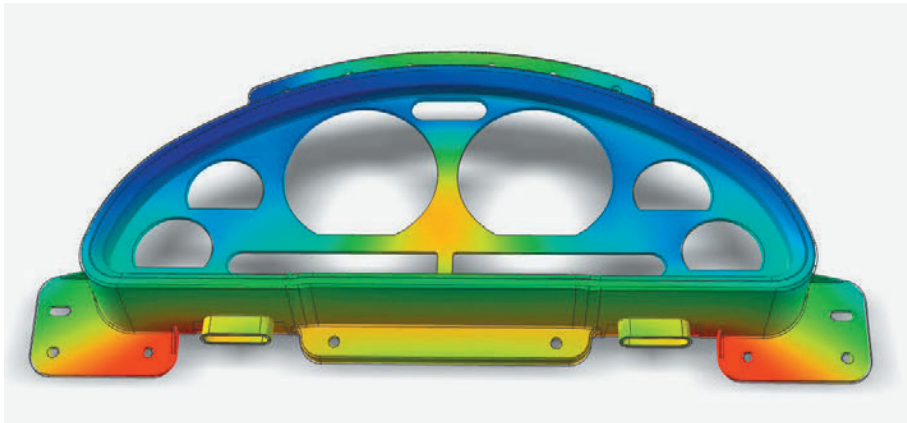
Modern solutions

Significant effort has been invested in addressing the warpage challenge, and today several simulation software solutions are available that effectively predict the molding cycle and resulting part warpage, as well as more robust CAD software that can handle the complexity.

What remains a stumbling block for moldmakers, however, is not the accuracy of the compensated part but the fact that the accurate results reveal design issues. For instance, holes that were designed to be produced straight up and down, and walls and ribs that were developed with sufficient draft to release from the mold, will instead be produced with undercuts or trapped in the mold due to warpage.

Ultimately, the corrected model is likewise not moldable, and even compensated parts will have the same issues once they are corrected. These issues could include ribs with poor draft angles, oblong holes where round holes were previously used, molded part features that are out of alignment, and parting lines that are no longer flat. These issues have prevented many in-progress molds from further development.

Figure 1



In Figure 1, the displayed color variation reveals a wide range of warpages, with the red portion indicating the most extreme warp. Across the vertical surface facing the screen, a band of warpage is shown as a blue curve. This shows the part that is toeing inward at a very acute angle, though the colors do not fully capture the banana shape of the warped model.

This white paper will explore solutions to the complex challenge of warpage com-

pensation. John Sand, a mold engineer at Mayfair Plastics in Gaylord, Michigan, has applied these strategies to compensate for warpage and has successfully created moldable parts in approximately 15 cases since developing the techniques required to meet the warpage-compensation challenge.

Four strategies for performing warpage compensation

Step 1: Using points to calculate compensation

Currently available, several CAE-based simulation software solutions are dedicated to predicting warpage. Typically, CAE software (such as Inspire Mold, Moldex 3D, or Moldflow) generates STL models of warped parts that designers import into their CAD systems, allowing them to be edited to compensate for warpage. These STL models may already incorporate warpage compensation, also known as morphing, reducing the tasks required of mold designers. In recent years, greater effort has been invested in creating NURB (non-uniform rational B-spline) surface models that can include either predicted or compensated warpage.

Again, even compensated models will include areas where the draft condition of walls and ribs renders them unmoldable, so this process does not entail simply removing the original model from the mold and replacing it with the new, warped model. The draft angles of the original model should be retained when adjusting the model to align with the compensated geometry.

In this example, the designer elects to deform the original CAD data to match the compensated model created in the mold warpage simulation. Points are projected onto the warped model and then paired with the corresponding points on the original model. Care must be taken to ensure that the distance between points in these pairings does not exceed the wall thickness of the model, or that a point on the cavity side of one model does not accidentally pair with a point on the opposite side or core side of the second model.

Another potential pitfall of this technique is that a point could be paired with a point on the side wall or vertical wall of the part, so vertical walls should be avoided during the point-assignment process. In this case, a designer may believe they can select points all over the part to gather as much detail as possible but less is typically more with this technique.

Using fewer points often results in a cleaner deformation of the part. Suppose the results demonstrate waviness in the vertical faces. In that case, it is worth considering using fewer points and rerunning the simulation to let the software handle the bulk of the work.

Figure 2

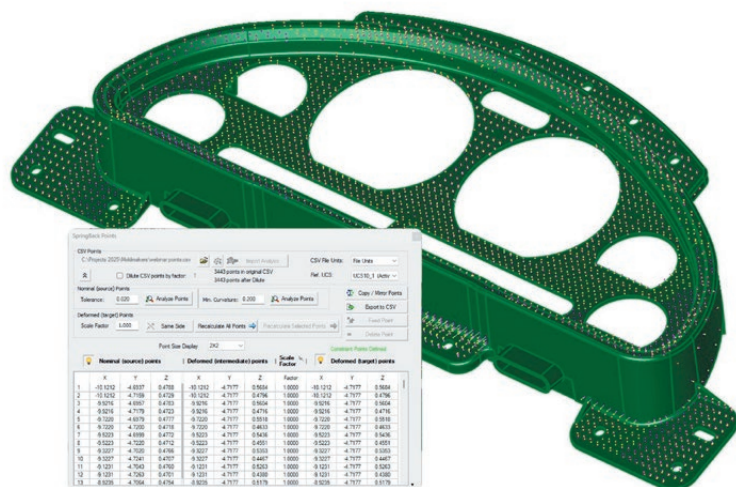
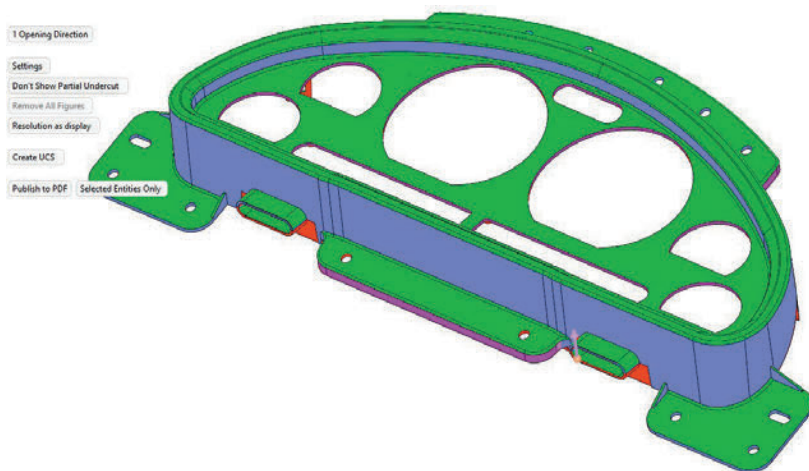


Figure 2 illustrates points placed across the original model and then "mapped" to the warped model generated using simulation software. This pairing of points will be used to warp the original to the contours of the calculated warped model.

Figure 3



As shown in Figure 3, the vertical walls of the compensated part exhibit a moldable draft condition that matches the original part's draft. Thus, while the part has been warped, the draft angles remain consistent.

Points can be manipulated in groups or individually. In cases where a particular area of a part exhibits excessive warpage, a threshold percentage can be set to limit the amount of warpage applied — enabling designers to "sneak up" on the correct part, much like stalking a butterfly.

We apply a certain percentage of the warpage and then rerun the simulation in our software to determine if the resulting model is correct or at least improved. If not, we apply a higher percentage of warpage compensation to the simulation and rerun it.

This technique may require several iterations before achieving the desired result. However, virtual iterations are much faster, less costly, and less labor-intensive than the process of physical prototyping, which ultimately involves cutting steel to achieve the same end. These benefits are important to consider when using point selection or any other technique discussed in this context.

Once the pairing is complete, the original part is warped to the compensated model, and the majority of the part is adapted to meet the desired results. Of primary importance in this operation is retaining the draft angles for all the walls, even though the original part has been warped.

Step 2: Aligning the part features

Although at this stage the majority of the part is adapted to the results we need, some wiggle room in the process must remain to avoid corrupting the model through manipulation. With the bulk of the part completed, we can focus on some of the finer details, such as aligning holes on the warped model with those on the original, which need to be moved into place using the warped model as a roadmap.

Advanced warpage capabilities enable us to align features, holes, edges, and even entire chains of geometry to match the original feature's location with its new location on the warped model. There may be several pairings before this is complete, and on a complicated model, it may involve more than 100 pairings.

Figure 4

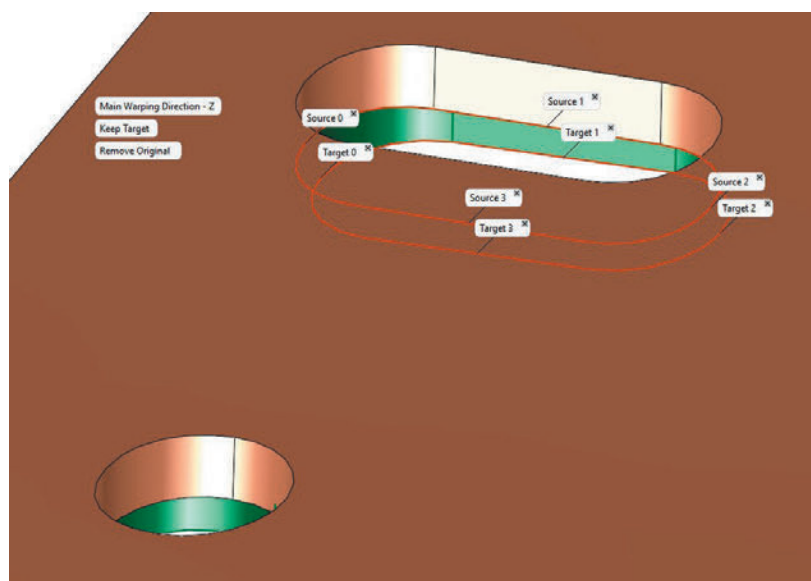
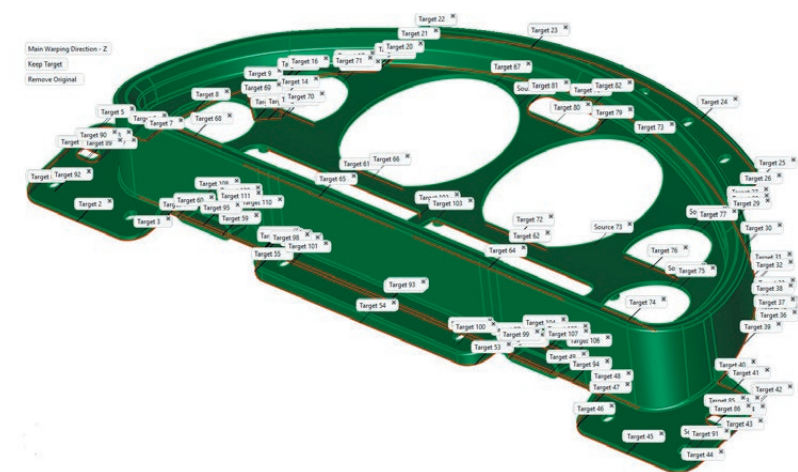


Figure 4 presents an isolated view of the "shift" away from the CAD geometry that occurs when the part is warped. Original part features, such as slots and holes, must be positioned to match their corresponding locations on the warped model. The figure displays the pairings of the original parts' features (green) with the warped features (orange).

Figure 5



Pairing comparisons can quickly add up, especially when the part has several small details or features, as illustrated in Figure 5.

Step 3: Isolating pull directions

Depicted in Figure 6 is a side action pulling two slides in the direction of the Y axis. Although these slides are positioned in the required location to compensate for warpage, we have lost the correct draft angles.

These angles now need to be oriented from a direction other than Z, which was their original orientation. In this case, we will take a copy of the model and run another advanced warp simulation that aligns its primary direction to the Y axis. We are not concerned with the rest of the part, which might deform radically, as we will ultimately import the new slide faces into the first part we worked with and merge them.

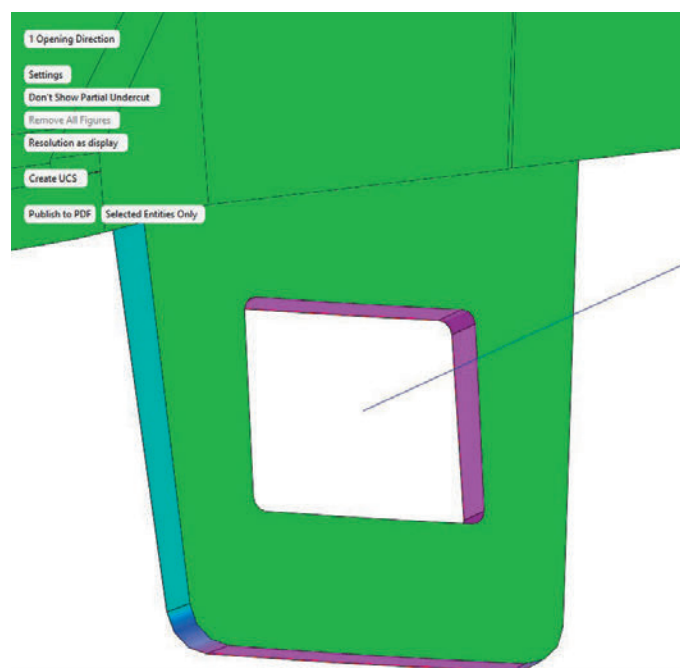
At this stage, it is essential to remember that the warp remains the warp; we will not alter it by running the function in a different pull direction; we are simply adjusting how it manages the draft angles.

Setting the pull direction along the Y axis instructs the software to maintain the draft in that direction, disregarding angles in other directions. As such, the part will remain essentially unchanged in the Y direction as it does in the Z direction.

We then grab the few surfaces affected by the side or Y pull direction and import them into the first model, which we use the Z pull direction. Again, any features along this pull direction that are moved will need to be relocated, as performed previously. Care also needs to be taken to merge the parts so that any geometry created or replaced has the correct draft condition along the merge area.

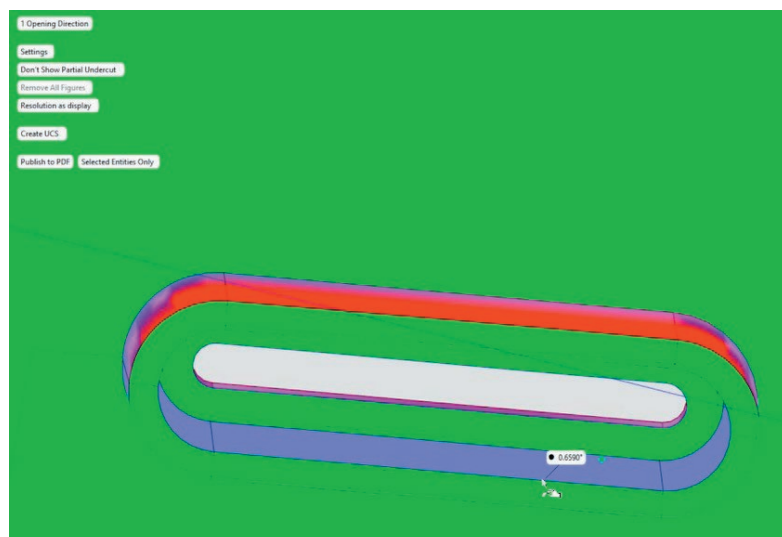
The figures shown illustrate the results of using this method on slide pulls, though it also applies when working with lifters. When working with lifters, the pull direction may not be immediately evident. Once the direction is determined, the walls affected by the draft may need to be rebuilt or altered using direct modeling. In Figure 6, the walls were rebuilt and modeled with the required draft in accordance with the determined pull direction.

Figure 6



The red walls are modeled using a draft aligned with the pull direction shown in blue.

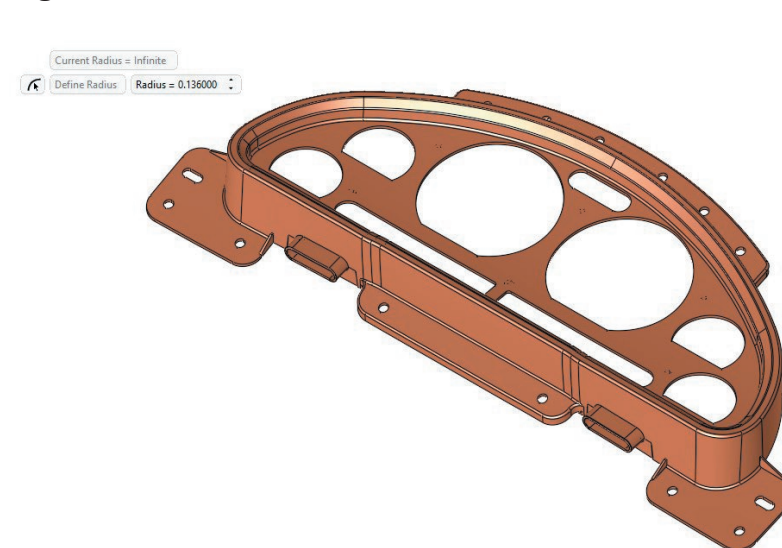
Figure 7



Shown in Figure 7 is an example of the pull direction coming forward in the positive Y direction. Some faces that were previously seen in the Z pull direction are now shown as "trapped," as indicated by the red coloring. The faces we are concerned with are those on the slide shown in violet, as they need to be isolated and merged into the part aligned with the first, or Z pull, direction.

In most cases, a previously nominal feature will now be irregular, meaning a hole that was a standard round size will be oblong due to warpage. Here, direct modeling capabilities can play a crucial role, as they are not just for original part design but can also be vital in tooling.

Figure 8



Using direct modeling capabilities, an oblong hole can be transformed back into a hole of nominal dimension—a true round hole—and, on the high side of tolerance, taking shrinkage into account.

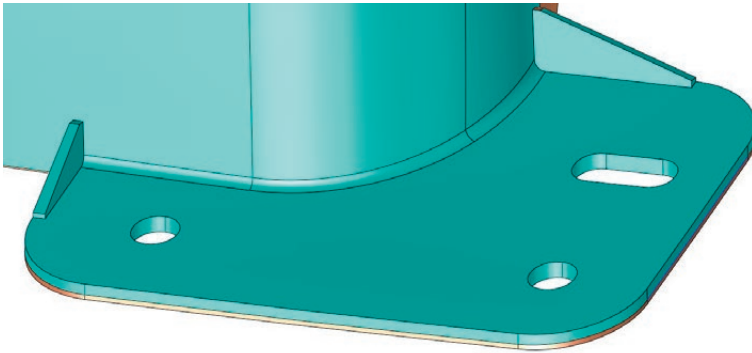
Step 4: Working with parting lines

Something fairly obvious occurs when we warp a part: Parting lines that were originally clean and flat become wavy or segmented. A flat parting line is significantly better for building and manufacturing tooling and for controlling overall costs than any alternative. As such, seeing a flat parting face that could easily be a ground face turned into a curved face that requires EDM operations can seem like a tragedy. However, correcting the warp may require a curved shutoff face.

To correct this result, we can raise the parting line by a minimal amount, perhaps 0.030", so we can achieve the flat face we want and recess the warped faces into the core side of the tool. Parting could originally have fallen directly onto the bottom face of the part. However, because the bottom is now warped, we raise the parting line above the old face a minimal amount and allow the warped faces to remain as they are.

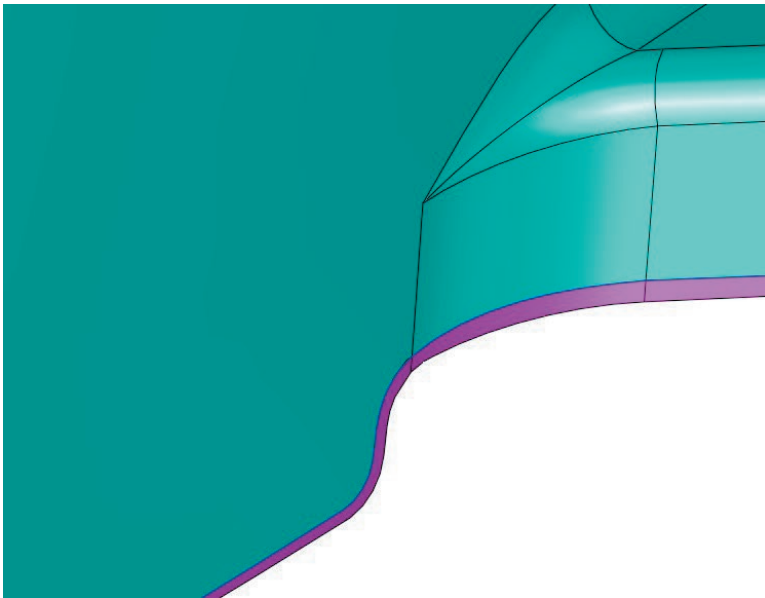
This creates a parting line with 0.030" being burned, or EDM-ed, into the core. As it is preferable to burn the warped part areas than to burn entire parting faces. The new 0.030" faces burned into the core will be slightly undercut, so draft is added along the parting to reduce the plastic part by a fraction and enable the part to release. This variation is so subtle as to be nearly undetectable.

Figure 9



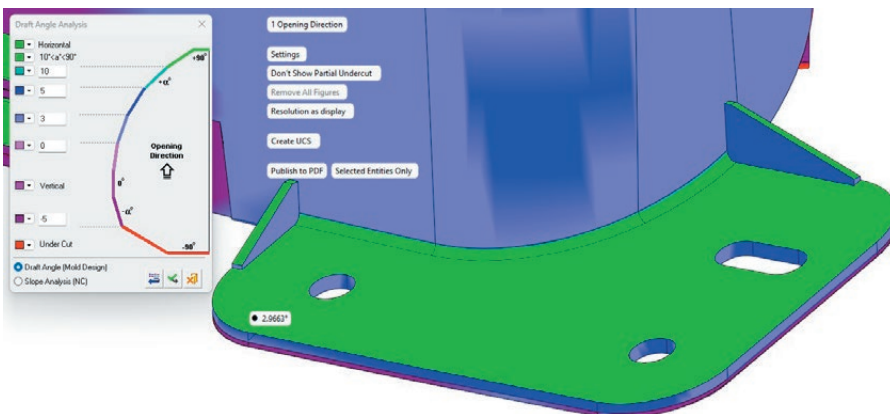
Shown is an altered parting line where the light blue is in the cavity and the orange is in the core. The actual bottom face of the part is burned into the core, ensuring it comes out flat after warpage has affected the molded part.

Figure 10



Typical parting line practices can be applied for better molding and tooling conditions. Here, the parting line has been shifted 0.030" up, and radii have been included in the shutoff corners along a drafted wall.

Figure 11



In Figure 11, the purple section shown at the bottom has been redrafted.

The draft must be corrected because it is now in the core half of the tool. Where the split in the wall has occurred due to elevated parting, the new edge must be swept downward, and the core faces trimmed to the new swept face. In this case, the sweep occurred straight down, resulting in zero draft; however, it could also be swept with a negative half-degree to ensure the purple face releases freely.

In all of these scenarios, a part redesign is required and must be approved by the end user of the plastic part.

Additionally, the mold designer should consult with the moldmaker to discuss the moldability of the part.

The idea of creating another EDM condition may at first sound objectionable. However, once the moldmaker understands what is needed to correct the warpage, they may be more than willing to adopt the new method, rather than resorting to trial and error.

David Lindemann
Application Engineer
Cimatron Technologie



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Congratulations to our four distinguished award winners – for their excellence in craft, and their continued contributions to the industry and society at large

**2025 Mold Maker of the Year
Ed Duignan, Thermo Fisher Scientific**

**2025 Mold Designer of the Year
James Fattori, Injection Mold Consulting LLC**

**2025 Mold Repair/Maintenance Technician of the Year
Markus Woeste, Molded Precision Components**

**2025 Apprentice of the Year
Nick Paxton, Thermo Fisher Scientific**



Left to right: Jon Vega, Area Account Manager for HASCO,
Kirk Pittman, Director of Tooling and Set Up for Thermo Fisher Scientific
Shawna Gareau-Kurtz, Director for BOCES2 Center for Workforce Development
Andrew Becker, Machining Fundamentals Program Instructor for BOCES2 Center for Workforce Development,
Nick Paxton, Mold Apprentice for Thermo Fisher Scientific – and 2025 SPE-MTD Apprentice of the Year Recipient
Ed Duignan, Mold Maker for Thermo Fisher Scientific – and 2025 SPE-MTD Mold Maker of the Year Recipient
Steve Steinmetz, Tooling Technician for Thermo Fisher Scientific
Jennifer Zulkosky, Student Support Services Advisor/Outreach Specialist for BOCES2 Center for Workforce Dev.
Lori Banning, Career & Training Admissions Advisor for BOCES2 Center for Workforce Development
Ron Natale, SPE Mold Technologies Division Treasurer and jolly good fellow

Winners of 2025 International Awards

Congratulations to our four distinguished award winners – for their excellence in craft, and their continued contributions to the industry and society at large

At WEMOCO on July 25, several organizations gathered to celebrate and honor working in machining. BOCES 2 Center for Workforce Development (CWD) leaders met with representatives from HASCO, the Society of Plastics Engineers, and Thermo Fisher Scientific to receive a donation from an award winner.

The Society of Plastic Engineers annually names an award winner for “Mold Maker of the Year” as well as “Apprentice of the Year.” A duo from the locally operated Thermo Fisher Scientific facility was named the winners, with Apprentice of the Year going to Nick Paxon, and his mentor Ed Duignan, with 47 years of experience as a top-level mold maker, was awarded the “Mold Maker of the Year,” award.

The recipients of these awards are selected from a pool of mold makers and apprentices throughout the world. The nomination was sent in by Steve Steinmetz, a Tooling Technician at Thermo Fisher for both Paxon and Duignan.

Steinmetz was especially honored to nominate Duignan, as he had firsthand experience as an apprentice under Duignan in the 90s. Steinmetz worked with Duignan after attending Monroe 2-Orleans BOCES Machining Program while in high school.

Duignan was also given the opportunity to make a donation to wherever he found fit. The donation aspect of the award is sponsored by HASCO. Monroe 2-Orleans BOCES Machining Fundamentals CWD class was lucky enough to receive the donation.

When asked why the adult program was selected, Steinmetz responded with: “Many skilled trades lack enough workers to fill labor demands. With increasing numbers of experienced professionals retiring, fewer skilled tradespeople are replacing them. Because of this skills gap, training and upskilling are more critical now than ever. With many of the skilled tradesmen in mold making and tool and die building going through the BOCES program during high School, the Machining Fundamentals program seems like a good fit for this donation.”

Support for BOCES 2 Machining Fundamentals program is strongly appreciated by BOCES 2 CWD and will help provide materials the class needs. CWD continually searches for grants and scholarships to alleviate the tuition burden and encourage enrollment.



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Congratulations to our four distinguished award winners – for their excellence in craft, and their continued contributions to the industry and society at large



Glenn Starkey, Progressive Components, and James Fattori of Injection Mold Consulting LLC, our SPE MTD Designer of the Year for 2025



2025 Mold Repair/Maintenance Technician of the Year – Markus Woeste, Molded Precision Components

Jim is a third generation molder and mold-maker. His grandfather had a booth at the NPE 1948 show, and at an early age, he knew, “this was the industry for me!”

When Jim was 12, his father would bring him to the factory on Saturdays. He was paid \$0.25 for every airline leak he fixed (“I made out like a bandit!”).

At age 15, his first mold design was 2-cavity, cold runner, edge gated, pin ejected panel for a Speidel Watchband display panel.

For education, though he has a B.S. in Industrial Engineering from Northeastern University in Boston, his “real” major comes from the School of Hard Knocks. His resume shows him pushing the envelope since the early 80’s, with roles such as Engineering Manager, VP Engineering, and since 2015 has been an independent consultant.

Through the years, he has three sole inventor patents, and is a named inventor in 20 more, all in mold and molding related innovations.

Markus Woeste exemplifies the gold standard in mold repair and maintenance, making him an ideal candidate for the SPE Mold Repair Technician of the Year award. His unparalleled expertise, problem-solving ability, and dedication to excellence have made a profound impact on the success of Molded Precision Components (MPC) and the industry as a whole.

His exceptional skills, innovative mindset, and dedication to excellence make him a deserving recipient of the SPE award. His unwavering commitment to his craft and his profound impact on the industry set him apart as a true leader in mold repair. Markus’s contributions continue to elevate standards, inspire others, and reinforce the critical role of mold repair technicians in driving manufacturing excellence.

Markus is not only a master technician but also a collaborative team player who shares his knowledge generously with colleagues. He mentors less experienced team members, fostering a culture of learning and continuous improvement.

Winners of 2025 International Awards

Congratulations to our four distinguished award winners – for their excellence in craft, and their continued contributions to the industry and society at large



Ed Duignan, Mold technologies Division " 2025 Mold Maker of the Year"

The 2025 Mold Maker of the Year is a 47-year veteran of the industry. Mr. Ed Duignan of Thermo-Fisher Scientific, Rochester NY, is a Journey Level Mold Maker with accreditation from the New York Bureau of Labor and Apprenticeship Training.

Ed's training began at the Rochester Institute of Technology (RIT). Ed has mastered many of the machine tool technologies required to be an all-around mold maker. He has even crossed over to the Die Making Side, an indication of his keen ability to adapt to the requirements of the project at hand.

Off work Ed is a devoted family man. He and his wife Trish have successfully raised two children and been married for 39 years. Ed served as a Scout Leader ensuring that his kids and their friends received the same commitment to family values that he has. As a skilled craftsman Ed is unflappable and that comes with a true nurturing spirit. Ed's home is filled with pets from cats and dogs to fish and turtles.

We are pleased to name him the 2025 Mold Maker of the Year for all his many contributions to both industry and society.



2025 Apprentice of the Year, Nick Paxton accepting the award from our very own Scott Peters

Nick took his related theory course work at Monroe Community College in the Applied Technology Center. Through his studies and on the job training, Nick maintained a 3.8 GPA. A truly well-rounded Mold Maker, he integrated his theory training with practical applications including Master-CAM™ Programming, Drafting, CNC Milling and Sinker EDM.

He sets the bar high with his innate ability to troubleshoot molds, hydraulics, and hot runners. Nick is also CPR and First-Aid Certified, showing his strong emphasis on ensuring a safe workplace.

Nick completed his apprenticeship in January 2025 with registration in the New York Bureau of Labor and Apprenticeship Standards. His work at Thermo-Fisher Scientific alongside Ed Duignan shows that as an employer the company has a keen interest in training the next generation of Mold Making Professionals.

We presented the award to Nick during PT-XPO. This was Nick's, and his girlfriend's first ever trade related event as a Mold Maker. And by all accounts, it won't be their last!

2026 International Awards Presentations

For over 40 years, the Mold Technologies Division (previously Mold Making and Design Division) of the Society of Plastics Engineers has recognized Mold Makers, and Mold Designers for excellence in craft, and continued contributions to the industry and society at large.

In 2023 the division added the Mold Repair/Maintenance Technician of the Year Award in recognition of the special skillset and aptitude required in meeting the demands of that segment of the industry. These individuals are likened to the "Crime Scene Investigators" of the business, in that they must find the root cause of tooling failures and then create a game plan to affect the repairs in such a way that the failure does not re-occur.

2024 saw another addition to the awards listing by recognizing those individuals that are starting out in their tradecraft as Apprentice Mold Makers, Machinists, and/or Designers. This award is presented based on scholastic achievement, on the job performance, recognition by the individual's Training Mentor in the operations.

2026 is no different. The Mold Technologies Division is seeking nominations for all four of these awards. Nominees need not be members of the Society of Plastics Engineers (although we may put the long arm on for future participation), should show exemplary performance in the specific area of endeavor and have a mindset towards providing future training to the next generation of Skilled Craftsmen and Women!

Awards will be presented during the PT-XPO 2026 on Wednesday March 18th at 2:00 Central Time. The show is located at the Donald E Stephensen Convention Center in Rosemont, IL. For FREE Show Registration please click: www.plasticstechnologyexpo.com/register-now and use code SPEMTD to gain your Expo Pass --

A complete listing of past recipients of these prestigious awards can be found on our LinkedIn page: (11) Post | Feed | LinkedIn (www.linkedin.com/feed/update/urn:li:activity:7389303808016945152/)

Please contact Scott Peters at Scott.Peters@MoldedMarketing.Com for more information or to submit your nominations.



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Continuing our partnership with the Industry and providing recognition for those leaders that have contributed in a significant manner, to this Industry, the Mold Technologies Division of the Society of Plastics Engineers is pleased to announce the 2026 Educational Scholarships and Grants will be known as:

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Scholarship and Grant Applications are available today!

For more information, please contact the Mold Technologies Division Education Chair, Mr. Joe Karpinski, at **JPKarpinski23@Gmail.com**

The application process runs through April 30th, 2026, with funds distribution during the fall term of the 2026 school year.

- ✓ Applicants need not be members of the Society of Plastics Engineers but must be enrolled in a Plastics Related Program.
- ✓ Special consideration will be made for those applicants seeking to convert an Apprenticeship Program into a Two- or Four-Year Degree.
- ✓ Post Graduate Applications will be considered for students seeking Master of Science or PhD educational opportunities specifically in the field of Plastics Tooling and/or Molding.



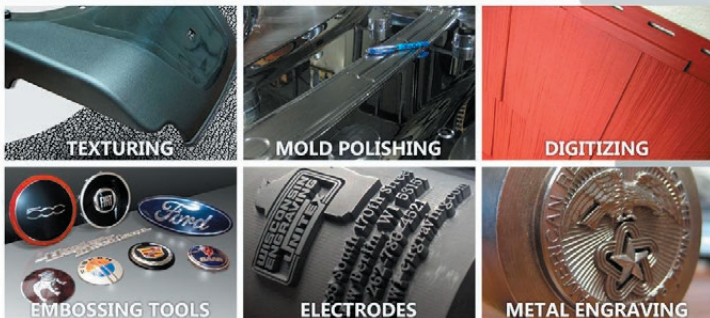
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Board of Directors Mold Making and Mold Design Division SPE

| Board Member | Present | Absent | Excused | Board Member | Present | Absent | Excused |
|----------------------|---------|--------|---------|---------------|---------|--------|---------|
| Darryl Gratrix | | X | | James Jergens | | | X |
| John Berg | | | X | Ron Natale Jr | X | | |
| Scott Peters | X | | | Andy Hartmann | | | X |
| Peng Gao | X | | | Brenda Clark | X | | |
| Greg Osborn | | | X | Davide Masato | | | X |
| Barbara Arnold-Feret | X | | | Joe Karpinski | | X | |
| Rich Martin | X | | | Hari Sharma | | X | |
| Gunakar Golagana | X | | | Anthony Bubay | | X | |
| Jim Piehl | X | | | | | | |

October 15, 2025 4:10 Eastern Standard Time – Meeting start

Roll Call - Rich Marting

Division Chair – Scott Peters

- SPE merger with PIA. SPE will be a division of PIA. Appears PIA has Global aspirations
- SPE will continue to do business as usual for now, will remain a non-profit
- MTD will continue to do business as usual, including global connections, for now
- K show was huge, expensive to attend
- New hot runner technology on display, need to get an article into an upcoming newsletter. Look for white paper.
- There appears to be a global ignorance of MTD - This will be changing
- Calls for award nominees have been posted on LinkedIn. Please share on personal pages
- MTD has reserved spot for PTXPO 2026 courtesy of Gardner Publishing. In return, MTD will give Gardner AD spots in its publications and post personally.
- Scott will be attending the Cleveland section event at Cleveland State University.
- SPE PlastChicks will be addressing a mold making course.
- MTD will be sharing a booth with Cleveland & Akron at the AMI Plastics World in Cleveland in November 2025

Chair-Elect Report – vacant position

Division Secretary Report – Rich Martin - Nothing to report

Division Councilor Report – Barbara Arnold-Feret

- Written report submitted on 10-16-2025 and is on file

Membership Chair – Jim Piehl

- Written report submitted on 10-7-2025 and is on file
- Membership increased by 3 individuals, 2 new and 1 renewal

Sponsorship Chair Report – Greg Osborne - Nothing to report

RETEC Report – Barbara Arnold-Feret - Nothing to report

TPC Report – Peng Gao

- 7 papers submitted for Antec 2026. Need to have 1 updated as not to appear commercial in nature.
- Injection Molding Division and MTD to do a collaboration. 1 session MTD and 1 session Injection Molding.
- Injection Mold Division has 20 papers submitted.
- Speakers to get 50% discount off of registration.
- Peng volunteered to moderate sessions.
- Does Accede want to participate somehow in our MTD session?

Newsletter Editor Report – John Berg

- We have 5 Women Making the Mold participants
- Several technical / best practices articles

Education Chair Report – Joe Karpinski & James Jergens - Nothing to report

Web and Public Interest – OPEN (reported by GK)

- Website being worked on
- Sponsors name/logo being hi-lited. Arranging by level of sponsorship. There is a tab on the home page.
- Putting together a folder for pictures.

Treasurer’s Report – Ron Natale

- Written report was submitted on 10-13-2025 and is on file
- Cash in-flow of \$2100 – dues paid, pass through dues, and CD interest
- Invoices for sponsorship are being mailed out
- Mini-trade fair attended by Ron and Joe K. More of social gathering vs. trade/engineering event. New brochures being handed out. High point – young man met Ron and expressed excitement about trades career and MTD opportunities

International Committee – Davide Masato/Hari Sharma - Nothing to report

Intersociety Liaison Chair – Andrew Hartmann - Nothing to report

Track the Apprentice – Open

Social/Golf Outing – Open

Student Activities – Anthony Bubay - Nothing to report

OLD BUSINESS

- Nothing to report

NEW BUSINESS:

- Nothing to report

The Meeting adjourned at 5:15 PM Eastern Standard Time



Send us your suggestions / nominations for Women Making the Mold

Whether she is any or all of designer, engineer, toolmaker, programmer, project manager, or shop owner we want to meet her and provide a platform for explaining her journey and telling her career story.

Please contact Scott Peters - scott.peters@moldedmarketing.com and John Berg - john.berg@dyntool.com with your candidate's name, contact information, and a few points on her career and the impact she has on our industry.

Our very sincere thanks to the outstanding roster of talent that allowed us to share their career path stories and industry insights.



Newsletter Sponsorship

The SPE Mold Technologies Division Newsletter is now issued four times a year, with readership composed of individuals involved in all aspects of the mold making industry. These issues are made possible through the support of sponsors shown in this Newsletter. SPE Mold Technologies Division thanks these sponsors for their generosity and encouragement in the publishing of our Newsletter.

For information on sponsorship of future issues, please contact:
Greg Osborne - Sponsorship Chair - mldmkr@yahoo.com

Publication Release Dates

Winter Issue
January

Spring Issue
March

Summer Issue
July

Fall Issue
October

SPONSORSHIP INFO 2025-2026

Platinum (\$2500/year)

Ad Specs: 9.75" H x 7.25" W

- Full page color ad in quarterly newsletter for one year circulated to members and distributed at SPE MTD events
- First right of refusal to a tabletop at Technical Tours to educate participants on new technologies/strategies
- Opportunity to submit a technical article for publication in newsletter
- Company logo on signage in MTD booth at AmeriMold
- Company logo on signage at ANTEC
- Company logo displayed at SPE events

Gold (\$1250/year)

Ad Specs: 4.75" H x 7.25" W

- Half page color ad in quarterly newsletter for one year circulated to members and distributed at SPE MTD events
- First right of refusal to a tabletop at Technical Tours to educate participants on new technologies/strategies
- Opportunity to submit a technical article for publication in newsletter
- Company logo on signage in MTD booth at AmeriMold
- Company logo on signage at ANTEC
- Company logo displayed at SPE events

Silver (\$625/year)

Ad Specs: 4.75" H x 3.5" W

- Quarter page color ad in quarterly newsletter for one year circulated to members and distributed at SPE MTD events
- First right of refusal to a tabletop at Technical Tours to educate participants on new technologies/strategies
- Opportunity to submit a technical article for publication in newsletter
- Company logo displayed at SPE events

Bronze (\$250/year)

Ad Specs: 2" H x 3.5" W

- Business card size ad in quarterly newsletter for one year circulated to members and distributed at SPE MTD events
- Company logo displayed at SPE events



MOLD TECHNOLOGIES

OUR MISSION

To be the leading industry resource for technical information to advance plastic mold engineering technologies, while fostering industry growth, education, and leadership.

OUR TECHNICAL FOCUS

The Mold Technologies Division exists to foster growth in the moldmaking and design profession by encouraging the training of moldmakers at the apprentice level, supporting the continuing development of established moldmakers, and by gathering and exchanging information on materials and mold performance.