

# Mold Technologies Division



Division of Society of Plastics Engineers

Volume 37, Issue 3, Quarter 2 2016

## Message from the Chair

The first half of 2016 is in the books, and many mold building companies are happy to have it in the rear view mirror. In my travels to SPE events, as well as trade shows and conferences, I'd often here statements such as these:

"In November of 2015 we felt great about the year ahead, but by the third week of January, I was calling customers wondering where some promised projects were."

"Last year was solid, but January through March was one of our worst periods. Things opened up in April, and now we're feeling ok about our backlog for the first time in a while."

As always, some mold building companies have been strong and steady, but overall activity may have lowered the most since after the 2008/2009 recession.

In addition to speaking to individual mold builders, a more macro view comes from talking with their suppliers (steel, carbon graphite, etc.). Usually I'd hear that Q1 was slow but then Q2 was positive and for some gained ground to put their year back on track.

Your SPE Mold Technologies Board is working to keep our Division on track, with these initiatives in recent months:

- Our Antec conference, with leadership provided by Technical Program Chair Brenda Clark, contained excellent speakers in a program that didn't miss a beat. It all began with a Plastics University mold design/mold build area for students, with the following day our Division's program of 5 speakers, covering topics such as cooling channel design to methods to determine pressure drops in molds.
- This Division's Education Chair, Greg Osborn, sent out 140 grant applications, and monies were then awarded to UMASS Lowell, Dunwoody College, and Penn State.
- Our Division has named the Annual Mold Designer of the Year and Mold Builder of the year awards, recognizing those who exemplify technical excellence along with "giving back" actions over the years.
- We exhibited at the AmeriMold exhibition, with new signage and materials, meeting, greeting, and pressing the flesh with our industry colleagues.

Thanks to our 2015/2016 Board of Directors for keeping things humming along. And, if you'd like to be a part of the Mold Technologies Division, either as a Director or as a conference speaker, please contact me at [gs@procomps.com](mailto:gs@procomps.com).

While we can't control the ups and downs of the mold world, becoming active on the SPE MTD team can put you in the company of likeminded colleagues networking with one another while advancing our industry together.

A handwritten signature in black ink, appearing to read 'Glenn Starkey'.



**Glenn Starkey**

SPE Mold Technologies Division Chair

## In This Issue

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- Meeting Minutes (23MAY16)
- Industry Events
- Tomorrow's Toolmaker

# A Message from the Newsletter Editor

## *It's a Wrap for Another Great ANTEC!*

ANTEC 2016 was a great event as usual. While the Mold Technologies Division did not have enough papers to warrant its own session, teaming up with the Injection Molding division for a joint session worked out perfectly. After all, there would be no injection molding without a mold!

One of the more interesting presentations was given by Philipp Nikoleizig from the Institute of Plastics Processing at RWTH Aachen University: *Inversed Cooling Channel Design for Injection Moulds based on Local Cooling Demand and Material Properties*. Nikoleizig noted that this cooling method is the answer to optimizing cooling in complex molds and parts because, as we know, cooling affects part quality. Shrink is a problem as uneven shrink causes voids.

Ten institutes working on 20 projects found that inversed cooling improved the quality of molded parts and resulted in more dimensionally accurate parts. "With inverse cooling all output variables are known, and input variables are partially known," said Nicoleizig. "Using turbulators with a focus on heat transfer brings more turbulence to the fluid which means you can manipulate heat transfer and can adjust the heat to the local demand of the part."

David Hoffman, Senior Instructor, Plastics Education & Training for the American Injection Molding Institute, spoke on *Evaluation of Methodologies Utilized to Determine the Pressure Drop Throughout an Injection Mold*. What happens to plastics as it flows through a mold and contrast that to conventional pressure drop for PC, ABS and PP homopolymers in an eight-cavity cold runner mold using pre-gate and post-gate sensors. A good mantra to remember: "Pressure grows as material flows."

There were a number of good sessions on design – which ran concurrently with the Injection Molding and Mold Technologies Divisions joint sessions – so I caught the few from each session that I could. Design is being emphasized more and more, and it would seem that OEMs are starting to understand the value of bringing in the mold designer collaboratively with the part/product designer to ensure a better quality product in a more cost-efficient, highly productive mold.

ANTEC has become a very valuable resource for the plastics industry over these several decades, and there's always good information that spans a range of topics no matter what your interests. We can always use more papers from the Mold Technologies Division and I would encourage you to think about next year's ANTEC 2017 being held in Anaheim, CA, May 8-10, and present some of your best technical or business challenges that will help the industry become better and stronger.

*Clare Goldsberry, Editor*



**Clare Goldsberry**

SPE Mold Technologies Division  
2016 Newsletter Editor

## **DIVISION HOTLINE**

For questions or comments about the SPE Mold Technologies Division please contact Glenn Starkey at:

gs@procomps.com  
1-800-269-6653

# SPE Mold Technologies Division Awards Mold Maker and Mold Designer of the Year

The SPE Mold Technologies Division presented its annual Mold Maker and Mold Designer of the Year Awards to two deserving and well-respected people in their fields.

Mold Designer of the Year was awarded to Wes Cobb, owner of Technical Design Associates Inc., in Brevard, NC. Cobb began his career at Alliance Mold Company in Rochester, NY, in 1973. He relocated to Brevard, NC in 1979 where he worked at several different shops as a chief mold design engineer before starting his own firm in 1989. Cobb also was instrumental in assisting many young and upcoming mold designers in the area through an apprenticeship program he started at Asheville-Buncombe Technical Community College. That program has been key in developing mold making and mold designers since the late 1980s in the region.

Cobb's experience and expertise in mold design spans many different types of molds from unscrewing to molds for over-molding, and hot runner designs. Over the 27 years he has owned his business, Cobb noted that there are not many plastic products that he has encountered that he could not design a mold from which to make the molded parts. "If a mold was needed to mold parts, I have seen it," Cobb said.

As an SPE member for over 20 years, Cobb has contributed many hours of service to the mold design industry.



*Pictured above is Brenda Clark (HASCO America, Inc. / Mold Technologies Division TPC) presenting the Mold Designer of the Year Award to Wes Cobb, owner of Technical Design Associates Inc., in Brevard, NC.*



*Members of the SPE Mold Technologies Division, standing from left, Greg Osborn, Cynthia Kustush and Division Chair Glenn Starkey, present Geoff Luther, president of A-1 Tool Corp. with his Mold Maker of the Year award and scholarship check. Luther and Mold Designer of the Year Wes Cobb each received a \$500 scholarship check that will be presented to a trade-related school of their choosing.*

Mold Maker of the Year was awarded to Geoff Luther, a member of the team at A1 Tool. Luther is highly respected in the mold making community, as leader of one of the largest and most technologically advanced mold shops in the Midwest. In addition to his extensive skills and expertise in mold making, Luther is active on the American Mold Builders Association's Chicago Education Committee charged with promoting the exciting careers in mold manufacturing to high school students and educators.

As if this all wasn't enough to keep Geoff busy, he also serves on his local high schools' committees and creates employment opportunities for students. Geoff's leadership runs in the family, as his father Roy Luther of Triangle Tool received this award in 1994, the only father/son recipients.

Congratulations to both Wes Cobb and Geoff Luther for their many contributions to the mold design and manufacturing industry, and their tireless efforts in promoting the trade.

# SPE Announces a Practical New Program

Leveraging a long association with universities and a large number of plastics industry professionals, SPE has created an Industry Academia Collaboration (IAC).

The program's goal is to promote a mutually beneficial collaboration between industry and academia by facilitating research and development projects relating to plastic materials, processes, products and technologies.

Many companies are now unable to find enough technically competent employees to research new material, or to develop new machinery, products and emerging markets. Many universities have the technical expertise to undertake research or develop projects of this type on a contract basis. These need not be large-ticket, multi-year projects. Small projects will be treated with equal respect.

SPE's Industry Academia Committee members will review project requests and put the applicant in contact with universities equipped and staffed to handle that type of project.

For additional information online, log onto [www.4spe.org](http://www.4spe.org); click on "Resources," then click on "Industry Academia Collaboration"; or contact IAC Chairman Dr. David Bigio at [dbigio@umd.edu](mailto:dbigio@umd.edu).



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# Muesburger Introduces New Products for Greater Efficiency

Steadily increasing quality requirements in mold making demand the highest manufacturing precision from standard parts manufacturers. This applies not only to moulding plates but also to insulation boards. Therefore Meusburger Georg GmbH & Co KG, Wolfurt, Austria, now offers an optimised standard for insulation boards with a maximum precision through 0.02 mm parallelism over the total length and width. The high-precision ground plates are offered in strengths 330 N/mm<sup>2</sup> and 600 N/mm<sup>2</sup>. The insulation boards are coordinated to the Meusburger standard plates system and are available in the standard parts range from stock and custom-made as per drawing.

Meusburger also introduced its new E6570 Terminal block for limit switches that makes it possible to check several limit switches on the machine at the same time with only one connector. The new product offers the optimal basis for a clear and easy process monitoring. Up to six limit switches can be used depending on application with a normally open or normally closed contact function. The integrated LED lights make it possible to control the function of every individual limit switch. The housing is manufactured out of powder-coated die-cast aluminum which also allows for use under extreme conditions. The



E6570 Terminal block and the matching accessories for the connecting of the limit switches are immediately available from stock.

With the original Staubli-RPL system Meusburger relies on a tried and trusted technology for temperature control. This coupling system is used in many different areas of application such as, for example, the automotive industry. The optimally designed geometry guarantees a high flow volume. Red and blue rings on the bushes and couplers enable an easy and fast identification of the circuits. Maintenance is quick and easy with the interchangeable external O-ring seal.

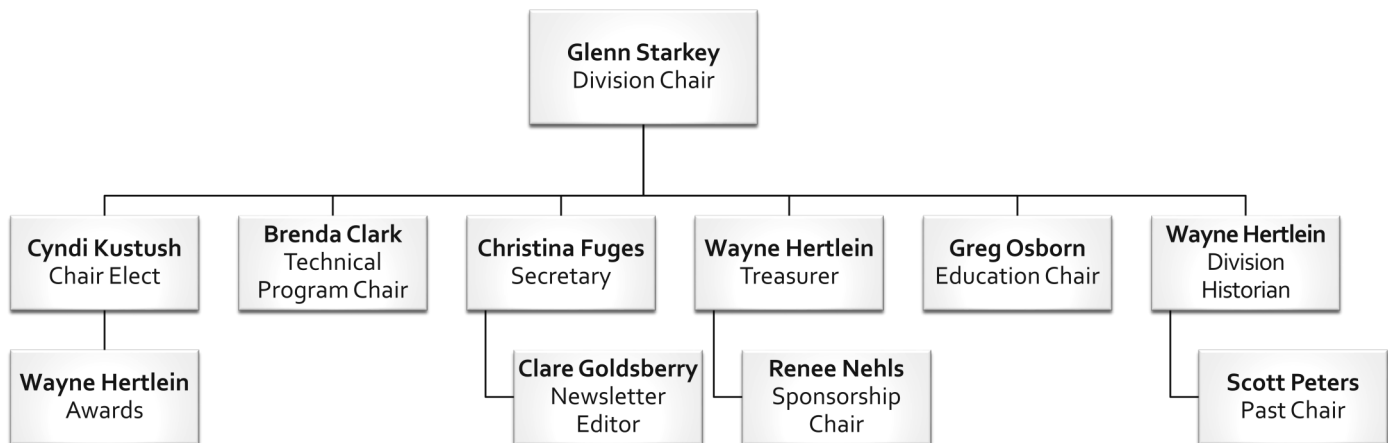
Through the different designs, for example, sockets with extension and angled couplers, the Staubli couplers for temperature control circuits are suitable for almost every installation situation. These and additional products from Meusburger can be ordered via the online shop and are available from stock.

Meusburger specializes in the field of high-precision standard parts, offering an extensive range of standards parts. The company bills itself as a reliable global partner for mold and die makers.

([www.muesburger.com](http://www.muesburger.com))

## 2015/2016 Board of Directors

Mold Technologies Division  
Society of Plastics Engineers, Inc.



## 2015/2016 SPE Mold Technologies Division Board of Directors Contact Information

### Division Chair

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### Chair Elect

**Cynthia Kustush**, Moldmaking Technology Magazine  
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### Newsletter Editor

**Clare Goldsberry**, Plastics Today  
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### Technical Program Chair

**Brenda Clark**  
P: 828-650-2600 | [BClark@hasco.com](mailto:BClark@hasco.com)

### Division Historian / Treasurer

**Wayne Hertlein**  
P: 248-817-8110 | [whertlein@wilbertinc.com](mailto:whertlein@wilbertinc.com)

### Secretary

**Christina Fuges**, Moldmaking Technology Magazine  
P: 267-261-5550 | [cfuges@gardnerweb.com](mailto:cfuges@gardnerweb.com)

### Education Chair

**Greg Osborn**, Synventive Molding Solutions  
[gosborn@synventive.com](mailto:gosborn@synventive.com)

### Sponsorship Committee Chair

**Renee Nehls**, MGS Manufacturing Group  
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### Immediate Past Chair

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# SPE Mold Technologies Division

## May 23, 2016 Meeting Minutes

**To:** Board of Directors Mold Technologies Division SPE  
**From:** Christina Fuges – Secretary to the Board  
**Subject:** Minutes of the Meeting of the Board of Directors on 23-May 2016

	Present	Absent		Present	Absent
Glenn Starkey, Chair	X		Cyndi Kustush	X	
Wayne Hertlein	X		Brenda Clark	X	
Barbara Arnold-Feret		Excused	Christina Fuges		X
Greg Osborn		X	Clare Goldsberry	X	
Renee Nehls	X		Scott Peters		X

The meeting was called to order by Division Chair – Glenn Starkey at 11:22am (PDT). Division Chair presided over the meeting. Cyndi Kustush filled in for the Secretary. Glenn Beall joined as an honored guest. Roll was taken according to the leadership roster above.

### Opening comments

- Introductions of Board members.

### Division Chair Report – Glenn Starkey

- Nominations / Elections (Glenn/Wayne)
  - TPC – Glenn thanked Brenda for her hard work as a first-time TPC for our Division.
  - Technical depth / Assistant TPC – “Keep drum beat going”; Glenn is optimistic about current BOD. Wayne reports no nominations to initial e-blast. Next steps will be second e-blast and asking BOD to approach certain people directly.  
 TO DO: Glenn to begin process by obtaining list of Division members, share with BOD to identify possible candidates. Keep Wayne notified of any progress. Need to fill the following positions on board:
    - Councilor
    - Membership Chair
    - PR / Tradeshow Assistance / Marketing Coordinator
- Division Bylaws due June 30<sup>th</sup> to BOD

262-786-4521



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- i. Contacted Kathy at SPE – She sent Glenn a template and our current bylaws for review and to make necessary Division name change; ensure we’re following them.
- ii. Will circulate to Board with questions/ recommendations for revisions

#### **Chair Elect Report – Cyndi Kustush**

- Division Goals
- Pinnacle Awards – Cyndi will work with Wayne and Scott on 2017.
- MM / MD of the Year Status – One nomination received to date for MD. TO DO: Cyndi to ask Pedro to send out another e-blast for nominations, and asking BOD to consider candidates they may know. Glenn Beall said nominees do not have to be SPE members, which opens the field a bit.

#### **Division Secretary Report – Christina Fuges**

- Minutes from April 14<sup>th</sup> – Minutes were approved; Glenn complimented Christina on the quality and immediate distribution of minutes.

#### **Treasurer’s Report – Wayne Hertlein**

- Checking - \$39,057.05
- Investments Accounts - \$89,405.48 Wayne says there is a CD in the amount of \$10,332.67 coming due in July, but recommends leaving it in until more division business is taken care of.
- Mold Tech Div. – \$128,462.53 (with ITQ, net worth \$168,800.57)
- ITQ account – 40,338.04

#### **Mini Tech Report / TPC Report – Brenda Clark**

- ANTEC Report / Meeting – Brenda looks forward to first ANTEC session and she feels confident it will be a good one. It’s a lot of work, especially right before ANTEC. Would like to find more ways to attract quality speakers for future and start earlier with that process.
- TPC Report – Glenn Beall said SPE’s Medical Plastics Division has a TPC committee, and that committee members need not be SPE members. Email blasts are good but personal contact is best. Reference good technical articles as possible ANTEC papers.
- Technical Tour (Greg, Glenn) – Glenn reported that at

AMBA conference Greg approached him with idea for a technical tour at a leading Chicago area shop. Invite Chicago AMBA to partner and help draw more attendees; hold its dinner meeting nearby on evening after tour. A-1 was one shop candidate; would have suppliers (by application) sponsor tables and set up in shop. No selling, only educating guests about new technologies/strategies for advancing production. Nominal charge for event and proceeds can go to AMBA and SPE education efforts.

**TO DO:** GS and GO to draft overall framework of event to present at next meeting. Check with Chicago AMBA for possible dates. More details to be worked out and date/location set up.

#### **Division Councilor Report – Barbara Arnold-Feret**

- No report from Barbara. Glenn says she is winding down on her post as Councilor; everyone agrees she has been a true asset to our Division.

#### **Membership Chair – Barbara Arnold-Feret**

- No report from Barbara

#### **Sponsorship Chair Report – Renee Nehls**

- Update on current state – Renee has connected with Jerry Fisher, our former Sponsorship Chair, to gain further insight about managing sponsorships. No money has been collected for sponsorships since Jerry held this position.  
**TO DO:** Renee will report on status of last year’s collection at our next meeting and moving forward, will put together a list of current and potential sponsors.
- 2016/2017 – Renee says next phase is to solicit ads for the coming year. Suggests current sponsors get first dibs on a table at the Technical Tour event.  
**TO DO:** Glenn to review signage for Amerimold with Renee. Review and post sponsorship levels and benefits in booth. Not calling it newsletter sponsorship, instead broadening the scope and making sponsorships even more valuable.
- *Side Note:* Jerry Fisher – Scott says Jerry’s health has not been good. Wayne said he would try to find out exactly how he’s doing and let the BOD know and we can send a card or something.



# ANTEC® 2017

**May 8–10, 2017**

Hilton Anaheim  
California, USA

## Call for Papers

*Want to share your knowledge with a global audience?*

Society of Plastics Engineers is pleased to announce our **Call for Papers** for ANTEC® 2017! SPE is soliciting papers in the following areas:

Additive Manufacturing/ 3Dp  
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Applied Rheology  
Automotive  
Bioplastics  
Blow Molding  
Color & Appearance  
Composites  
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Electrical and Electronic  
Engineering Properties & Structure  
Extrusion  
Failure Analysis & Prevention  
Flexible Packaging  
Injection Molding

Joining of Plastics & Composite  
Medical Plastics  
Mold Technologies  
Plastic Pipe & Fittings  
Sustainability  
Plastics in Building & Construction  
Polymer Analysis  
Polymer Modifiers & Additives  
Product Design & Development  
Reaction Injection Molders  
Rotational Molding  
Thermoforming  
Thermoplastic Elastomers  
Thermoplastic Materials and Foams  
Thermoset  
Vinyl Plastics

**Paper Deadline: December 2, 2016 - 11:59 p.m. EST**

[Click HERE to Create a Submission](#)

### Questions?

**Edwin Tam**

Technical Program Chair 2017  
+1 401.642.3753

**Scott Marko**

Events Manager  
+1 203.740.5442

**ANTEC® Anaheim 2017**

### Newsletter Editor Report – Clare Goldsberry

- Past Newsletter – Last newsletter went out on time.
- Next Newsletter timing – Right after Amerimold (late June). Plan for a special “Amerimold Edition” to pass out at the show, promoting sponsorships, showing our ANTEC news, etc.
- Assistance from Board needed – Help with materials by snapping photos, providing some news or announcements.

### Awards Chair Report – Wayne Hertlein

- ANTEC Certificates – All in order and ready for distribution today.
- Mold Maker of the Year and Mold Designer of the Year – Wayne has updated our name on awards but needs 1.5 to 2 weeks to have awards ready for Amerimold.
- Fellows and HSM

### Education Chair Report – Greg Osborn

- Milwaukee Education Night – Renee – a success; thanks to Division for providing scholarship awards. Wayne made sure our Division gave three \$250 scholarships.

- Western Michigan ANTEC Update

### Division Marketing Report – Cyndi Kustush / Glenn Starkey

- Business Cards
- Christina – Amerimold Booth
  - Wayne – Detroit Division for Amerimold Booth – Wayne and two members from the Detroit Section will help man the booth, as will Greg.
  - Cyndi – SPE give away – Glenn wants to sample giveaways for both Amerimold and Mike Koebel in November. Need to order soon for Amerimold.

### Next Meeting

June 23<sup>rd</sup> 11:00 CST. Glenn to send email for votes on dates, with BOD members responding with either “A” Awesome, “C” = Could make it, or “F”.

Meeting was adjourned at 12:32 p.m. Brenda motions; Clare seconds.

Respectfully submitted,  
Christina Fuges

## Sponsor's Index

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*"Someone is sitting in the shade  
today because someone planted a  
tree a long time ago."*

Warren Buffett

# Upcoming Industry Events

## Plastics Caps & Closures

August 29-31, 2016

Chicago, Illinois

[www.cvent.com](http://www.cvent.com)

## SPE Automotive Composites Conference & Exhibit

September 7-9, 2016

Novi, Michigan

[www.speautomotive.com](http://www.speautomotive.com)

## 3rd International Conference and Exhibition on Biopolymers and Bioplastics

September 12-14, 2016

San Antonio, Texas

[www.conferenceseries.com](http://www.conferenceseries.com)

## IMTS 2016

September 12-17, 2016

Chicago, Illinois

[www.imts.com](http://www.imts.com)

## MD&M Minneapolis

September 28-29, 2016

Minneapolis, Minnesota

[www.MDMminn.com](http://www.MDMminn.com)

## Benchmarking and Best Practices Conference

October 13-14, 2016

Indianapolis, Indiana

[www.mappinc.com/conference](http://www.mappinc.com/conference)

## K 2016

October 19-26, 2016

Dusseldorf, Germany

[www.k-online.com](http://www.k-online.com)

## Pack Expo International

November 6-9, 2016

Chicago, Illinois

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# GM Machining Solution to Acquire Microlution Inc.

GF Machining Solutions, a division of GF, has agreed to purchase 100% of the shares of Microlution Inc., a Chicago, IL-based specialist of micro-machining based on milling and laser technologies. The company Microlution was founded in 2005 by three engineers from the Chicago region. It specializes in 5-axis million and femtosecond laser for hole drilling and micro-cutting in a wide range of industries including aerospace, medical and automotive. The company generated in 2015 a turnover of USD 10 million with a workforce of 30 employees.

The acquisition is in line with the strategy of GF Machining Solutions to enlarge its technology portfolio to cover the needs of its key target sectors such as the aerospace and medical fields. Both parties have

agreed to keep the sales conditions confidential.

"We warmly welcome Microlution to GF. The company has developed within a short time a remarkable know-how in micro-machining which complements very well the technology portfolio of GF Machining Solutions," said Yves Serra, CEO of GF. "We look forward to supporting Microlution in widening its presence in the U.S. and worldwide."

Andy Phillip, President and Director of Microlution, commented: "We are excited for our team, products and technology to join forces with GF Machining Solutions. Microlution's customers have benefitted from our innovative systems for nearly 10 years. With our new partner we will increase our ability to serve our customers and grow."

GF Machining Solutions provides machine tools, automation solutions and customer services for the production of molds, dies and high value-added metal parts. The division had R&D and manufacturing facilities in Switzerland, Sweden and China, and serves its customers through its own sales companies in more than 50 countries.

GF comprises three divisions: GF Piping Systems, GF Automotive, and GF Machining Solutions. Founded in 1802, the Corporation is headquartered in Switzerland and operates in 32 countries with 121 companies, 45 of them production facilities. Its approximately 14,400 employees generated sales of CHF 3.64 billion in 2015.

[www.gfms.com](http://www.gfms.com)



*"No man will ever make a great leader who wants to do it all by himself or to get all the credit for doing it."*

Andrew Carnegie

# Polyshot's New Single Nozzle Valve

Polyshot has raised the bar on "in line" pneumatic direct valve gating. With its extremely high pin force of 400 lbs., the Polyshot Single Nozzle Valve Gate makes light work of processing the most highly filled and unfilled commodity resins. In a unique feat of engineering, it places the pneumatic actuating cylinder within the integrated mold locating ring. The Polyshot Single Nozzle Valve Gate System is designed to be

the most compact and mechanically reliable unit available.

Polyshot accomplishes this by using fewer components than the competition and containing the activation within the mold locating ring. Also, Polyshot has designed all components to move in an inline action which greatly reduces wear. "We have manufactured this unit with the customers' needs in mind," said Polyshot. "With its compact size and the

ability to easily change nozzles, it can be used for a variety of applications. So whatever your production mold or prototype tooling, the Polyshot Single Nozzle Valve Gate has you covered."

([www.polyshot.com](http://www.polyshot.com))

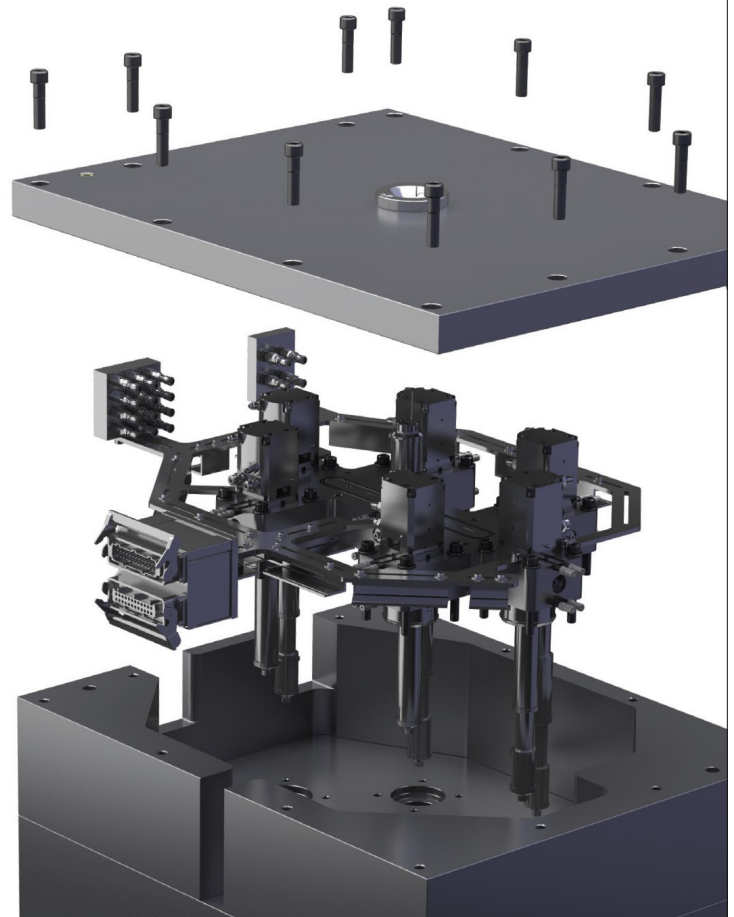


## HUSKY®

### Introducing UNIFY™ Manifold System

Husky's new UNIFY™ manifold system is pre-wired and pre-assembled with hydraulic valve gate actuators for simple, quick installation into your mold. The UltraSeal design keeps the nozzles aligned to the mold gate in cold condition, at operating temperature and anywhere in between. UNIFY™ manifold systems save you time and effort during installation and provide the same leakproof performance as all Husky Hot Runners.

[www.husky.ca](http://www.husky.ca) >



# AST Technology Offers New System Cooling Platform

The efficiency of mold cooling circuits is critical to a stable process and manufacturing of high quality, dimensionally stable parts. With the new System Cooling platform from AST Technology, molders now have the ability to monitor water flow and temperature circuits inside the mold. "There are monitoring devices for mold pressure, injection speeds, cycles and cycle times, but there has not been a comprehensive system for tracking water flow and temperature through the entire mold until now," explains Sujit Sheth, AST's Maintenance and Monitoring Manager.

System Cooling monitors every circuit in the mold individually, and can protect the mold and improve quality by quickly identifying cooling problems and alerting the user to various common cooling circuit problems, such as: No water flow from the mold heater; blocked waterways; scale/rust build-up; and incorrect piping.



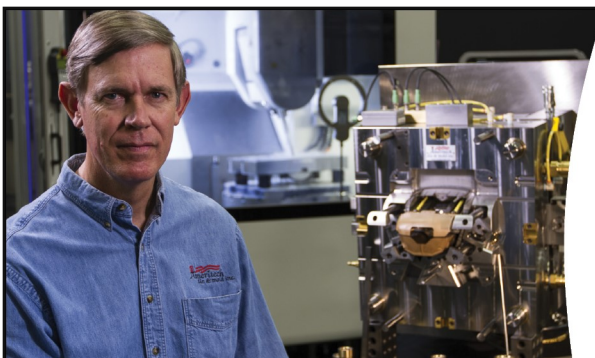
*The System Cooling Test Rig offers a convenient and time-saving way for mold builders to qualify cooling circuitry on new molds and analyze and test cooling channels during maintenance.*

For molders who run parts with critical tolerances and require consistency of mold cooling, reports can be generated to support their industry certifications using the system's remotely mounted Touch Screen controller. The touch screen monitor displays the flow and temperature for every circuit and is used to set warn-

ing and alarm limits for flow and temperature to all monitored zones individually; view current status graphically or as text; fee alarm signal to an ancillary device such as an alarm tower, hot runner controller of molding machine; store data and mold setups in the internal memory where they are time and date stamped for ultimate traceability.

For mold builders who must often supply new molds to customers complete with opening parameters including data relating to cooling circuitry, the System Cooling Test Rig easily connects to a mold as part of the benchmarking process. Later, at maintenance intervals, the Test Rig makes it easy to analyze and test cooling channels because the flow and pressure can be controlled exactly to simulate the production setup.

([www.asttech.com](http://www.asttech.com))



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# Tomorrow's Toolmaker

Tomorrow's toolmaker may look a lot like Build-A-Mold (BAM) of Windsor, Ontario, Canada, which has a goal of bringing a "production mentality" to the company's custom mold making. BAM was featured in a recent edition of *Competitive Mold Maker*, a publication of machine tool manufacturer Makino. One of BAM's core challenges was one that many mold shops face: "how to apply a production system to our custom mold making," said Rob Caizeiro, moldmaker manager at BAM. "We wanted to find better ways to open up capacity on a CNC machine and improve our EDM workflow by replacing our outdated equipment. We needed to understand how high-performance equipment would fit our needs and help us change our shop."

It's often difficult for a "one-off" environment like mold making to convert to a production mentality, but great suppliers like Makino, GF Machining Solutions, Mazak, Haas, and the other great suppliers of machine tools have put many mold manufacturers on the leading edge of the technology it takes to produce high-quality, precision molds in a fraction of the time it took even a decade ago. The toolmaker of tomorrow will certainly have all the latest, state-of-the-art equipment, but even more importantly, they will have the most highly-trained personnel who under-



Click [HERE](#) to read the article "Bringing a Production Mentality to Build-A-Mold's Custom Mold Making" published in Vol.21 / No. 1 of *Competitive Mold Maker*.

stand how to optimize this machinery. Machine tool optimization not only creates greater efficiencies but opens up capacity so that shops can do more, faster.

Tomorrow's toolmaker will be continually investing in the machinery, equipment and personnel that it takes to be a competitive, quality-driven company that meets customers' requirements for lead-time, costs and precision.

A photograph displaying a wide variety of mold-making components and tools. In the foreground, there are several spray cans (labeled 'Zap-It', 'Mold Guard', and 'Mold Release'), various sizes of metal rods, pins, and finished mold parts. The background is a plain, light-colored surface.

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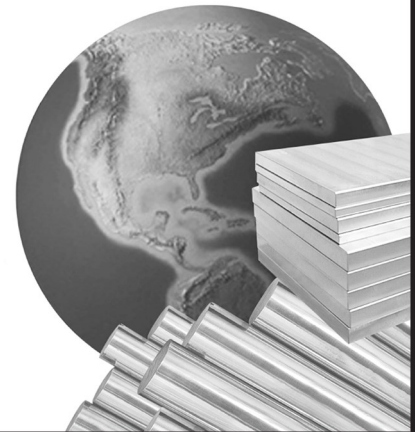


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