Mold Making & Mold Design

Division of Society of Plastics Engineers

Volume 36, Issue 1, Winter 2014

Message from the Chair

I can hardly believe we are already well into 2014 and more than half way through my second year (second term) serving as the Chair of our Division. It has been a fantastic time but not without many changes to our board.

To start, our Division Newsletter Editor and Chair Elect – Mr. Tony Lauzon – had a change in responsibilities at his employer. As a result he tendered his resignation from the board in September. Tony will be greatly missed and we thank him for all of his years of service. He has worked tirelessly on our Newsletter and was in the process of developing his business plan for the coming two years as Chair of the Division. As you might imagine, Tony's resignation left a large hole in our leadership that had to be filled quickly. Enter Glenn Starkey.

Glenn is no new-comer to the leadership of the Mold Making and Mold Design Division. He served as Division Chair for two terms in the mid-1990's and was instrumental in my coming onto the leadership. Glenn has stepped in and will assume the role of Division Chair-Elect for the balance of the 2013 – 2014 Operating Year. In July Glenn will take the reins of the Division as he takes over as Division Chair. If you know Glenn at all, you know he is a "High Energy" individual. He has a vision for our organization and the drive to reach goals to put us at the forefront of the industry for information related to the training of Mold Makers and Designers. Glenn is already working with the Society of the Plastics Industry and the American Mold Builders Association to solidify relations and find opportunities for complementary activities.

Scott L. Peters

SPE Mold Making and Mold Design Division
2012—2014 Chair

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A Message from the Newsletter Editor

Cyndi Kustush

SPE Mold Making & Mold Design Division
2014 Technical Program Chair and
Newsletter Editor

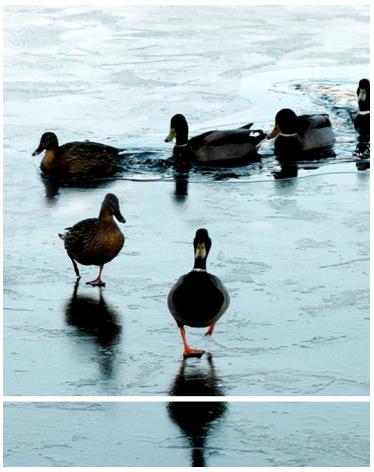
Hello Division Members!

I hope this year has started off on a good note for everyone, and I'm happy to bring you the first of three Division newsletters for 2014. As our Division Chair Scott Peters points out in his message to all, there have been a few changes in our leadership roles and we are in need of others to get involved. Please take a few moments to read Scott's message and also be sure to read messages from Chair Elect Glenn Starkey and our new Education Chair Brenda Clark.

ANTEC is fast approaching, and we invite all who can to join us in Las Vegas, NV, on April 28-30 for this important annual event. Also, I'd like to mention that we still have several cocktail reception sponsorships available. Contact me via email at cyndi.kustush@procomps.com for details. We hope to see you there!

Speaking of sponsorships, our division will once again sponsor the ENGINEER Conference Program at Amerimold! See complete details on pages 28 and 29!

Thanks to Tammy Alongi at Progressive Components for this fantastic redesign of our newsletter. Enjoy the issue!



"You don't have to hold a position in order to be a Leader."

Anthony J D'Angelo

DIVISION HOTLINE

For questions or comments about the SPE Mold Making & Mold Design Division please contact Scott Peters at:

spemmmd@gmail.com
270-215-1503

Message from the Chair *(continued)*

You may recall that Glenn was serving as our Division Technical Program Chair from 2012 – 2014. As a result of his move to Chair Elect with all of duties in that position, we were faced with a need to fill the TPC. Last year Glenn had at his side a fantastically organized lady. She was the glue that held many of Glenn's ideas together. She aided in the coordination of our very successful ANTEC Program and then backed it up with the Amerimold Expo 2013 Technical Program related to Mold Design/ Engineering. Of course I am referring to Ms. Cyndi Kustush.

Cyndi is a natural coordinator. She has taken on the role of Division TPC (Technical Program Chair) and secured several good papers. We expect to have a morning session at ANTEC 2014 devoted to Mold Making and Design. But there is more! In addition Cyndi has worked with the Injection Molding Division to bring about an afternoon joint session. We haven't had a joint session to speak of since ANTEC Toronto. And that was a long time ago. So you can see we have a real jewel in our leadership with Cyndi now firmly in place on the Executive Committee.

Vic Baez has stepped in to cover one of Tony's other roles – that of Division Secretary. He had been on the board for a year and now has shown the character of leadership that the Milwaukee Section knew for many years. We look forward to Vic moving through the other EC Chairs as the years go by and to his continued leadership of our division.

Brenda Clark has penned an introductory article that you will find in the newsletter. Brenda is our Education Chair. She has a desire to meet all of our many friends in the academic arena and to work closely with you with a goal of meeting Grant Requests for support of Mold Making and Mold Design related research projects.

In 2012 our division partnered with several alumni from the University of Wisconsin – Stout Engineering School to establish an endowed scholarship. The scholarship – named **John Leon Abrams Memorial Scholarship –** is focused on Veterans or Family Members of Veterans of the American Armed Services that are students in the Plastics Technology Program at the school. As a result there were scholarships awarded the past two years to two deserving students.

This year Barbara Arnold-Feret will complete her 6th year as Division Councilor. Barbara your commitment to excellence on Council will be missed by our division. You have served admirably and will leave big shoes to fill. We hope that while you are leaving council, you will continue to work with our board and help in the leadership of the division.

By the By-Laws of the Society Barbara must now take a sabbatical year (or three) and we are in desperate need of a Councilor. The Councilor role is one that places you right in the thick of governance of the Society. There the various leaders of the divisions and sections interact with the Executive Committee and the staff of the organization to craft the review and adopt the rules of order under which our society operates.

We are looking for leaders to help us propel the division forward in the years to come. We've included a form on pages 7 and 30 that can be submitted to let us know of your interest in serving on the board. This is an exciting place to give some time. Barbara, Glenn, Wayne, Jerry and I have been serving here since the 1990's and we need your assistance too.

Also on the Ballot you will see a call for Nominations to Mold Maker and Mold Designer of the Year. As in years past, the division, through grants from Progressive Components and the D-M-E Company, is sponsoring these awards. If you, or someone that you know, exhibits leadership in the industry in either discipline please consider making a nomination. All that is required is a brief (less than this article) Career Biography showing the points that you feel qualifies the individual for the award. It is a great way to recognize those folk that many times go by as "Un-Sung Hero's." Please make your nominations TODAY!

Since it is still early in this new year I will close my time with you by wishing every member of the Division a Happy, Healthy and Prosperous 2014. I look forward to great things in the coming year – and you should too!

Scott L. Peters
SPE Mold Making and Mold Design Division Chair, 2012 - 2014

Society of Plastics Engineers
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Newtown, CT 06470 USA

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Last Name (Family Name)

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Mailing Address is: ❑Home ❑Business **Gender:** ❑Mail ❑Female *(for demographic use only)*

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Choose 2 *free* Technical Division and/or Geographic Section Member Groups.

1._____ 2. _____

Additional groups may be added for $10 each. Add Special Interest Groups at no charge.

1._____ 2. _____

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Dues include a 1-year subscription to *Plastics Engineering* magazine-$38 value (non-deductible). SPE membership is valid for 12 months from the date your membership is processes.

Payment Information *Payment must accompany application. No purchase orders accepted.*

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The SPE Online Member Directory is included with membership. Your information is automatically included unless you indicate otherwise.

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By signing below, I agree to be governed by the Bylaws of the Society and to promote the objectives of the Society. I certify that the statements made in the application are correct and I authorize SPE and its affiliates to use my phone, fax , address and email to contact me.

Signature: _____ Date: _____

Technical Division Member Groups - Connect with a global community of professional in your area of technical interest.

❑ Additives & Color Europe—D45
❑ Automotive—D32
❑ Blow Molding—D30
❑ Color & Appearance—D21
❑ Composites-D39
❑ Decorating & Assembly-D34
❑ Electrical & Electronic-D24
❑ Engineering Properties Structure-D26
❑ European Medical Polymers-D46
❑ European Thermoforming-D43
❑ Extrusion-D22
❑ Flexible Packaging-D44
❑ Injection Molding-D23
❑ Medical Plastics –D36
❑ Mold Making & Mold design-D35
❑ Plastics Environmental-D40
❑ Polymer Analysis-D33
❑ Polymer Modifiers & Additives-D38
❑ Product Design & Development-D41
❑ Rotational Molding-D42
❑ Thermoforming-D25
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Geographic Section Member Groups - Network with local industry colleagues.

❑ Alabama/Georgia-Southern
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❑ Brazil
❑ California-Golden Gate
❑ California-Southern California
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❑ Mississippi
❑ Nebraska
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❑ New York
❑ New York-Rochester
❑ North Carolina-Piedmont Coastal
❑ Ohio-Akron
❑ Ohio-Cleveland
❑ Ohio-Miami Valley
❑ Ohio-Toledo
❑ Oklahoma
❑ Ontario
❑ Oregon-Columbia River
❑ Pennsylvania-Lehigh Valley
❑ Pennsylvania-Northwester Pennsylvania
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❑ Pennsylvania-Pittsburgh
❑ Pennsylvania-Susquehanna
❑ Portugal
❑ Quebec
❑ Southeastern New England
❑ Spain
❑ Taiwan
❑ Tennessee-Smoky Mountain
❑ Tennessee Valley
❑ Texas-Central Texas
❑ Texas-Lower Rio Grande Valley
❑ Texas-North Texas
❑ Texas-South Texas
❑ Tri-State
❑ Turkey
❑ United Kingdom & Ireland
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❑ Virginia
❑ Washington-Pacific Northwest
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Special Interest Groups - Explore emerging science, technologies and practices shaping the plastics industry. Choose as many as you would like, at no charge.

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❑ Alloys and Blends-010
❑ Applied Rheology-013
❑ Bioplastics-028
❑ Composites Europe-026
❑ Extrusion Europe-025
❑ Failure Analysis & Prevention-002
❑ Joining of Plastics & Composites-012
❑ Marketing & Management-029
❑ Nano/Micro Molding-023
❑ Non-Halogen Flame Retardant Tech-030
❑ Plastic Pipe & Fittings-021
❑ Plastics Educators-018
❑ Plastic In Building and Construction-027
❑ Process Monitoring & Control-015
❑ Quality/Continuous Improvement-005
❑ Radiation Processing of Polymers-019
❑ Rapid Design, Eng. & Mold Making-020
❑ Thermoplastic Elastomers-006

Recommended by (optional)_____ ID#_____

A Message from the Chair Elect

Glenn Starkey
SPE Mold Making & Mold Design Division
Chair Elect

About two years ago I began a discussion with long-time Mold Making and Mold Design leaders Glenn Beall, Scott Peters and Wayne Hertlein about how our Division can be more viable and relevant in the world we now live in. Where is our place in a Linked-In, Facebooked, “a-month-doesn’t-go-by-where-there’s-not-a-US-trade-show-or-plastics-symposium-event” world? We understand where we brought value in the pre-Internet world and before so many magazine-sponsored events were established. Where do we bring value ahead?

While nobody has all the answers, a direction seems viable. This direction would be to give more face-to-face, knowledge sharing and networking opportunities to tooling professionals than currently exists.

A mold shop owner can join the AMBA and attend their events; an owner of a molding company can join MAPP or SPI and gain value from their events, but what about the mold designer, mold buyer, tooling engineer, plant manager, etc.? This is who our Division can further serve and grow.

Okay, sounds great… But how? We don’t need to reinvent the wheel or fill the calendar by hosting events in addition to the ones mentioned above. Instead we can align with others. For example, last Amerimold 2013, our division advised Amerimold organizers to hold three separate speaker tracks, Engineer-Build-Repair, and our division hosted the Engineer track. It was well attended and went well! Not only was it great to have our Division represented to a packed room of tooling professionals, it also increased our networking with the speakers and the attendees to help us plant the seed for their participation in future ANTEC’s. Pulling from that success, we are in the planning stages now for Amerimold 2014. In addition, I have met with SPI President Bill Carteaux and SPE Chief Executive Officer Willem De Vos, and they extremely and enthusiastically welcome this kind of collaboration with our Division. We are now in the prelim stages of a possible collaboration in 2014, and further collaboration with “non-competing” industry organizations just makes sense.

Excited about the term beginning soon, I look forward to collaborating with Board members at upcoming meetings, and also with Board members, speakers and attendees at ANTEC in April. I hope to connect with you at Amerimold 2014.

If you’d like to be part of continuing what our past leaders have built for us and our Division, please see Page 7, throw your hat in the ring, and join us!

“Management is about arranging and telling. Leadership is about nurturing and enhancing.”

Tom Peters

2014 SPE Mold Making and Mold Design Division Board of Directors Contact Information

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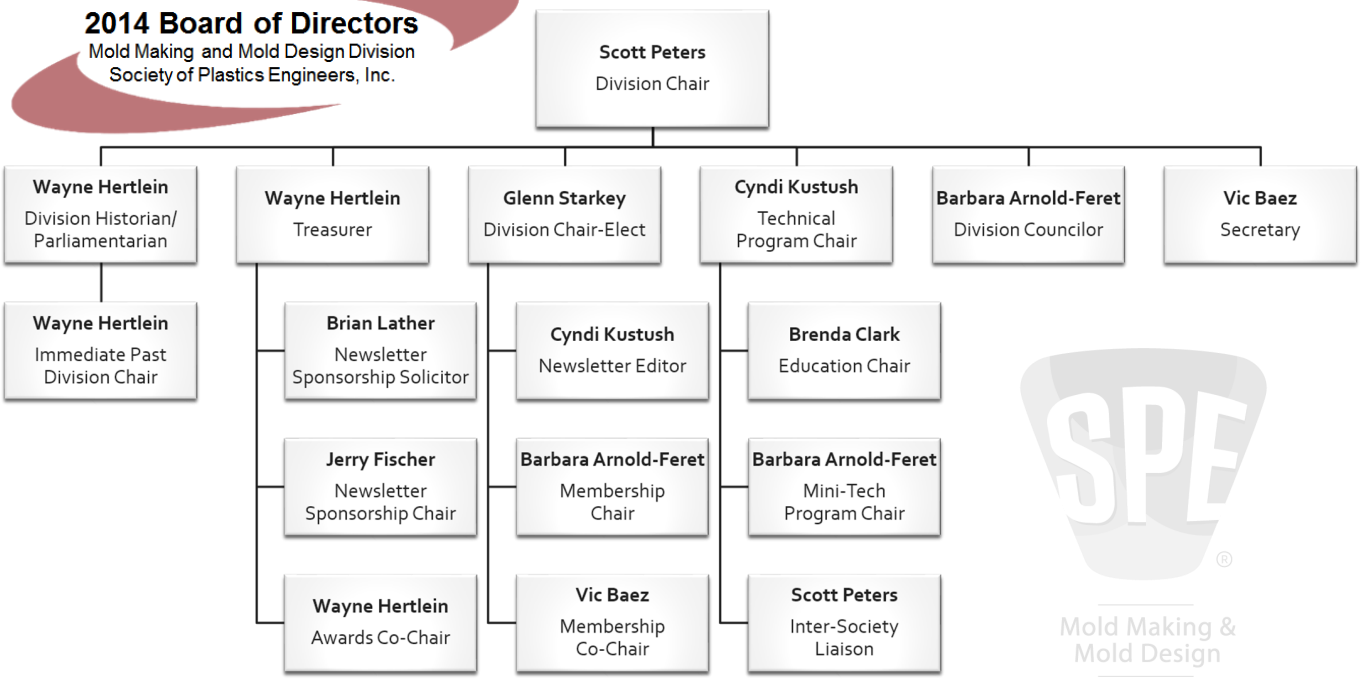
*Note: ** Indicates Past Division Chair*

2014 Board of Directors

Mold Making and Mold Design Division
Society of Plastics Engineers, Inc.



WE NEED YOU!

The Mold Making and Mold Design Division Board of Directors is in need of a ***"Few Good Men and Women."***

If you are interested in the continued betterment of our industry around the globe, and would like to be a part of the leadership within the Mold Making and Mold Design Division, then we have a place for you!

Please add your name to the below form and return via e-mail to **Scott@HunterDouglas.com.cn**

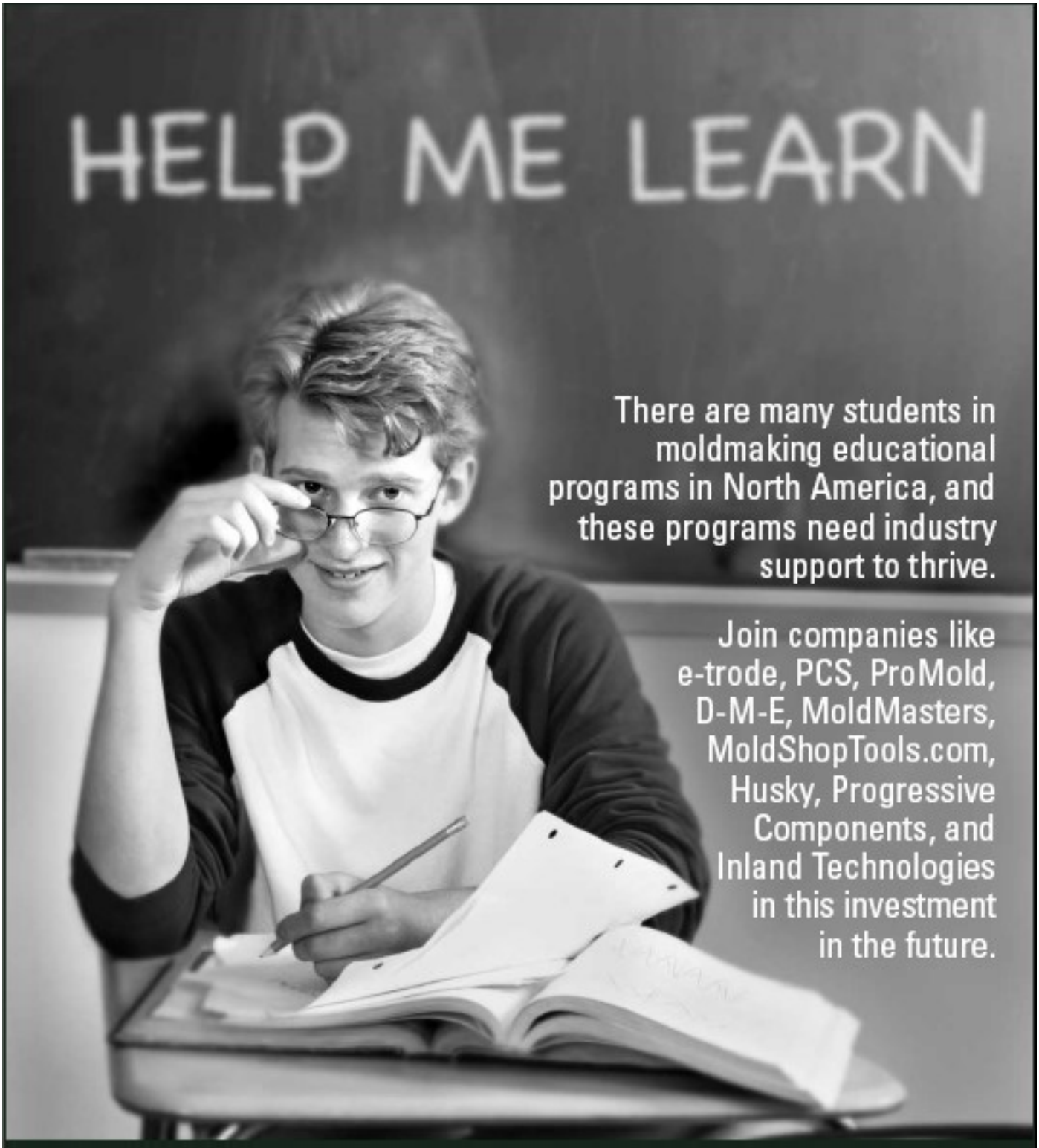
Name:_____

Mold Maker:_____ Mold Designer:_____ Both:_____

Phone:_____

Mobile:_____

E-Mail:_____



There are many students in moldmaking educational programs in North America, and these programs need industry support to thrive.

Join companies like e-trode, PCS, ProMold, D-M-E, MoldMasters, MoldShopTools.com, Husky, Progressive Components, and Inland Technologies in this investment in the future.

I.T. QUARNSTROM FOUNDATION

We are a non-profit working in cooperation with the SPE Mold Making and Mold Design Division. To become a sponsor, email us at info@itqfoundation or visit www.itqfoundation.org.

63 W. Breitmeyer Place | Mt. Clemens, Michigan 48043

A Message from the Education Chair

Brenda Clark

SPE Mold Making and Mold Design Education Chair

Brenda Clark, Application Engineer with HASCO America and a parent of school age children, realizes that there is a need for support in the US education of plastics engineers. Within the Mold Making and Mold Design field a much greater requirement is needed as many of our colleagues are heading towards retirement. The loss of such mentors is beginning to be felt in many companies across the US. Today's education will need direction and assistance that SPE can lend to keep this vocation alive. The next generations are looking for career choices now; let us make sure they see plastics as the possibility. Programs to support the industry on a manufacturing level will also require information and funding. This is where SPE Mold Making and Mold Design division needs to focus.

These are a few reasons why I chose to support the SPE MM & MD Division. I have been selected as the Education Chair for the SPE MM & MD division and wish to introduce myself.

Starting in the plastic industry in the early 80's, unaware of the possibilities before me, I reached my present position not only with hard work but with educational support. The support I did receive was during my internship at a small mold making company with an open minded owner who saw my future possibilities. I am still very thankful even today for the encouragement I received.

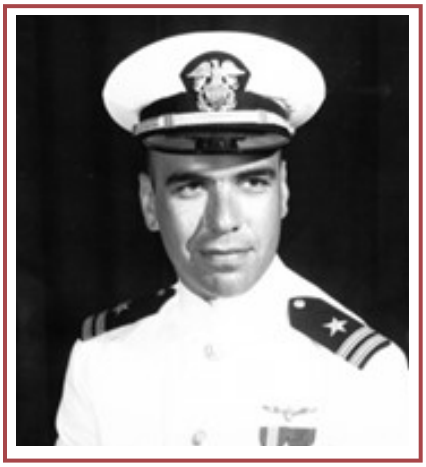
Society of Plastics Engineers played a part in this support during my earlier years and it plays a part now. I have been able to work through all areas of the plastic industry from injection mold design, mold building on to the molding process. Additionally, attending SPE funded plastics courses after receiving my initial degree helped lead the way to greater success. Many of the courses and activities supported by SPE have strengthened my knowledge – a base I need to get the work done. There are numerous locations for information to assist students, workers and owners in the plastic industry.

I look forward to working to build a brighter future in our industry with the next generations and their further education. Working with educators, institutions, and co-involvement with other societies in mold making will only help our industry. Please feel free to contact me if you need assistance or can help with assistance in any of these areas at brenda.hasco@gmail.com.

"If your actions inspire others to dream more, learn more, do more and become more, you are a leader."

John Quincy Adams

John Leon Abrams Memorial Scholarship Committee



The Mold Making and Mold Design Division
The Society of Plastics Engineers

Dear Officers and Members of the MM & MD Division:

The John Leon Abrams Memorial Scholarship Committee extends our most heartfelt appreciation for your most generous and significant contribution to the fund last year. As you know, your contribution helped raise the endowed fund to $50,000. This endowed scholarship will aid our next generation of plastics professionals in gaining their degrees and becoming meaningful contributors to sustain and grow the USA plastics industry.

"This endowed scholarship will aid our next generation of plastics professionals in gaining their degrees and becoming meaningful contributors to sustain and grow the USA plastics industry."

I am pleased to inform you that this year's recipient of the John Leon Abrams Endowed Memorial Scholarship is Michael Beeler, a sophomore from Sparta Wisconsin. Michael qualified with a 3.5 GPA, his participation in on-campus activities and because he is a member of the Stout Varsity Football program, where he is an offensive lineman. Michael's deceased father was a member of the U.S. Army. Michael was selected from a number of well qualified students. He has three brothers and the scholarship help is greatly appreciated by his family. The endowed scholarship for this year was $1,000, along with another scholarship of $2,500 that was placed into his tuition student account at Stout.

We are pleased that the Stout Foundation identification, selection, qualification and award processes worked flawlessly again this year in this process. Last year's selection, William Jaekel with a 3.95 GPA, was the finest person to be the first recipient of the John Leon Abrams Memorial Scholarship. It looks like the trend will continue.

All of us on the Memorial Committee want to express our full gratitude to you for the kind, generous and significant contribution to the John Leon Abrams Memorial Scholarship and honor his sacrifice to our country. Additionally, and more importantly, for the contribution's effect on the educational assistance for the growth of the students striving to make our plastics industry even better. Thank you so much.

Regards,
Bob Dealey
John Leon Abrams Memorial Scholarship Committee

ANTEC 2014 Las Vegas is for Young Professionals!

We've listened to the feedback our younger SPE members have provided from previous ANTEC conferences. So we just wanted you to know we're offering some new, fun and engaging activities at ANTEC 2014 (April 28-30), specifically for young plastics professionals:

- **Plastics Race** - See Las Vegas through the eyes of a plastics engineer as you team up and roam the Vegas Strip to compete for some awesome prizes!
- **Panel Discussion** - Participate in a lively discussion, ask your industry questions, and gain the knowledge you've been looking for including career tips and tricks relevant to you, not that generic advice you find online.
- **Celebration Dinner** - Network over an enjoyable dinner with your fellow peers, future associates and industry veterans. Prizes, awards and more!
- **Mission Possible 2.0** - Your chance to make ANTEC 2015 and SPE what you want it to be.
- **Speed Interviews** - Sharpen your skills at on-site screening visits with prospective employers.

So come on out, and see the new and improved ANTEC!

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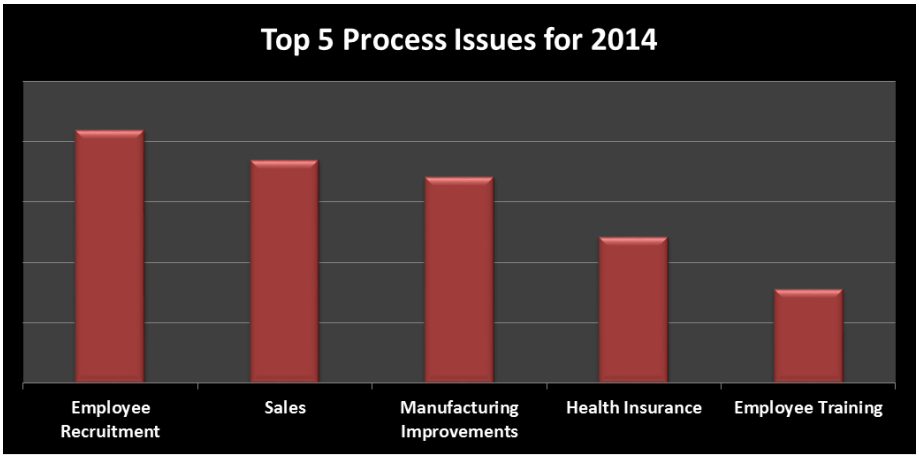
AMBA Business Forecast

Manufacturing—the 2014 Outlook from the Processor's Point of View

By Troy Nix, AMBA Executive Director

Business consultants far and wide pride themselves on telling their clients how important it is to understand their customers. The reasons are pretty clear. The better one can create relationships with the professional making the buying decision, the greater the possibility of getting new business and repeat orders. Since buying behavior is primarily based on both rational and emotional reasons, most decisions are first logical, "Our company needs a mold for this project that looks and functions like this…" and then emotional, "I want to use this brand, made by moldmaker x, because…." Good mold building executives ensure the answers to the because" clause are prevalent in the minds of their customers. They spend time cultivating relationships – building their image, brand and reputation so that the answer to the "because" clause is a no brainer. They spend time researching and educating themselves on their customer's industry.

This article has been written to help moldmaking executives better understand the issues, concerns and overall state-of-being for executives in the plastics and rubber products manufacturing industry segment.



Concerns in 2014

Lack of a Skilled Workforce: Plastics manufacturing executives have a number of issues on their radar screens for 2014, ranging from raw material costs variability and increased government regulation to employee training and production capacity-related issues. Currently, the number one challenge facing rubber and plastics industry executives stems from the lack of availability of a qualified workforce. In fact, leading processing executives now ensure that their company business strategies contain detailed plans for developing and recruiting talent, as their future sustainability depends on their success in this area. Just think, acquiring talent and pulling any qualified/skilled workers from the workforce pool is usually a regional or local competition. The company with the best talent acquisition strategy has an edge on its competition and any other business is contending for the same resources.

Sales Revenue: Finding New Customers or Managing Rapid Growth: True for most companies, the ability to sustain the top line by both retaining customers and landing new ones is a constant issue for most businesses, and so it is for plastics- and rubber-related processing companies. However, the focus on sales revenue, the number two concern for polymer-related businesses in 2014, is really two problems in one: the need for growth or the need to control growth. Some processors must find new customers and increase volume with the clients they have, but many other processors have identified the need to actually control and manage their current state of revenue growth. In fact, over half of the 150 processing executives taking part in a recent survey who listed the top line as their primary concern indicated they are more disturbed with managing and controlling growth rather than finding new customers in the marketplace. Issues connected with rapid growth include the following:

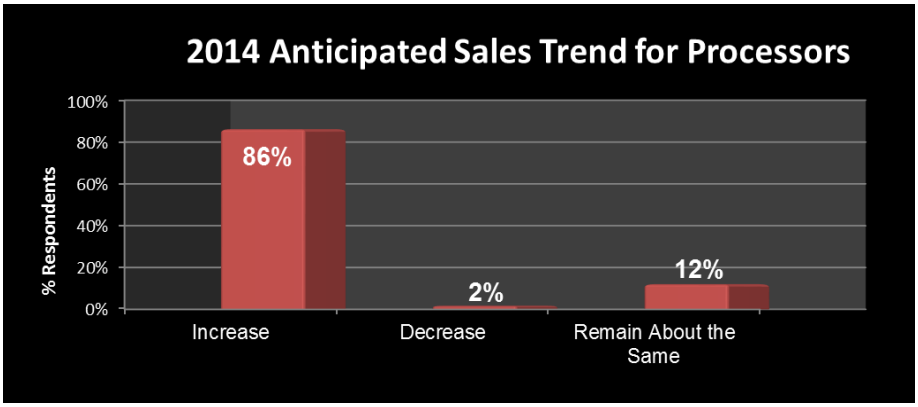
- Becoming less efficient, which directly impacts end-product quality and bottom-line profits;
- Managing cash flow due to the need for more cash outlay. Processors in rapid growth situations must purchase more raw material and invest in more

equipment, maintenance upkeep and people before they get paid by their end customers, which severely limits cash on hand;

- Having less flexibility in meeting unplanned customer demand, as both space constraints and running at maximum production capacity make it difficult to squeeze in an unexpected production run for a needy customer;
- Overwhelming the current workforce, as running lean operations in an uncontrolled growth mode literally can stretch people beyond their boundaries; and
- Staffing operations to meet new sales demand levels. The lack of a skilled workforce significantly magnifies the impact that recruiting, hiring and especially, training have in high-growth situations.

Cost Control and Operational Improvements: Next on the list of issues for rubber and plastics manufacturing operations highlights the need to control rising costs and improve their state of production operations. Executives noted a vast number of challenges in this area including the need to address rising operational costs in order to price their parts more competitively. Over one-third of processing executives noted an increase in raw material cost in the fourth quarter of 2013 and 47 percent of those respondents indicated that not all increases were passed through to customers. Adding to cost-related pressures included escalating health insurance costs along with the increased business cost linked to the Affordable Care Act (AFA).

The need to more aggressively eradicate waste from facilities, improve production processes and change internal cultures to focus more on lean were highlighted as essential activities in addressing operational improvements.



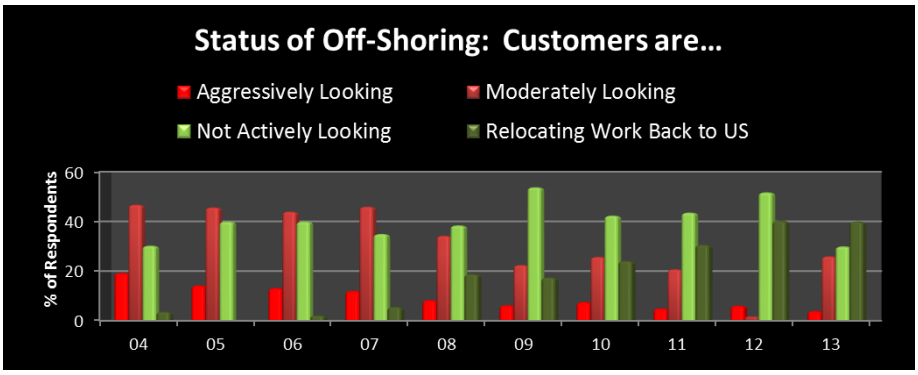
2014 Business Outlook

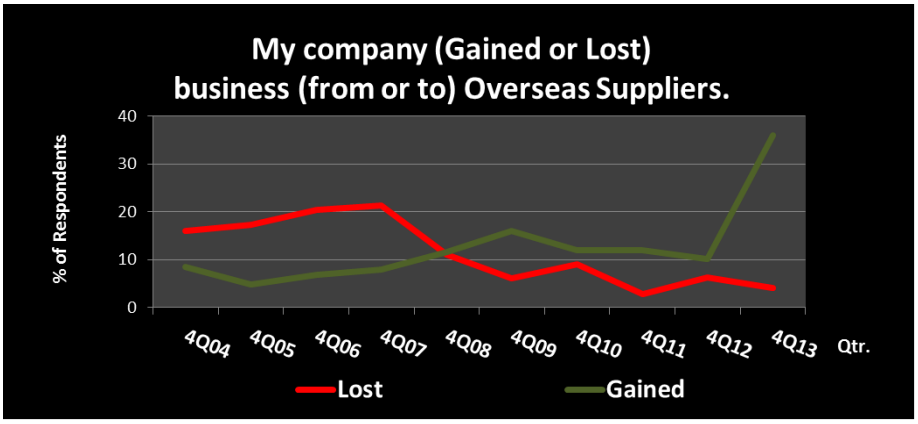
General results of recent economic performance/forecast surveys conducted by the Association for Rubber Products Manufacturers and the Manufacturers Association for Plastic Processors can be construed as very optimistic, as 86 percent of business leaders from over 150 processing companies indicated that sales trends for 2014 are anticipated to increase.

Although many variables are fueling this optimistic viewpoint for the next 12 months, one thing very clear to the executives representing these industry segments is that the reshoring trend is not a myth. Since 2004, rubber and plastics manufacturing executives have been asked annually to notate their customers' view-points on where they plan on placing new business. Over the last decade, there has been a slow shift from OEMs and end-use customers aggressively or moderately looking for overseas sources to actually shifting work back to the United States. To summarize the graph below, shades of green are good for the US, shades of red are bad for the US economy.

Taking this concept one step further, manufacturing executives completing the recent surveys by these two associations were asked to quantify if they have gained or lost business in total to or from foreign suppliers. As illustrated below, 2013 represented the largest variance ever recorded in the nearly ten years of tracking responses to this question, as 36 percent of executives indicated a net gain in business from their overseas counterparts.

In general processing executives plan on reinvesting in their companies over the next twelve months, as 55 percent of





the survey respondents indicated that capital expenditures will increase and 37 percent indicated that their investment levels will remain the same. When asked about where capital dollars will be allocated in the next year, 44 percent of business leaders indicated that primary equipment purchases of injection molding presses and extruding machines would lead the way.

Rounding out the processors' outlook for 2014 was the fact that 43 percent of the respondents indicated a robust first quarter is in store, as 43 percent indicated employment expansion plans and 25 percent are anticipating the need to expand the work week.

**This article is reprinted with permission from The AMBA.*

AMBA Launches New Interactive Website

Through the continued efforts by the American Mold Builders Association (AMBA) to bring value to its members, they recently unveiled a completely new interactive website at www.amba.org.

"The new site was created to systematically improve the connectivity between our members and the industry," said Troy Nix, AMBA Executive Director. The site will be instrumental in the mold building industry and has been designed to allow mold builder executives the ability to reach out to one another to solve problems and build relationships for new business opportunities. "We envision that the site will become an expansive portal for mold building issues and business resources," Nix continued.

The site can be used by association members and non-members alike. In an effort to assist existing members in learning about the many benefits that are available on the new site, the AMBA staff has scheduled webinars walking attendees through tasks such as the importance of logging on to the site to ensure that they take advantage of the discount programs and services provided to members, accessing the "Communicate with Members" page, and the tremendous feature of being able to post and reply on the website.

"Early feedback has been no less than outstanding," Nix said. "Our members have not been aware of the work and effort in the development of this new benefit. This is part of what we announced early in the year about our focus on providing more and more value to our members." The new site is up and running in the first phase of introduction.

"The site will be evolving constantly," Nix said. "New features are being planned including a state-of-the-art search engine that will put OEMs and those in need of finding moldmakers the ability to do just that." The AMBA website can be accessed by going to **www.amba.org**.

> ***"The site will be instrumental in the mold building industry and has been designed to allow mold builder executives the ability to reach out to one another to solve problems and build relationships for new business opportunities."***

Freedonia Report

US Demand for Disposable Medical Supplies to Reach $49.3 Billion

US demand for disposable medical supplies will expand 4.1 percent annually to $49.3 billion in 2018. According to Freedonia analyst Bill Martineau, "An increasing volume of patient activity attributable to an aging population, a rising incidence of medical conditions, and the extension of health insurance coverage by the Affordable Care Act of 2010 will comprise the major factors spurring growth." The US disposable medical supplies market will also benefit from a heightened focus on infection prevention throughout the health care sector. These and other trends are presented in ***Disposable Medical Supplies,*** a new study from **The Freedonia Group, Inc.**, a Cleveland-based industry market research firm.

Based on an increasing number of patients who need surgery or long-term chronic care therapy, drug delivery and related products will remain the fastest expanding group of disposable medical supplies. Total demand registered by this product group will rise 5.1 percent annually to $13.4 billion in 2018. Safety-enhanced devices for the minimally invasive delivery of parenteral medicines, inhalation therapies, and IV and dialysis solutions will lead growth.

Disposable wound management products will post demand of $11.2 billion in 2018, up 3.8 percent annually from 2013. Polymeric tissue sealants, along with alginate, foam, and collagen wound dressings, will realize the fastest growth based on enhanced safety and faster healing properties. Conversely, demand for bandages will expand at a below average pace due to limited pricing flexibility and the overall lack of proprietary types. First aid kits will fare the best among other disposable wound management products, benefiting from trends promoting self-treatment.

Compared to disposable medical supplies as a whole, nonwoven medical disposables will see above average growth in demand. The heightened focus on infection prevention in the health care sector will boost consumption of single use, high value-added nonwoven garments and textiles by hospitals and outpatient facilities. A rising prevalence of incontinence problems attributable to the aging population will impact favorably on retail and institutional sales of nonwoven adult undergarments, shields, and other protective products.

Disposable Medical Supplies (published 02/2014, 416 pages) is available for $5300 from The Freedonia Group, Inc. For further details or to arrange an interview with the analyst, please contact Corinne Gangloff by phone 440.684.9600 or e-mail **pr@freedoniagroup.com**.

Information may also be obtained through **www.freedoniagroup.com**.

**This article is reprinted with permission from The Freedonia Group, Inc (Cleveland, OH)*

US DISPOSABLE MEDICAL SUPPLIES DEMAND
(million dollars)

Item	2008	2013	2018	% Annual Growth 2008-2013	% Annual Growth 2013-2018
Disposable Medical Supplies Demand	32790	40300	49300	4.2	4.1
Drug Delivery & Related Products	7990	10450	13400	5.5	5.1
Wound Management Products	7740	9290	11200	3.7	3.8
Nonwoven Medical Disposables	4410	5590	7000	4.9	4.6
Other Disposable Medical Supplies	12650	14970	17700	3.4	3.4

Industry Event Calendar Listing

Intermold Korea 2015
March 10 - 14
Goyang, South Korea

Medax 2014
March 11 - 12
Tel Aviv, Israel

GPEC 2014
March 12-14, 2014
Orlando, FL

Medical Fair India
March 14 - 16
Mumbai, India

TOPCON
March 24 - 25
Gurnee, IL

BIOMEDevice Boston
March 26 - 27
Boston, MA

Eurostampi 2014
March 27 – 29
Parma, Italy

SIMMEXPO
March 28 – 31
Shenzhen, China

MTA HANOI 2014
April 01 - 03
Hanoi, Vietnam

MEDTEC France
April 09 - 10
Lyon, France

MEDTEC Japan 2014
April 09 - 11
Tokyo, Japan

PLASTEC South
April 15 - 16
Charlotte, NC

Intermold/Die & Mold Asia
April 16 - 19
Osaka, Japan

Milwaukee SPE Edu. Night
April 16
WCTC Waukesha, WI

ANTEC 2014
April 28 – 30
Las Vegas, NV

Plastic Closure Innovations
April 28 – 30
Berlin, Germany

Diemould India 2014
April 17 – 20
Mumbai, India

Chinaplas 2014
April 23 – 26
Shanghai, China

EMEX 2014
April 29 - May 01
Aukland, New Zealand

Plastics in Medical Devices
May 06 – 08
Cleveland, OH

Intertool 2014
May 06 – 09
Vienna, Austria

AMBA National Conv.
May 14 – 16
Milwaukee, WI

Medtec UK
May 14 – 15
London, England

Thin Wall Packaging 2014
May 20 – 21
Chicago, IL

METALTECH 2014
May 21 – 24
Kuala Lumpur, Malaysia

Plastpol 2014
May 27 – 30
Kielce, Poland

CleanMed
June 02 - 05
Cleveland, OH

Medtec Europe
June 03 – 05
Stuttgart, Germany

Die & Mold China 2014
June 04 - 07
Shanghai, China

MD&M East
June 09 – 12
New York, NY

Amerimold 2014
June 11 – 12
Novi, MI

FIP Solutions Plastique
June 17 – 20
Lyon, France

Plastics Design & Moulding
June 18 – 19
Telford, UK

SPE-CS Golf Outing
June 23
Woodridge, Il

Sharing Best Practices

Staying One Step Ahead of Customer Needs

The key to optimal customer support for any mold manufacturer is doing more—from upfront design engineering during the initial stages of product development to emergency mold repair services. And this is exactly the business model Kansas City-area blow moldmaker Creative Blow Mold Tooling offers.

The key to optimal customer support for any mold manufacturer is doing more—from upfront design engineering during the initial stages of product development to emergency mold repair services. And this is exactly the business model Kansas City-area blow moldmaker Creative Blow Mold Tooling offers to stay ahead of its customers' needs.

Creative began building this model in 1984 when the company was established to design, manufacture, repair and reverse-engineer blow-mold tooling for the plastic container industry. Today, the company's plant in Lee's Summit, Missouri accommodates mold manufacturing for wheel, shuttle, injection stretch blow mold and reciprocating screw platforms. This provides the necessary flexibility for the company to meet its customers' diverse and changing needs, and also helps to maximize Creative's productivity and manufacturing processes.

"In our operations, we couple upfront design efficiencies with lean manufacturing techniques to maximize throughput that generates an effective value stream and reduces lead times. This allows us to meet our customer's scheduled deadlines," explains Jim Hensiek, director of business development.

Creative Blow Mold Tooling's facility in Lee's Summit, Missouri.

The "Doing More" Model

Hensiek believes success comes from being different and willing to do more for the customer than just building tools, and that is why Creative invests a significant amount of time and resources in working with clients on front-end design, some of which it doesn't get paid for.

"It's all about the relationship," Hensiek says. "We collaborate with customers on a variety of issues, many times before a project has been approved. Once the tooling is built and delivered, if a customer needs us on site to assist with run-off or other issues, we commit our people there the next day. Staying in touch with our customers, being good listeners and helping them meet their internal company goals have earned us their confidence. This 'trust factor' is essential to becoming a preferred vendor in their supply chain."

With Creative already focused on customer plant productivity, quick turnaround and communication, the logical next step in the company's business model was to initiate a 24-

hour emergency blow mold repair service. According to Hensiek, this means that technicians give immediate attention to molds when they arrive at the dock via a series of tests to determine the severity of the damage. This information is then communicated to customers and turnaround time is defined, putting everyone on the same page with regard to expectations. Once the repair work is complete, the customer is contacted and the mold is returned to the plant.

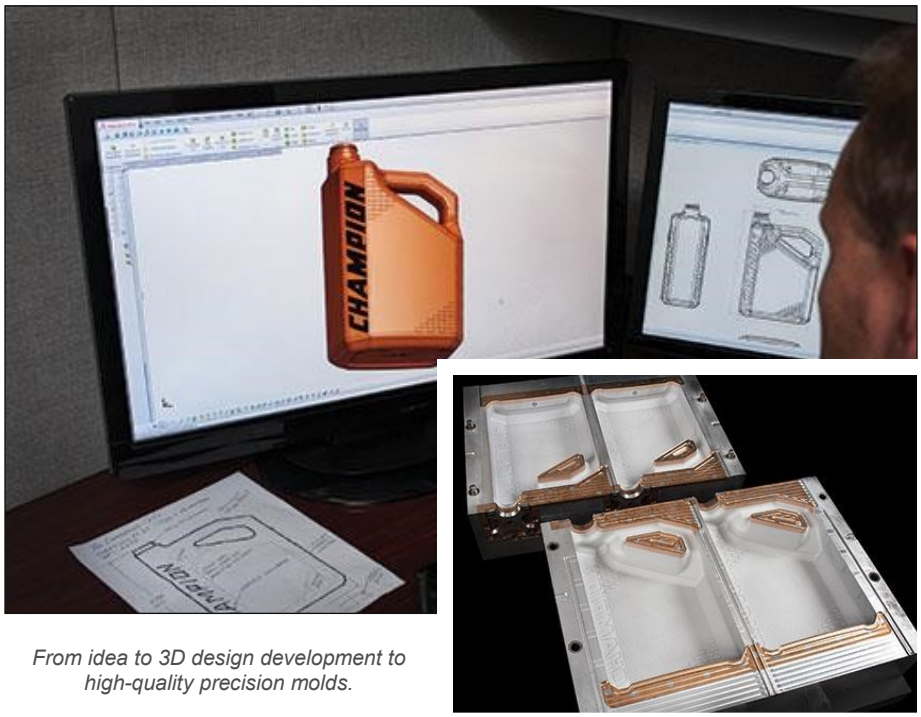
The Team

To successfully accomplish Creative's goals, 35 employees are split among three shifts that cover 24 hours a day, five days a week. According to Hensiek, this team approach ensures that a customer's product is built right, every time, on time—shortening the customer's supply chain.

This team has evolved through an ongoing effort of recruiting and developing dedicated and knowledgeable people to service the customers. Team members possess a long history on both sides of blow molding: experience in plastic packaging plant operations, and expertise in mold design and manufacture. Since this caliber of employee is tough to find, Creative has focused on local high schools, personal relationships and referrals for these new hires. Once on board, each employee is quickly oriented to Creative's processes and methodologies.

Hensiek says the company strives to live up to its core values every day. These values include:

- **Customer focus**. Creative says it is passionate about serving the needs of its customers, whose success is a key measure of Creative's success.
- **Teamwork.** The company encourages collaboration within the team as well as with its extended team of customers and suppliers.



From idea to 3D design development to high-quality precision molds.

- **Respect.** Creative says it strives to treat everyone with respect and dignity, recognizing that innovation comes from considering unique perspectives.
- **Integrity.** The company also says it strives to be honest and ethical in everything it does, without compromise.
- **Excellence.** Creative recognizes that, in order to grow, it must learn, adapt and embrace change through continuous improvement.

"We treat people the way we want to be treated," Hensiek explains. "We foster a team environment where everyone can express their opinion and be confident that their ideas will be considered. We have open communication with our team members as to company performance, new projects in the pipeline, next quarter outlook and issues of importance within the business beyond the work performed each day."

Creative is also fortunate to have close access to community college training opportunities through which employees can expand their knowledge base. The Metropolitan Community College Business and Technology Center in Kansas City offers a variety of classes in CNC machining, CNC programming, lean manufacturing, design for Six Sigma, and supply chain and operations management.

Creative also participates in a consortium of local manufacturing companies that commit to hiring students as interns at the end of each semester. These interns have become a source of new talent for the company.

"Some of our employees have reached a level of expertise that qualifies them to teach these same courses, which can be done adjacent to work schedules," Hensiek says. Creative also offers online and e-learning opportunities, including training through its memberships in the AMBA and NTMA.

The Technology

Along with a commitment to quality personnel is a significant commitment by ownership to capital expenditure investment. In 2009, Creative increased the size of its Lee's Summit facility, adding 10,000 square feet for additional equipment and an expanded inspection room.

In addition, a blend of 19 vertical and horizontal machining centers gives Creative the capacity to take on short-turn projects. By setting up and running multiple components simultaneously, Creative is able to eliminate wait time for completion of certain components prior to mold assembly and inspection. The company also stocks certain new mold components based on customer demand, reducing the setup and machine time required to build a finished part. A new DMG Mori Seiki vertical high-speed machining center and an additional Haas horizontal machining center are two recent additions to the company's machine line up. When it comes to software, Creative's enterprise resource planning system integrates SolidWorks, Pro/E and AutoCad for design, and Mastercam for programming. Shoptech's E2 helps to manage the production schedule and job costs.

All of this investment has re-positioned Creative with its current customers, increasing its capacity to take on more project opportunities while continuing to meet manufacturing schedules and project deadlines.

"Now with the additional production capacity and market confidence in our ability to deliver, we can build new market relationships, adding market share in the extrusion blow molding (EBM) and two-stage injection stretch blow molding (ISBM) markets," Hensiek says.

Creative knows that its goals require ongoing investment in people, technology and processes. The company continues to be committed to remaining lean and highly productive to meet customer requirements and compete for new work.

**This article is reprinted with permission from MoldMaking Technology Magazine, December 2013.*

"Effective leadership is putting first things first. Effective management is discipline, carrying it out."

Stephen R. Covey

Call for Candidates

Mold Maker of the Year 2014 Award

and

Mold Designer of the Year 2014 Award

Every year, the Society of Plastics Engineers, Mold Making & Mold Design Division recognizes both a Mold Maker and a Mold Designer who have made great contributions to their profession and craft, supported and/or advanced the industry at large, and who have played a significant role in supporting their communities.

Anyone may submit a candidate to be considered for either of these two prestigious honors. To submit a candidate, please fill out your contact information, along with the contact information for the award candidate. Please identify the award that you are submitting the candidate for. Also, please include a bio for the candidate which explains why you feel that your candidate should receive the respective award.

Your contact information:

Full name: _____

Mailing address: _____

_____

Phone number: _____

E-mail address: _____

You are submitting the candidate below for the following award(s):

(Please note that in some cases, a candidate may be suitable for consideration for either award. For example: the candidate performs both mold making and mold design.)

☐ **Mold Maker of the Year 2014** ☐ **Mold Designer of the Year 2014**

Also, please note that if a candidate is selected to receive an award, the candidate will receive only one of the award honors.

Contact information for award candidate:

Full name: _____

Mailing address: _____

_____

Phone number: _____

E-mail address: _____

Bio for candidate is attached *(Note: Bio must be submitted for consideration*).

Send Nominations To:

Scott L. Peters
HunterDouglas Mfg Co. China Ltd.
No. 161 Yao Tian He Street
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P: +86-20-322223808 | F: +86-20-32223818
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Tomorrow's Toolmaker

Is Reshoring a Long-term Change or a Short-term Shift?

Everyone has their own take on whether or not reshoring is a long-term shift in manufacturing or a short-term event. That seems to be the dilemma whenever there's a conversation on reshoring. Recently, I had a chance to talk to Patrick Van den Bossche, a partner with A.T. Kearney and the Americas operations practice lead based in Washington, D.C.

One of the first things that made Van den Bossche "doubt" that reshoring would work as a long-term business model is the skills gap that has developed in the U.S. "We see so many unfilled slots in manufacturing," he told **PlasticsToday**. "People with the skills that are required in large scale manufacturing just aren't there. I hear people say 'manufacturing is coming back in a big way' and I say, 'Yeah, right.'"

In Van den Bossche's way of thinking, if you're going to bring manufacturing back to the U.S. you'd better make sure you're ready. "You'd better make sure you have the skills resources issue resolved," he said. "Now we're paying the price for not having the skills in place that we need."

There are several problems here: young people aren't going into the skilled trades in the numbers needed to fill these jobs in manufacturing, and older trades people who were laid off are either finding jobs in other fields (consulting, for example) or taking early retirement and hanging it up. "The average age for many in the skilled trades is 48," Van den Bossche said. "We'll start seeing certain markets where skilled labor gets so tight that the price for that labor will go up and costs will go up."

> *"In Van den Bossche's way of thinking, if you're going to bring manufacturing back to the U.S. you'd better make sure you're ready."*

There are some trade schools starting up again in certain areas, particularly in the South to help the booming automotive industry get the workers t needs. Van den Bossche noted that he's seeing companies training their own such as Volkswagen in Chattanooga, TN, where there is "good old German training programs" in place.

"They're training their employees themselves, which is good from one point of view," said Van den Bossche. "From the point of view of the individual, however, you've been trained to run Volkswagen lines which means you haven't developed the skills that are transportable to other companies. People are getting training but in the basic skills, that seriously limits your opportunities as an individual and to find other opportunities outside of the environment you were specifically trained for."

Another big drawback, Van den Bossche explained, is capital reinvestment. "The majority of companies reshoring manufacturing are bringing it back to existing facilities," he stated. "Many are running their operations on older equipment they mothballed 10-15 years ago. There are stories of employees being brought back to work because they're the only ones who can operate some of this equipment. How long can you be competitive with old infrastructure? Other countries are catching up on the technology front. At some point there's a tipping point and that could shift the balance once again to another place."

There is a good indication that people aren't doing as many Greenfields. "Only about 25 percent of the companies included in our research are doing this

so it's doubtful that will ensure the long-term sustainability of manufacturing in the U.S.," Van den Bossche said.

There are several factors that make shifts like off-shoring and reshoring happen. Energy costs for one. Van den Bossche noted that large manufacturers in certain industries have a big portion of their costs locked up in energy. "Those costs are coming down due to shale gas," he said. "Other countries are sitting on shale gas but it's hard and expensive to get out so right now we have that advantage."

Labor costs are another factor. Companies seek low labor-cost countries that are beneficial for a while, but those change as well. "China is fighting 20 percent per year in labor cost increases," he said.

The American consumer has gotten interested in Made in USA - "a nice dose of patriotism, which is fine," commented Van den Bossche. "Tainted products from China made people think twice about where the things they buy for their families are made, and that creates a bit of resurgence. But what still remains to be seen and tested is how much more consumers will pay for these things. Energy, labor, premium for Made in USA, local suppliers, it's all pretty much in flux."

Perhaps we need to get used to short-term shifts in everything - the economy, manufacturing, jobs, even the climate. Most of us in the manufacturing sector know by now that nothing is certain but change. It's being prepared for change that's key. We'll never go back to the manufacturing world we had after World War II; the world of the skilled trades people that my Dad grew up in and became a part of.

Van den Bossche concluded that the "ups and downs follow each other in ever faster cycles" and that may be something we need to keep in mind if we're going to just accept that perhaps reshoring is a short-term phenomenon.

**This article is reprinted with permission from Plastics Today, February 19, 2014.*

Challenges for the Tooling Industry will Impact Processors

By Laurie Harbour, Harbour Results Inc.

Plastics Business
Strategies for Today's Plastics Processors

In October of 2013, Harbour Results, Inc. (HRI) and the Original Equipment Suppliers Association (OESA) collaborated on a study of automotive tooling. The initial goal for this benchmarking study was to analyze payment terms and sourcing practices within the industry, which are two very hot topics for tool suppliers. However, the study focus evolved into an analysis of the entire tooling value stream and was designed to provide insight into and understanding of the roles of each stakeholder: OEMs; Tier 1 and Tier 2 parts suppliers; and tool suppliers. The study's objectives were to uncover the root cause of inefficiencies, waste and risks impacting the supply chain; identify best practices; and provide cost-saving opportunities to the entire industry.

Nearly a year was spent on research for this study, and it included formal interviews with seven OEMs (data gathered from three additional OEMs was informal), nearly 50 Tier 1 and Tier 2 suppliers, more than 50 tooling suppliers and various industry experts. In addition to these interviews, OESA conducted a survey of part suppliers and tool suppliers. This survey was executed with support from other associations as well, including the Manufacturers Association for Plastics Processors (MAPP). The data was used both to supplement interview data and validate key findings. The final report totals nearly 500 pages of detailed analysis on the tooling industry with a 43-page Executive Summary.

The Harbour team uncovered some very interesting facts that affect not only automotive suppliers purchasing tools, but also manufacturing suppliers in other industries that are purchasing dies and molds for their businesses. Given Harbour's extensive work in plastics processing, we wanted to look more closely at this data and the effects on processors as they acquire molds in future years. The following are some of the key facts from the study.

"The study's objectives were to uncover the root cause of inefficiencies, waste and risks impacting the supply chain; identify best practices; and provide cost-saving opportunities to the entire industry."

Size of the Market

The HRI team spent many months gathering data on the number of tool shops in North America. Using several lists and recent visits to more than 120 shops in Canada and the US, HRI determined that the focus was to be on tool suppliers primarily supporting the automotive industry and with the size and capability to grow. Although focused on automotive tool suppliers, the research led HRI to study the entire industry. According to the Bureau of Labor Statistics, there are more than 5,000 shops in the US; however, this includes every small shop under $1 million in revenue that makes small details, heat treat, graining and parts for tooling. These shops do not have the strength and capability to grow with the automotive demand coming in the future. Therefore, these shops were excluded from the analysis, and focus was placed solely on mid-sized to large shops. Following are the key figures from the research on the size of the tooling industry:

- HRI estimates there are 625 US tool suppliers and 125 Canadian shops focused primarily on the automotive industry. Many of them build tools for other industries, such as appliance and recreation, but these shops have a majority of their business in automotive – they make 80 percent of the primary critical tools in a vehicle.
- The average size of the North American tooling supplier is between $15 and $18 million. Many in the industry believe there are a high number of large tool suppliers that are $50 million and above, but in fact there are only a handful of these large tooling suppliers (approximately 15 to 20).
- This focused group of tool shops directly employs approximately 75,000 people (an average of 100 people per $15 million shop) and a total of 187,500 workers when the support shops are included.
- Utilizing the 750 suppliers in North America and the average size of a shop, the industry capacity for the US and Canada is approximately $11.25 billion. Looking at data on

exports from LCC (low-cost country) regions, there are few shops out of thousands that support the majority of exports to North America for automotive. Based on estimates, HRI believes there is approximately $0.5 to $1.5 billion in imports from LCC adding to the capacity. Not included in this number is the amount of tooling coming into North America from Europe, Japan and other non-LCC countries to support foreign OEMs with their production. This information is too difficult to gather and not available from the OEMs.

- The average number of major tools per vehicle is between 2,000 and 3,000, depending on complexity of the vehicle. However, the total number of tools per vehicle, including powertrain, is closer to 7,000. Tools range in cost from $5,000 to $1 million. For example, a front fascia tool can range from $500,000 to $1 million for the injection mold alone. In addition, each assembly may require more than 35 tools to complete.
- HRI estimates from interviews that the OEMs in North America spend approximately $9.25 billion on vendor tooling, on average for vehicles produced in North America. At 2012 vehicle volume levels, the average North American vendor tooling content per vehicle was $550.

These facts about the industry are critical to understand before moving forward with the other findings of the study. The OEMs spend billions of dollars on vendor tooling for their vehicles, and their current battle is the ever-changing consumer. Growing product complexity and mass customization are all forcing more tools per vehicle (20 percent more than 10 years ago per vehicle), and costs are rising. This same phenomenon is happening in every industry of manufacturing. Whether it is

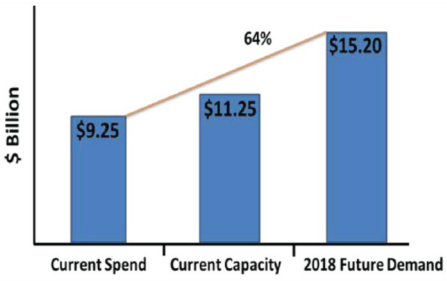

Chart A.

appliances, medical equipment or devices, consumer goods or industrial products, the changing consumer wants to mass customize the product and have more features. Every industry is struggling with rising costs and the need for more capacity while trying to meet these consumer demands. What is the future demand for tooling in the automotive industry?

Tooling Growth Results in Capacity Issue

It became critical to HRI to define the size of the vendor tooling industry in North America for today and forecast where it would be in five years. *Chart A* reflects HRI's analysis of the estimated size of the North American automotive tooling industry in 2012 to be $9.25 billion. This number represents tooling purchases for North American vehicle programs only.

Based upon discussions with individual tool shops and proprietary capacity surveys done on the industry, HRI then defined the actual capacity in the market for tools in North America to be approximately $11.25 billion, or a 79 percent utilization rate. Utilizing many sources of data, HRI is forecasting a growth in total OEM tool spend to $15.20 billion by 2018, or a 64 percent increase over the current spend.

HRI's 2018 forecast uses 2012 as a baseline for complexity and tooling cost per launch. The 2018 forecasted value is based on the number of vehicle launches planned in North America for that year (source: LMC Automotive).

Chart B further validates the growth of tooling by analyzing the foreign OEMs' growth in North America. This utilizes the number of launches each year (source: LMC Automotive) and plots the percentage of tooling available for sourcing by OEMs. Using each company's number of launches and the data shared with HRI on the planned percentage of tooling sourced locally, HRI estimated this growth

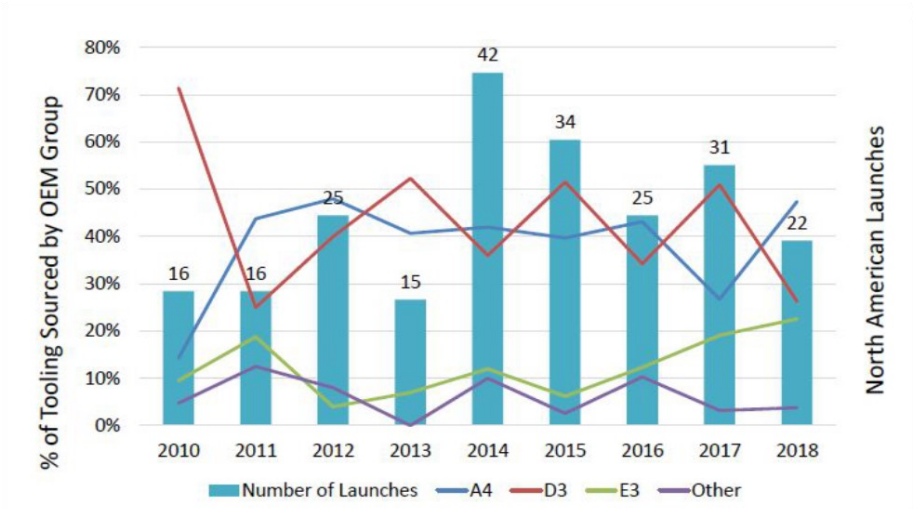

Chart B.

through 2018. The chart shows the substantial growth, particularly for European OEMs that are relatively new to this country.

The bottom line to the study research shows a $6 billion capacity gap by 2018. Further, HRI believe that this number is conservative and could be higher if current demand for new vehicles continues.

As a result of this growth, the main question to be answered is where will this additional capacity come from? Some believe the simple answer is increased sourcing to LCCs. However, in looking at China where a support infrastructure is in place, there are several evolving indicators that lead to a conclusion that this is not a viable option. HRI has spent a great deal of time in the past three years in Chinese tool suppliers (almost 60 facilities). Additionally, we have studied the economic data in this region. As *Chart C* indicates, HRI believes that there are several factors that will make LCCs, and China in particular, less of an option to meet this growing tooling demand in North America and around the globe.

All in all, the factors working against China seem to be higher than those in favor of moving production or tool manufacturing to the China market. Is Europe a region that could fill the capacity gap for tooling? The short answer is no. In fact, part of the growth in North America is due to the European companies moving their tool sourcing to the region in which they are building vehicles. Many European companies have said that North America is becoming a low-cost country to them, and they are asking their German tool suppliers to set up shop in North America as a potential solution to the growing problem. There really are no other regions of the world that could help close the capacity gap for vendor tooling because the infrastructure is just not there.

What Does it Mean to the Plastics Industry?

Although much of the research and discussion has been driven specifically to the automotive industry and its tool suppliers, the message is a significant one to those processors that are buying tooling to support other industries as well. The auto industry tends to be a microcosm of a larger issue; in this case, it's further tightening of pricing, tied to a capacity shortage of tool suppliers. Recently, Harbour spoke to a group of smaller mold builders that were not necessarily tied to the automotive industry. They indicated to Harbour that they have plenty of capacity and are ready to be the solution to the industry's issues. However, a survey of their customers shows that those tool suppliers are not price competitive in today's market, particularly when competing with China and even while prices are rising.

The business owners and leaders running plastics processing businesses today need to share more information and data with their local tool suppliers and get them engaged with associations like the American Mold Builders Association (AMBA) and Manufacturing Association of Plastics Processors (MAPP) in order to support them in their efforts to improve their competitiveness. Too often, processors do not provide the necessary feedback to tool suppliers that is needed to convince them they need to work harder at improving their businesses.

Takeaways for Plastics Processors

Processors need to be cautious in how they leverage current tool suppliers against suppliers in China. HRI has seen many North American tool suppliers let their customers send tooling to China, oftentimes hoping lessons will be learned. This has left some processors in a difficult situation.

It is critical for processors to work harder to develop relationships with their tool

Chart C.

"The processors that have had the most successes have forged high-level relationships with their tool suppliers. "

suppliers. With capacity constraints throughout the tooling industry in North America, many suppliers are stepping forward to grow their businesses and capture market share in new industries. If relationships are not solid, those suppliers may find new and better customers, and processors may find themselves struggling to locate available capacity.

Processors need to be more diligent about assessing their tool suppliers. It is customary to assess component suppliers, but infrequently do tool shops get assessed and/or audited by their customers. Processors should use these audits to assist the tool supplier in providing better service and product to the processors' businesses.

Tool suppliers have become quoting factories, driving tremendous transactional waste. Processors can do their part by not contributing to this quoting machine. Respect the tooling suppliers' time.

Plastics processors can drive improvement at the tool supplier if they become an "easy" team to work with. "Easy" does not mean that the processor pays more, but it does mean that the processor is easy to communicate with and to work with. Collaborate with tool suppliers and greater efficiency will be returned.

The easiest way to gain efficiency at a tool supplier is by having visibility into the business load and schedule for an extended period of time. If processors can collaborate and share their Strategic plans with their tool suppliers, the tool suppliers will better be able to plan and manage their workflows.

The processors that have had the most successes have forged high-level relationships with their tool suppliers. They have become 'clientele' to a handful of shops and consistently outsource their needs to that shop. As a result, they are getting more value from that shop.

Some processors have considered bringing tool building in-house, but they have struggled to find talent. In the end, most have chosen not to expend resources into tool building, because they realize it is not their core competency. This is why collaboration is so critical.

It also is critical to only refer tool suppliers selectively; only the closest strategic partners should have access to a processor's best shops. This is difficult, particularly when in an association with other great processors, but the best resources must be protected.

Tool suppliers from some LCCs will fill the capacity gap identified in the North American automotive industry and other industries because manufacturers will not stop launching new products. It is critical for processors and tool suppliers to work together to capitalize on this opportunity. Why not have North America reclaim this effort by supporting North American plastics business growth?

Laurie Harbour is president and CEO of Harbour Results, Inc. Combining operational and financial advisory expertise with industry analysis and thought leadership, Harbour Results delivers results that impact the bottom line. The company specializes in manufacturing, production operations and asset-intensive industries, as well as a number of manufacturing processes, including stamping, tooling, precision machining and plastics. For more information visit ***www.harbourresults.com****.*

This article was originally featured in the* ***2014 Winter Issue* *of* ***Plastics Business Magazine****, and is reprinted with their exclusive permission.*

SPE Mold Making and Mold Design Division Sponsors Amerimold Conference Sessions

Your Mold Making and Mold Design Division will once again sponsor the **ENGINEER Conference Program** at this year's Amerimold Expo, which will be held June 11-12, 2014, in Novi, MI.

Our Division Technical Program Chair, Cyndi Kustush, and Chair Elect, Glenn Starkey, are working with Gardner Publications (MoldMaking Technology Magazine) to develop an exciting and informative conference program. SPE members are encouraged to register and attend the conference as well as take in all that's exhibited on the showroom floor.

ENGINEER

Sponsored by Society of Plastics Engineers, Mold Making and Mold Design Division

Goal: To examine the technologies and best practices that are necessary for mold buyers and mold builders to make critical decisions when it comes to de-risking the product launch and making that quoted cycle time. Topics will include part/mold design and simulation, additive manufacturing, conformal cooling short-term goals for getting qualified parts and long-term plans for managing the life of the program.

Who Should Attend: Those on the front line of decisions being made between the mold builder and buyer—Mold Shop Senior Management, Mold Procurement, Mold Designers, Part Designers, as well as processing and troubleshooting personnel.

Moderator: Glenn Starkey, Society of Plastics Engineers, Mold Making and Mold Design Division Chair Elect

Following is a description of the division-sponsored ENGINEER portion of the 3-tiered conference (other segments focus on BUILD and MAINTAIN). Visit www.amerimoldexpo.com for complete event details!

8:15am-9:00am | PANEL 1: Reactive and Proactive Simulation

Where does simulation fit in and where doesn't it? What Scenarios fit for one approach vs. another? Both reactive and proactive approaches will be covered, including discussion about how moldmakers get paid for this service and how to avoid common "enemies" that cause unscheduled downtime.

CAE Services, Tim Lankisch / Moldex3D, John Snawerdt / Extreme Tool & Engineering, Eldon Leidich

9:00am-9:45am | PANEL 2: The Dollars and Sense of Additive Manufacturing and Conformal Cooling

Meeting customer needs today requires going beyond just building a mold; it means recommending techniques for cycle reduction, too. Panelists will share where it makes dollars and sense to apply alternative manufacturing and cooling approaches, and where it does not. Attendees will learn the importance of doing more engineering than traditionally required so their customers can achieve the increase in productivity they desire, and so the mold builder can secure future business.

Robert Beard & Associates, Bob Beard / Autodesk, Jay Shoemaker / Linear Mold & Engineering, Lou Young

9:45am-10:00am Break

10:00am-10:45am | PANEL 3: Demystifying Venting Options: What Approach Matches What Problem?
Many part quality issues—weld lines, flow lines, sinks, bubbles, burning, dimensional stability, etc.—can be traced to inadequate mold venting, which is still considered a "black art" at times. Panelists will review areas to consider when assessing venting effectiveness and address strategies for optimal venting. They will begin with an overview of several best practices and then do a closer examination of the top two. Attendees will learn how to eliminate or decrease adjustments to the tool during validation, yielding better part quality at an improved cycle time.

Progressive Components, Ken Rumore / International Mold Steel, Paul Britton / DME, Bob Salhaney

10:45am-11:30am | PANEL 4: When Things Go Wrong: Firefighters Share Experiences from the Field
OEMs want to know what their suppliers are doing to avoid being plagued by short- and long-term tooling problems, and these "tales from the front lines" can guide specifications to prevent issues from arising.

SIGMA Plastic Services, Inc., Matt Proske / RJG, Rod Groleau / MGS MFG Group, Kevin Klotz / Extreme Tool Engineering, Mike Zacharias

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Mold Making & Mold Design

UPCOMING DIVISION BOARD MEETING

April 28, 2014 at ANTEC 2014

UPCOMING DIVISION BUSINESS MEETING

April 29, 2014 at ANTEC 2014