



# SOCIETY OF PLASTICS ENGINEERS

## BLOW MOLDING DIVISION

Volume 2009 Edition 1

### ANTEC 2009

The blow molding division has planned a great session for Antec 2009 and since it is being co-located with NPE 2009 there are even more reasons to attend! But in case you need some specifics, here are the 5 top reasons to attend.

#### OFFICERS

Chairperson  
**Jonathan Meckley**  
Chairperson-Elect  
**Scott Steele**

Secretary  
**Ben Lopez**

Treasurer  
**John Rathman**

Councilor  
**Mark Barger**

Past Chairperson  
**Ron Puvak**

#### COMMITTEE CHAIRPERSONS

Education  
**Mark Heitker**

Marketing  
**Daryle Damschroder**

TPC Chairperson  
**Surendra Agarwal**

ABC 2008  
**Lew Ferguson**  
**John Rathman**

#### 1) **Understand the Impact of New Technology -**

Help your company see the future faster. Confer with the industry's leading technical experts to see what new technologies and techniques are being developed today.

#### 2) **Broaden your understanding of the Plastics Industry -**

ANTEC is the only place where you can attend sessions covering the full spectrum of the plastics industry. Unlike specific topical conferences, ANTEC is a place to gain exposure to developments and people throughout the entire industry.

#### 3) **Build New Skills -**

ANTEC offers seminars, workshops and other forums for people on all levels within the plastics industry. Take advantage of one or more of our special sessions to enhance your skills and knowledge base.

#### 4) **Network -**

Meet with fascinating, informed and creative colleagues from around the world to share insights from a broad range of disciplines and industries within plastics.

#### 5) **Recharge Your Own Career and Interests -**

Set new goals and focus on your opportunities at ANTEC to meet people and attend sessions that take you where you want to go.

### BLOW MOLDING SCHEDULE

#### *Innovations in Blow Molding - 9:00 AM*

#### *Tutorial - 10:00 AM*

#### **0743-Structural Strength Of Blow Moulded PET Bottle Using Microwave Pre-Heated Preforms**

Syed Masood - Swinburne University of Technology

This paper presents an investigation on injection stretch blow moulding (ISBM) of PET bottles which are heated using microwave (MW) ovens instead of infrared lamps. Comparative simulation studies are carried out on structural strength of PET bottles obtained from three performs heated with different power outputs of microwave along with a preform heated conventionally under different process conditions. The comparisons between microwave and infrared heating were carried out to study the structural strength of the bottle under top loading and pressure conditions using ANSYS simulation software. Results indicate the range of microwave power

output to be used for better strength of blow moulded bottles.

#### **10:30 AM**

#### **0629-A Novel 3-D Blow Molding Method And Its Part Thickness Control Strategy**

Geng-qun Huang - South China University of Technology

In this study, a novel air traction 3-D blow molding machine was presented. Distinct from conventional blow molding machine, this 3-D blow molding machine utilized compressed air to draw the extruded parison through the closed mold. The results showed that the new 3-D molding machine was low flash waste and high molding quality. To further improve the performance of the 3-D blow molded product, a control strategy based on fuzzy iterative learning control algorithm was designed and implemented



Continued on Pg 2

**Become  
a member**

**Join the  
SPE  
Blow Molding  
Division**

## Chairperson's Message



Hello,

We are finally heading into spring! As I write this message, we have just received more snow. So, winter takes its last shot at us. Here at Penn State we are in the

last few weeks of the semester. It won't be long before our students graduate and start out into the working world. I sometimes think we are like parents. We put a lot of work into these students and are excited to see them go out and succeed.

We are deep into the planning for our conference in October. The speakers are being recruited and sessions are falling into place. Make sure you block out the dates and plan on attending. You don't want to miss seeing where the Blow Molding industry is going!

Our next event is at NPE/ANTEC. We are having a session on Wednesday morning. I hope to see you there.

Jon

### Schedule Con't from Pg 1

to control the wall thickness of blow molded part. The results showed that after five times iterations, the average axial thickness of 3-D bend pipe converged to the object area of thickness.

#### 11:00 AM

##### 0984—Next Generation HDPE For Blow Molding Applications

Mridula (Babli) Kapur - The Dow Chemical Company

High density polyethylene (HDPE) is widely used to fabricate blow molded articles for rigid packaging as well as for other market segments. The drive to reduce packaging cost as well as minimize impact on the environment has increased the emphasis on light weight packaging. A next generation (NG) of HDPE resins was developed to offer a unique combination of easy resin processing on existing extrusion blow molding equipment and a superior balance of physical properties, which allow blow molded articles to be light weighted. A higher percentage of post consumer recycle can also be incorporated while meeting the blow molded article performance requirements.

**The Blow Molding  
Division Education  
Committee has  
received annual  
contributions  
from two  
continuing special  
sponsors:**

***ExxonMobil  
Chemical Company*  
has donated  
\$5000  
to support our  
Undergraduate  
Scholarship  
Program.**

***Graham Engineering  
Corporation*  
has donated  
\$2000  
for ongoing  
support of our  
Continuing  
Education Grant  
Program.**



## SPE Pinnacle Application: Submission Results

We have finished the initial review process for the 2009 SPE Pinnacle Award program. I am writing to advise you that Blow Molding has met the criteria to receive Gold recognition. Congratulations on your group's achievement! My special thanks to you for taking the time to capture this information so that your Division could be so recognized.

Formal notification and information about participation at the SPE Leadership Luncheon in June is forthcoming. In the meantime, please share this good news with the rest of your Board.

Regards,

Tricia McKnight  
Manager, Leadership Services  
Society of Plastics Engineers



### Extrusion Blow-molding with integrated filling.

UNIKA, is an integrated machine which will be officially launched during Anuga Foodtec 2009 exhibition. This innovative product design extrusion blow-molds bottles with filling in a unique unit that represents the first "combi" in the HDPE market. The system is manufactured in Bologna, Italy and integrated at TECHNE's new state of the art facility.

This model will be in operation at the exhibition, producing mono-layer HDPE 250 cc bottles for a dairy application at 4.500 pc/h.

#### ADVANTAGES:

- HIGH ROI: rapid and measurable return of investment thanks to a lower bottle cost and high added-value integrated production.
- FLOOR SPACE REDUCTION: from the extrusion blow-molding to the filling process in a unique integrated unit.
- ENERGETIC SAVING: 35% saving in comparison to traditional hydraulic complete packaging line.
- REDUCED MAINTENANCE: thanks to the part standardization, oil absence and mecatronic solutions. This machine does not need long machine stops for cleaning and maintenance.
- WORKMANSHIP REDUCED by 50% in comparison to traditional packaging lines.
- VERY FLEXIBLE due to fast mold, colour and liquid product change. Production stops and re-starts in only a few minutes.
- EFFICIENT: high production rate thanks to technical assistance on-line, remote production data retrieval and the automatic setup of the production parameters
- EXTREMELY PRECISE: net weight precision filling technology is reliable and superior to the performance of any other system available on the market.
- COMPLETELY MECATRONIC: industrial PC based, Bus wiring and the most innovative solutions for granting flexibility and high production.



- MODULAR: Modularity achieved with the machine design, assembly and test procedures. UNIKA can be standardized to a considerable degree and this has a formidable impact on the reduction of the delivery times.
- SUSTAINABLE: Low environmental impact, quiet and hygienic this machine is eco-friendly due to the absence of oil and the reduced presence of copper other non-recyclable materials.
- If required, the bottles produced can be in conformity with strict parameters verified through the use 6 Sigma analysis- CP/CPK.

#### APPLICATIONS:

Suitable both for food (dairy products, sauces, fruit juices) and industrial applications (personal care, lubricants and house-hold chemicals).

UNIKA can mold and fill bottles (mono or multi-layer) from 80 ml to 1 lt. Larger bottle volumes up to 5 lt. are possible with other UNIKA® versions.

TECHNE Extrusion Blow-molding machine combined with ACMA VM Filling system: together with UNIKA® to respond to market higher challenges and give a faster return of investment.

For more information about TECHNE, please visit our website at [www.technespa.com](http://www.technespa.com) or email at [info@technespa.com](mailto:info@technespa.com).



## PLASTIVAN VISITS OKLAHOMA SCHOOLS

The National Plastics Center's PlastiVan visited area schools in Oklahoma the week of October 6. Allen Jackson, the southeastern regional director for the National Plastics Center, provided the demonstrations at the schools. The \$5500 cost for the visits were shared between the Blow Molding Division and the Oklahoma Section in conjunction with the 2008 Annual Blow Molding Conference held in Bartlesville, Oklahoma. The schools visited were:

Oct. 6-7 - Madison Middle School, Bartlesville, OK

Oct. 8 - Wesleyan Christian School, Bartlesville, OK

Oct. 9 - McKinley Elementary School, Norman, OK

Oct. 10 - Apple Creek Elementary, Moore, OK

Brian Grady coordinated with the Oklahoma City area schools;  
Lee Carvell coordinated with the Bartlesville area schools.

Feedback after the visits was universally positive from both the teachers and students. One teacher e-mailed: "The kids really enjoyed it and we all learned a lot. We asked a lot of questions which Allen was very good about answering. They all thought it was very cool and were asking me more questions about it the following day. One sophomore told me he wanted to be an engineer and he found the presentation to be helpful. A senior said the same thing. It's hard to know what you want to be when you grow up but activities like this can help. Thanks for the opportunity to enrich my curriculum!"

Con't on next page



*Total Commitment, Customized Service,  
World Class Capabilities*

<http://www.plastictechnologies.com/>

- Packaging Technology - PET Specialists
- Package Development - Concept to Commercialization
- Preform and Bottle Prototyping
- Unit cavity prototyping through pilot production
- Product and Material Testing
- Recycling Technology Development
- Technology Licensing
- Quality Assurance support and instruments
- Manufacturing Support
- Training programs from resin to finished bottle.

**We Package  
Solutions®**





A student pushes a skewer through a balloon during a lesson on plastics Monday at Madison Middle School in Bartlesville, OK. Allen Jackson gave demonstrations on the different properties and uses of plastics with hands-on experiments and activities for Madison science students.

(photo and caption courtesy David Austin, Bartlesville Public School District Community Relations Coordinator)

## Polyethylene Blend Formulating Software

### Blow Molding - Injection Molding - Sheet/Film - Pipe

**ABT's OptiMISER® reduces product costs:**

- Lower resin costs 10% to 35%
- Increase material availability (Recycled & Wide-spec)
- Improve product performance
- Increase manufacturing efficiencies
- Shop floor friendly system

**Call for a Free Demo**

**Advanced Blending Technologies, LLC**

531 Williamsburg Dr.

Tiffin, OH 44883

419-348-0550

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



Eastar Copolyester EB062

# Containers Shaped By Your Imagination

Cal Becker • Eastman Chemical Company  
Food, Beverage and Consumer Packaging  
Marketing Development Manager  
Cell: (301) 606-2544 • [cjbecker@eastman.com](mailto:cjbecker@eastman.com)

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

**EASTMAN**



**All-In-One Software to Integrate, Measure, Optimize  
and Streamline your entire Blow Molding Enterprise**

**UNLEASH**  
» your true potential



**ERP**

Totally Integrated  
Enterprise Management

**SPC**

RealTime Online  
Statistical Process Monitoring

**eCommerce**

Online Customer service  
& Order Management

**Scheduling - Multi level BOM - Lot Traceability - Quality Control - Inventory**

**Visit [www.plasticerp.com](http://www.plasticerp.com) Now ! or Call 1-866-293-7263 Today !**



### **Plastics Hall of Famer Gigliotti dead at 88**

by Bill Bregar  
April 24, 2009  
Plastics News Staff

GLOUCESTER, MASS. (April 24, 11:10 a.m. ET) Michael Gigliotti, who headed the House of the Future project at Disneyland and helped develop early plastic beverage bottles in a 35-year career at Monsanto Co., died April 21.

Gigliotti, 88, was inducted into the Plastics Hall of Fame in 2003. After retiring from Monsanto, he ran a consulting company, MGA Inc. in Gloucester, Mass., in the waterfront home that he shared with his wife, Miriam.

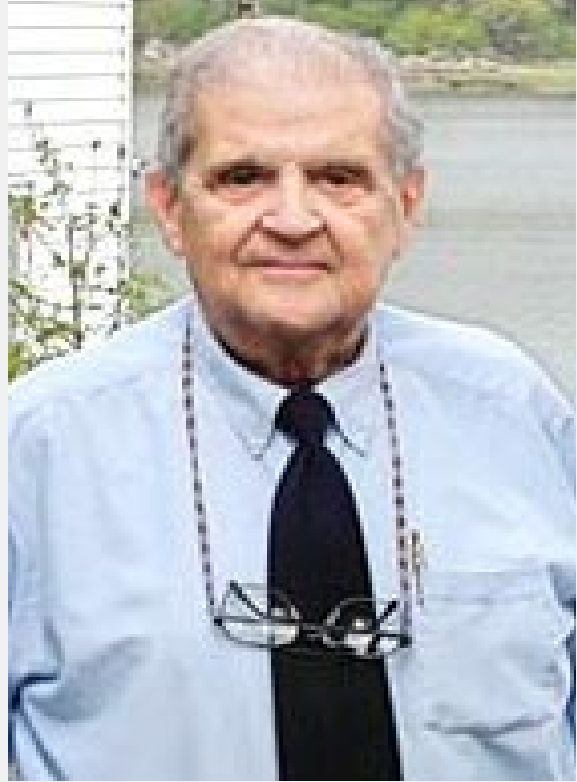
Born in Utica, N.Y., and raised in Hoboken, N.J., Gigliotti graduated from Stevens Institute of Technology in 1942 with a mechanical engineering degree. Monsanto hired him to work in its 3-year-old Plastics Division.

When he was just 25, Monsanto named him supervisor of design engineering on a major expansion of its production of vinyl, polystyrene and melamine resin complex in Springfield, Mass. Later, he headed two other resin plant construction projects.

Monsanto then picked Gigliotti to head a new effort launched in 1955, the Structural Plastics Engineering Group "which worked with the Massachusetts Institute of Technology to design a plastic house. The result "an exotic, space-age house with four elegant wings cantilevered off a central pedestal" was built at in 1957 at the new Disneyland theme park in Anaheim, Calif.

Gigliotti played a key role in creating building codes for plastics products, working with the Society of the Plastics Industry Inc. From 1961-1968, he was director of process engineering and technology for Monsanto's Plastics Division.

In the late 1960s, the company again assigned Gigliotti to a groundbreaking project: lead a team to develop plastic packaging with low levels of oxygen permeation. The result: the first plastic soda bottle "of acrylonitrile, not PET.



Coke introduced the Easy-Goer 32-ounce plastic bottle in 1975.

As a consultant, Gigliotti also had a major role in the move by Bekum Maschinenfabriken GmbH, the German blow molding machinery maker, starting its U.S. operation in 1979.

Gigliotti remained actively involved in the global plastics industry. He recently nominated Trevor Evans, chairman of Nampak Ltd. of South Africa, to the Plastics Hall of Fame. Evans will be inducted into the hall during NPE2009.

Entire contents copyright 2009 by Crain Communications Inc. All rights reserved.

How often do you get a chance  
to work with a new company  
that happens to have a 75-year  
record of technological and  
application success?



Lexan\* (PC) resin



Lexan\* EXL resin



Cycloloy\* (PC/ABS) resin



Ultem\* (PEI) resin



Extem\* (TPI) resin



Lexan\* GLX resin



Valox\* (PBT) resin



Xenoy\* (PC/PBT) resin



Xylex\* (PC/polyester) resin



Geloy\* (ASA) resin



Cyclocac\* (ABS) resin



Noryl\* (PPE/HIPS) resin



Noryl\* GTX resin



LNP\* compounds



Specialty Film & Sheet

At least this once. Because, as the new owner of these proven GE Plastics products, SABIC Innovative Plastics will continue to provide value-added solutions for innumerable industries. And we'll continue to offer an unsurpassed portfolio of leading-edge materials, backed by advanced technical support for customers around the world. And how many companies can say that?

SABIC Innovative Plastics – Continuing the legacy

[www.sabic-ip.com](http://www.sabic-ip.com)

Sharing our futures

\*Trademarks of SABIC Innovative Plastics IP BV

## PARISONS

*Knowledge Workers in Blow Molding*

### LEWIS FERGUSON

APPLICATION DEVELOPMENT, PROJECT MANAGEMENT, TRAINING  
MATERIAL SELECTION, PROCESS DEVELOPMENT, MARKET ANALYSIS

PHONE: 1-609-368-7230

FAX: 1-609-368-7229

EMAIL: [PARISONS@AOL.COM](mailto:PARISONS@AOL.COM) (US)

PO BOX 483, STONE HARBOR, NJ 08247 USA



# INVISTA PP Reheat Technology

a brighter future for polypropylene ISBM and thermoforming



The perfect solution for those looking to increase PP ISBM or thermoforming throughput, with reduced energy costs and optimum product aesthetics.

Enhanced processing characteristics widen the range of packaging opportunities, and ensure reliable production of highly complex bottle and tray designs.

The benefits of using INVISTA PP Reheat Technology in ISBM, and thermoforming applications:

- Commercially proven technology
- Simple robust process chemistry
- Increased throughput on heat-limited machines, or lower energy consumption
- Broadened processing window
- Ability to produce more complex bottle or tray designs
- Allows the use of thicker wall sections
- Maintains optimum product aesthetics
- Patent protected

For more information please contact:

Marla Farns Manager, Technology Licensing T: +1 302 683 3068 E: [loly.farns@invista.com](mailto:loly.farns@invista.com)

Mike Gardner Research Scientist T: +44 164 257 2220 E: [michael.w.gardner@invista.com](mailto:michael.w.gardner@invista.com)



The INVISTA logo is a trademark of INVISTA. Copyright © 2005 INVISTA.

# ASB

**Does your supplier  
switch gears from  
sales to service  
after the initial  
capital investment?**



Nissei ASB does! We offer exceptional aftermarket parts and service, providing full training and maintenance programs, and boasting a huge inventory of spare parts, many available to ship within 24 hours. Our more than a quarter of a century of experience has made us the world leader in PET Technology, delivering over 5,000 machines and 10,000 molds to 90 countries worldwide! Partner with us for full service:

-  **Creative Container Design**
-  **Innovative Mold Design & Manufacturing**
-  **Turnkey Machinery Solutions**
-  **Reliable Aftermarket Parts & Service**

When you invest in your container business, you deserve only the best from your supplier for the life of your equipment. That's exactly what we promise at Nissei ASB... keeping our customers **more than one step ahead!**

**Putting it all together**



**In-the-Blowmolder  
Quality and  
Process Control**

from  
**Agr**®

**30% improvement of  
measurement accuracy  
and repeatability**



**Measurement system  
to facilitate closed-loop  
operation**

**Complete  
Container  
Profile**

- Up to 32,000 measurements per container
- Operates at speeds up to 150,000 bottles per hour
- Unmatched accuracy with direct measurement approach
- Continuous feedback for closed-loop operation

For more information,  
contact:

**Agr International, Inc.**

Tel: (+1) 724 • 482 • 2163

E-mail: [sales@agrintl.com](mailto:sales@agrintl.com)

**[www.agrintl.com](http://www.agrintl.com)**

## **Graham Engineering Corporation Continuing Education Grant Program**

The Blow Molding Division of the Society of Plastics Engineers and Graham Engineering Corporation co-sponsor a program for continuing education of blow molding industry workers. By making financial resources available to Blow Molding Division member companies, this program will assist more people in obtaining continued education in blow molding and improve their job-related skills.

Up to \$500 per person is available to attend an SPE Blow Molding Conference, an SPE Seminar in Blow Molding, or other program applicable to blow molding.

### **Eligibility Criteria:**

1. The employee must be a full-time employee of one of our member companies (having at least one current member of the SPE Blow Molding Division).
2. The employee's job function must be blow molding related.
3. The employee's academic training must not be higher than Associate Degree.
4. The employee must have company recommendation and support.
5. Costs exceeding \$500 will be the responsibility of the employee or employer.

### **How to enroll:**

1. Submit a request to the Blow Molding Division at the following address:  
  
Mark Heitker  
INEOS Technical Center  
1230 Battleground Road  
LaPorte, TX 77571  
[Mark.Heitker@ineos.com](mailto:Mark.Heitker@ineos.com)
2. Include a letter of support from your company.
3. You will be notified of acceptance before the event that you wish to attend.

## **Executive Meeting**

### □ **Call to order at February 16, 2009 @ 5:00pm**

Present: Benjamin Lopez,  
Scott Steele  
Jonathan Meckley  
Mark Heitker  
Bob Jackson,  
Gary Carr  
John Rathman

- Review Deirdre M. Turner 2009 tasks & objectives
- New meeting structure proposal (web / conference calls)
- 20year SPE BOD service award

Continued on next page

***Distributing Quality Polymers and Service  
to the Blow Molding Industry  
for Over 30 Years***



**A-ToP POLYMERS, INC.**

***Service 24/7 No Voice Mail  
Every Minute, Every Hour, Every Day***



47 Rockingham Road • Windham, NH 03087 USA  
Tel: 603-893-4366 • Fax: 603-898-5937  
[www.a-toppolymers.com](http://www.a-toppolymers.com)

Contact: Jeff Light, A-ToP Senior Account Executive  
Director – SPE Blow Molding Division



## Board of Director's Meeting

Minutes of the Board of Directors of the Blow Molding Division of SPE,  
Meeting held on February 17, 2009 Atlanta, GA Callaway Gardens

### ❑ Call to order at 12:30

BOD Members present: Benjamin Lopez, Bob Fitch, Scott Steele,  
Jonathan Meckley, Bob Jackson, Mridula Kapur, Gary Carr, John Rathman,  
Kyle Grodzinski, Terry Glass, Daryle Damschroder, Geoff Ward,  
Gerald Hobson, Clyde Bonhe  
BOD Members Excused: Ron Puvak, Mark Barger, Lewis Ferguson  
Surendera Agarwal, Mark Heitker, Win Burrington, Bill Galla, Jeff Light, John Headrick,

### ❑ Treasurer's Report – John Rathman

Subject: Winter Treasurer's Report

Since the last report dated October 4, 2008:

Operating Fund Highlights:

Expenses

\$ 27024 - Remaining ABC 2008 Expenses  
\$ 10500 - Deirdre Turner – 70% remainder of consulting fee  
\$ 2645 - Blow Molding Website Service for 3<sup>rd</sup> Quarters 2008 and 2<sup>nd</sup> half website  
redesign and 50 copies of Newsletter for ABC 2008 distribution  
\$ 1018 - Councilor Travel Expense for Fall 2008  
\$ 716 - ABC 2008 – 30% profit split with SPE National  
\$ 610 - Blow Molding Meetings and Teleconferences  
\$ 450 - Director Shirt Program  
\$ 350 - Tax Preparation for 2007  
\$ 260 - SPE Blow Molding Newsletter Work

Continued on next page



## Fremont Plastic Molds

Molds Fixtures Gages

Product Engineering / CATIA / Unigraphics / SolidWorks  
CNC Programming / CNC Machining / Blow Mold / Twin Sheet Mold  
Prototype Mold / Compression Mold / Injection Mold  
Spray Metal Tooling / Production Tooling / Thermoform Sampling  
Fixtures & Gages / Model Making / CMM Certification / ISO 9001  
*e.trak job tracking*

4711 N. State Route 19 : Fremont, OH 43420 : 800-376-6653



**MOLDS-FIXTURES-GAGES.COM**

\$ 239 - ABC 2008 – 10% profit split with SPE Oklahoma Section  
\$ 206 - Seed Money for ABC 2009 – Flyer and design work  
\$ 26 - Postage and Office Supplies  
\$ 4,044 - Total

Income:

\$ 8094 - ABC 2008 Revenues  
\$ 5000 - Donation from Chevron Phillips for ABC 2008 Expenses  
\$ 2400 - Platinum & Gold Sponsorships  
\$ 1049 - SPE 4<sup>th</sup> Quarter 2008 Membership Rebate  
\$ 214 - Interest  
\$ 120 - Payment by BOD for shirts ordered  
\$ 16,877 - Total

Disbursement Fund Highlights:

Expenses

\$ 4000 – Plastivan during ABC 2008  
\$ 1484 – Student Travel to ABC 2008  
\$ 491 - Matthew Zimbicki – Penn State Erie – Student Travel to ABC 2008  
\$ 5,975 - Total

Income

\$ 309 - Interest  
\$ 309 - Total

We currently have a twelve month \$20,000 CD earning 3.6% interest that will mature on March 12, 2009.  
Another 12 month \$5,000 Certificate of Deposit will mature on July 31, 2009, earning 3.7% interest.

Continued on next page


Confer Plastics is a superior single source supplier for custom blow molded products. We provide custom plastic parts manufacturing and secondary assembly operations with strict adherence to technical specifications.

Many clients rely on our expertise to assist them in bringing their new ideas to the marketplace, quickly and cost effectively, from start to finish.

Visit our new web site at  
[www.ConferPlastics.com](http://www.ConferPlastics.com)

# Custom Blow Molded Products



 **CONFER** *plastics inc.*



Confer Plastics, Inc. • 97 Witmer Road • North Tonawanda, NY 14120-2421  
Tel: 1-800-635-3213 • E-mail: [plastics@conferplastics.com](mailto:plastics@conferplastics.com)

## Grant Fund Highlights:

The January statement has not been released and 2009 interest rate has not been announced. During the year of 2008, the SPE Investment Plan was earning 4.25% interest (about \$640/month)

Our 3 fund's balances are:

| <u>Fund</u>  | <u>Balance</u>                              |
|--------------|---|
| Operating    | \$ 36,593.92                                |
| Disbursement | \$ 11,091.21 + \$25,000 in CD's             |
| Grant        | \$ 178,455.29 Amount as of December 5, 2008 |
| Total Funds  | \$ 251,140.42                               |

Voted and 2/3 vote met approved @ 1:26 (Bob Jackson - motioned)

Councilor's Report – Mark Barger

Council Summary: 10/18/2008

SPE President Bill O'Connell called the meeting to order.

President O'Connell presented his comments on the year to date and the goals for the meeting.

President O'Connell stated that this is the first Council meeting with electronic participation.

Those participating electronically have a voice but no vote in this meeting. President O'Connell talked about all the Sections and Divisions that he has visited and his plans for the rest of his term.

Executive Director Susan Oderwald pointed out that increasing revenue is important to the Society's survival and that attracting new members is vital.

Investments in our Internet technology are expected to help attract new members. The proposed budget assumes membership numbers stabilized at 2008 end-of-year levels. Other revenue-boosting ideas including corporate outreach are actively in process.

Continued on next page



GRAHAM ENGINEERING CORPORATION

# HOW THE TOP PRODUCERS PRODUCE

## Extended Shelf Life. Extensive Processing Options.

Single layer or multilayer. Low, medium, or high volume. Shuttle or wheel technology. Single machines to turn-key systems. Graham has the equipment and the expertise to help you meet your ESL bottlemaking needs. From resin to dairy case, we can help you create packaging with consumer appeal and product protection. Graham also supplies a full line of industrial accumulator head machines to meet your automotive and industrial molding requirements.

## Hit us with your best shot. Graham has a solution for every production requirement.

Industry's highest production is made possible by a proportionally controlled, high-speed, hydraulic clamping system. It is just one of the exclusives offered by our versatile lines. Others include a screen changer combined with our Shot Pot technology and the XBM Navigator™ PC Blow Molding Controller, which can be expanded with optional 100-point parison programming, for effective lightweight bottle production.



GRAHAM ENGINEERING CORPORATION

Phil Balin, Regional Sales Manager • (828) 488-7551 • [pbalin@grahamengineering.com](mailto:pbalin@grahamengineering.com)  
Richard Nolan, Regional Sales Manager • (309) 530-6190 • [rnolan@grahamengineering.com](mailto:rnolan@grahamengineering.com)  
Scott Howland, Sales Director • (717) 505-4813 • [showland@grahamengineering.com](mailto:showland@grahamengineering.com)



(717) 848-3755 • [www.grahamengineering.com](http://www.grahamengineering.com)



## ❑ **Elections**

Council elected the following individuals as Society officers for the 2009-2010 term, which begins at ANTEC (June 22-24).

President-elect – Ken Braney

Senior Vice President – Russell Broome

Vice President – Brent Strong

Non-officer position: Chair for the Council Committee of the Whole - Helen Basso (2009-2010)

## ❑ **Treasurer's Report**

SPE's financial position is continuing to erode as the year wears on. Lower revenues are the key issue.

Expenses are generally running at or below budget, but not enough to make up the difference in lower revenues. SPE is looking at restructuring its operations in the last quarter of 2008 to be better positioned financially for 2009. The consolidated statement and dashboard can be found at the end of the Councilor's report.

## ❑ **Budget**

The major Council action was the approval of the 2009 calendar-year budget. A full write-up on the budget was distributed to Councilors and to all Section and Division Board members in preparation for this meeting. The budget that was approved calls for gross income of \$4,840,000, direct expenses of \$4,787,500, and a net income of \$52,500. Of particular note is that rebates to Divisions and Sections will be reduced by 2/3. Council approved the budget unchanged from the original presentation.

## ❑ **Bylaws & Policies**

The Bylaws & Policies Committee submitted items for consideration by Council:

- Bylaws for Second Reading and Vote
  - 3.3.3 Election Date
  - 10.10.10 foundation
  - 10.10.11 17.6 Temporary Suspension of a Bylaw
- Electronic Participation
  - 5.1 Annual Business Meeting
  - 5.3 Quorum
  - 4.4 Special Business Meetings
  - 2.2.2 Council Meeting Times and Places
  - 2.2.3 Quorum
  - 14.7 Participation and Voting
- Governance Downsizing
  - 3.3.3 Council
  - 1.1 Officers of the Society
  - 5.5.5 Staggering of Terms
  - 1.1.1.1 Executive Committee Membership
  - Policy 022 Vice Presidential Transition
- Policies for Council Review and Vote
  - Policy 015 Special Interest Group Establishment
  - Policy 016 Student Chapter Establishment
  - Policy 020 Code of Ethics
  - Policy 021 Embargoes and Sanctions

Council voted to approve all items as presented.

- The SPE Foundation

SPE Foundation Managing Director Gail Bristol updated the Council on the status of the Foundation. She reviewed the grants and scholarships presented so far and noted that the Plastics Pioneers have established a PlastiVan matching-grant program. Foundation finances are tracking well and the Foundation is healthy. The Foundation will be folded back into SPE effective December 31, 2008, as previously approved by Council.
- SPE Awards

The SPE Celebrates award ceremony will take place at a luncheon between the two Council meetings on Sunday prior to ANTEC@NPE. SPE will present the International Award, Business Management Award, and Education Award at the Plastics Academy Hall of Fame Dinner on Monday evening at NPE.

Continued on next page

## ❑ Committee Meetings

Fifteen committees met prior to the Council meetings. The following Committee/Officer Reports were given at the Council meeting:

### ➤ Sections Committee Report

Councilor Helen Basso, Chair of the Sections Committee, reported on the activities of the Committee. The Committee approved the reactivation of the France Section and the merger of the Palisades and New Jersey Sections. The new Section will be called the Palisades/New Jersey Section.

### ➤ Divisions Committee Report

Councilor Dale Grove reported on the activities of the Divisions Committee. The Divisions Committee recommends that the New Technology Committee approve the merger of the Radiation Processing of Polymers Europe and Radiation Processing of Polymers North America SIGs. The new group will be called the Radiation Processing of Polymers SIG.

### ➤ New Technology Committee Report

Councilor Prithu Mukhopadhyay, Chair of the New Technology Committee, announced that the New Technology Symposium will be held on November 11 and 12, 2008.

### ➤ ANTEC Committee Report

Councilor Bill Arendt, Chair of the ANTEC Committee, noted that paper submissions are up for this year's ANTEC.

### ➤ Communications Committee Report

Councilor Roger Kipp, Chair of the Communications Committee, reported on the activities of his Committee. The new member handbook is a key output of this team. His Committee also had input into the new SPE website.

### ➤ Council Committee-of-the-Whole

Brent Strong, Chair of the Committee, conducted the meeting prior to the formal Council meeting. Items discussed at this meeting included rebate structure, status of the Society, student activities update and remote Council participation.

Continued on next page

# M.C. Molds, Inc



Extrusion Blow Molds, Spin Trimmer,  
Foam Molds, Vacuum Molds & Repair /  
Refurbishment.

Shuttle & Long Stroke Molds



Stretch Blow Molds



ABS Molds &  
Buck Molds



Foam & Vacuum  
Molds



Spin Trimmers



Transfer and Trim Tools



Recip Molds

125 Industrial Drive - Williamston, MI 48895  
P. 517-655-5481  
F. 517-655-4826  
Email - sales@mcmolds.com  
Bill Simpson - Sales

# JB

## Products & Machinery

Inline Belfasher



Inline Neck Finishing



Inline Belfasher with Tool



Hydraulic Belfasher



Hand Load Belfasher



P. 517-655-4734  
F. 517-655-7400  
Email - jbrp@jbjparts.com  
John Palazzolo - President

➤ 2009 Operating Plan

President-elect Anderson gave Council his thoughts on the 2009-2010 operating plan. He highlighted the emphasis on further engaging Generation X and Generation Y in SPE membership and activities. Key strategic objectives are: membership growth through increasing benefits focused on Generations X and Y; and revenue growth through new partnerships, licensing, and broader marketing efforts to grow non-dues revenue.

Tactics will include continued improvements to the SPE website, corporate outreach, getting the most out of our participation in ANTEC@NPE, and implementation of new technical forums like virtual conferences.

➤ Virtual Conference Demo

SPE Senior Event Manager Lesley Kyle explained the virtual conference that SPE will be hosting in March 2009. This will be a two-day conference using live and recorded presentations, a "cyber lounge," and a virtual trade show. The cyber lounge will be a chat room environment. This event is expected to be attractive in a down economy, in which attendees may otherwise be subject to travel bans and restricted travel budgets. It is also expected to attract individuals from Generations X and Y. The Failure Analysis & Prevention SIG has stepped up to co-sponsor this first virtual conference. A demonstration of the virtual conference technology was shown to Council.

➤ PRESENTATIONS

The Color & Appearance Division returned its rebate to the Society.

The next formal Council meeting is scheduled for June 21, 2009, in Chicago, Illinois.

All relevant Council materials can be found via:

<http://extranet.4spe.org/council/index.php>

Financial information from the Treasurer's Report can be found on the following pages.

## ANTEC™@NPE2009:

- NPE 2009 will be held at McCormick Place, June 22-26.
- Formal contact with SPI is in final stages of preparation (no major outstanding issues). ANTEC will be held concurrent with the NPE show. ANTEC will occupy the new West Hall.

Continued on next page



AMERICAN TOOL & ENGINEERING, INC.

**American Tool & Engineering, Inc.**



**■ Complete tool design from start to finish**

**■ Machined & Cast aluminum molds**

**■ On-time delivery**

**■ Weekly progress reports**

For more information contact us at..  
(641) 816-4921  
[sales@atemold.com](mailto:sales@atemold.com)

*Quality Molds by Design*

*Dedicated to building quality molds for the Blow Molding, Thermoforming & Pressure Forming Industries*



- SPE Seminars will either be co-located with the technical sessions or in conference center space connecting the Hyatt Regency McCormick Place to McCormick Place.
- Discussions with SPI regarding the appointment of an SPE hotel are under way. Negotiations also continue regarding the scheduling of morning and afternoon sessions.
- Planned submission and review deadlines for ANTEC 2009:
- Online submission site opens by June 30
- Abstract submission: September 4
- Abstracts will be encouraged, but not be required
- Paper submission: November 6
- Paper review deadline: December 12
- Final paper revision deadline: January 9
- Matrix Meeting: January 6

Closing Comments:

- Plans for 2009 Council meetings surrounding ANTEC/NPE are still being finalized. It is possible that there will be only one Councilor's report that encompasses the next three Blow Molding Division BOD meetings, depending on when the Blow Molding Division schedules its 2<sup>nd</sup> 2009 meeting.

❑ **Education** – Mark Heitker

Subject: Winter Education Committee Report – Activities since the ABC '08 BOD Mtg

Memorial Scholarship program:

Our current scholarship recipients are:

Jessica Patz - Penn State University Erie - 1<sup>st</sup> year \$8000 Carrie Fox Solin Memorial Scholarship

Nicolas Cruz - Pittsburg State University - 1<sup>st</sup> year \$4000 John Raymonds Sr. Memorial Scholarship

Russell Ankerbrandt – Ferris State University – 2nd year \$8000 Carrie Fox Solin Memorial Scholarship

Jason Merkle - Ferris State University – 2nd year \$8000 John Raymonds Sr. Memorial Scholarship

Nick Cruz was recognized at the ABC banquet at Wooloroc.

Our scholarship program is being managed through the SPE Foundation.

Program info can be found at the SPE website. <http://www.4spe.org/foundation/scholarships.php>

We are expecting 8 new applications from the SPE Foundation for up to 2 new \$8000 scholarship awards.

A subcommittee has been organized to review the applications during the next few weeks.

Captive Plastics' funding for the John Raymonds, Sr. Memorial Scholarship has ended. The new name for our second award is the ExxonMobil Chemical Scholarship.

**2009 Corporate Educational Sponsors:**

ExxonMobil Chemical Company plans to contribute \$5000 to our education fund again this year. Thanks to Bob Fitch!

Graham Engineering Corporation supports the Continuing Education Grant Program.

An invoice has been sent for annual contribution of \$2000.

**2009 Student Design Competition:**

42 project abstracts have been submitted, 2 from Penn College of Technology and 40 from Penn State Erie. The final submissions are due by April 15th and will be judged by the Education Committee. The winning entry will be awarded \$1000 and requested to exhibit their project at the next ABC.

We hosted Matt Zimbicki from Penn State Erie, who displayed his 2008 winning project "Surfboards of Tomorrow", at the last ABC in Bartlesville.

**Graham Engineering Corporation Continuing Education Grant Program**

(Former Workplace Scholarship):

No new awards during this period.

**Blow Molding Division School Grant Fund:**

Grants from The SPE Foundation/Blow Molding Division are available to educational institutions seeking funding for the purchase of blow molding equipment or educational resources pertaining to blow molding.

Continued on next page

Eligible items include machinery, installation, tooling, auxiliary equipment, instrumentation, controls, finishing equipment, software, and training or educational modules.

This program is promoted by the SPE Foundation, for information go to <http://www.4spe.org/foundation/blowmoldinggrant.php>.

A request from Penn State Erie for a bottle thickness gauge was received and approved by the education committee. Awaiting purchase documentation.

### **ABC 2008 Student Activities:**

We hosted 16 students and faculty from Pittsburg State University, and 2 students from Penn State Erie at the ABC. Disbursement Funds were used for their conference registration and travel expenses. Both schools used complimentary tabletops in the exhibition area to promote their programs.

### **PlastiVan:**

The PlastiVan visited Bartlesville and Oklahoma City schools during the ABC 2008. The SPE Oklahoma section chapter is providing local coordination and sharing the cost with the Blow Molding Division.

### **Division web site:**

Scholarship, Student Design Contest, and Sponsor information has been updated.

### **2009 – 2010 Budget:**

Proposed Disbursement Fund budget was developed during the Education Committee meeting in Bartlesville and incorporated into the version sent today from J. Rathman

- Budget balanced
- SPE rebate
- Student travel expense policy reviewed

Voted and 2/3 vote met approved @ 2:15 (John Rathman - motioned)

### **❑ Newsletter** Ron Puvak

#### Newsletter – Interest and Topic Leaders

- PET SBM column – Scott Steele.
- Column Extrusion blow – Gary Carr.
- Industrial Blow Molding column – Ben Lopez.
- Injection Blow Molding column – Ben Lopez.
- Material forecast – Bill Galla
- K07 product review
- Focus on highlights / key issues
- Open participation to the BOD
- Survey – ABC input
- Newsletter review (focus on highlights & key issues)
- Rework our Mission Statement – Gary Carr

### **❑ Membership** – Lew Fergusson (Report this at the meeting)

2007 Through December 31:

2007 New 203 >Primary 112 + Secondary 91 = 203

2007 Suspended through December > 184

2008 Through September 30

2008 New >Primary 49 + Secondary 57 = 106

2008 Suspended through September > 160

D-30 membership is down in September 2008 compared with 2007, as is the Total SPE Membership. Percentage of Primary Members in D30 and our percentage of Primary Members in the SPE Total have decreased marginally. Since 2005, D30 remains consistent at about 5.2 % on the total SPE membership, primary = 3.0 %

Sponsorships – Jeff Light - Registered sponsors remain unchanged although with Babli's recent additions to the web-site, Deirdre and I remain optimistic additions are forthcoming.

Continued on next page

## Web Site – Babli Kapur - Updated Site Layout:

- Home
- Sponsors
- Conferences
- Educational Activities
- Technical Information
- Industry Links (roll industry links under blow molding references)
- Blow Molding References
- What's new?

## Submenu Details:

- Mission statement (page 3, 2<sup>nd</sup> click) – J.M.
- BOD Member list - All
- Chair message – J.M.
- BM Division Activities (brief activity list) – J.M.
- Current year BOD meeting calendar – J.M.
- Quarterly Newsletter – R. Puvak
- Award winners – J.M.
- Focal point (responsible for compiling information for this section): J. Meckley

## Sponsors: (Conferences)

- ABC Conference (general information - what it is about; listing of past conferences; posting of prior year agenda; prior year attendees list; location and agenda of current year conference)  
Focal Point to provide info: ABC co/chairs Link to ANTEC-NPE SPE & Plastics Industry Event Calendar  
Focal Point info: ANTEC Co/chairs
- Link to other conferences

Continued on next page



## Don't gamble with your mold and tooling alloys.

# MOLDMAX<sup>®</sup>

### MOLD ALLOYS

Brush Wellman's MoldMAX<sup>®</sup> family of mold and tooling alloys is helping injection and blow molders realize:

- **FASTER CYCLES**
- **THERMAL MANAGEMENT SOLUTIONS**
- **IMPROVED PART QUALITY**

#### MoldMAX<sup>®</sup> Family of mold & tooling alloys:

| Product Name                      | Alloy                        | Hardness | Typical Applications                       |
|-----------------------------------|------------------------------|----------|--|
| MoldMAX <sup>®</sup> HH           | Copper Beryllium             | 40 Rc    | Injection & blow molds                     |
| MoldMAX <sup>®</sup> LH           | Copper Beryllium             | 30 Rc    | Injection & blow molds                     |
| MoldMAX <sup>®</sup> SC           | Copper Beryllium             | 20 Rc    | Injection & blow molds, hot runner systems |
| MoldMAX <sup>®</sup> XL           | Copper Nickel Tin            | 30 Rc    | Injection molds                            |
| <b>NEW</b> MoldMAX <sup>®</sup> V | Copper Nickel Silicon Chrome | 28 Rc    | Injection & blow molds                     |

#### Why Brush Wellman Mold Alloys?

| A Mold Must             | Brush Wellman Mold Alloys Provide:               | Benefits:   |
|-------------------------|--|---|
| Transfer heat rapidly   | The highest thermal conductivity available       | • Rapid heat transfer<br>• Faster cycle times<br>• Lower processing costs     |
| Transfer heat uniformly | Uniform cooling                                  | • Dimensionally correct parts<br>• Minimized warpage<br>• Reduced scrap rates |
| Sustain 100+ cycle life | Excellent hardness, wear resistance, non-galling | • Higher cycle life with lower maintenance costs<br>• Less downtime           |
| Be easily fabricated    | Faster machining rates than tool steels          | • Lower mold fabrication costs  |



For more information, contact us at 888-MoldMAX (888-665-3629) or visit [www.MoldMAX.com](http://www.MoldMAX.com).



#### Educational Activities:

- Undergraduate Scholarships
- Continuing Education Grants
- School Blow Molding Grant Program
- Student Blow Molding Design Competition
- Corporate Supporters of Our Educational Programs
- Direct Contributors include: Focal Point: M. Heitker
- Captive Plastics, Inc.
- ExxonMobil Chemical Company
- Graham Engineering Corporation

#### Technical Information:

- History of blow molding (S. Steele)
- Resin types, advantages/disadvantages, properties, test methods (B. Fitch, J. Rathman, M. Heitker, W. Galla, B. Kapur)
- Fabrication methods: EBM, IBM, ISBM (B. Jackson, S. Steele)
- Types of equipment, molds, tooling (B. Lopez, G. Carr, K. Grodzinski, D. Damschroder)
- Troubleshooting
- Overall focal point: J. Headrick

#### Blow Molding References:

1<sup>st</sup> click on BM refs will show topics listed below. 2<sup>nd</sup> click on each topic will bring up a submenu as shown in following slides. 3<sup>rd</sup> click on sub-submenu topics will take user to pertinent website. No more than 3 clicks on BM webpage to access information.

- Industry links
- Past ABC (L. Ferguson to send Babli) and ANTEC Blow Molding Division Papers (subject to permission from SPE)

Continued on next page

---

## Uniloy ... with you in the end



UMI: reciprocating screw blow molding technology - APPLICATIONS: dairy, food, beverage, consumer packaging

email: [sales@uniloy.com](mailto:sales@uniloy.com)



**UNILOY  
MILACRON**

- Key Blow Molding Web Sites, Books and Other Media
- Schools with Blow Molding Programs
- (Picture Gallery – idea rejected)

#### Industrial Links:

- Resin Producers
- Equipment Manufacturers Converters
- Brand Owners e.g., Food & beverage, HIC BM, PC&T, LPBM, etc.
- Regulatory

#### Past ABC and ANTEC Blow Molding Division papers:

- ABC Conference Archive
- ANTEC Blow Molding Division Archive

#### What's New:

- ABC Conference
- Display BOD voted best papers from previous year's ABC & ANTEC BM Division
- Quarterly BM Division Newsletter link

#### June'08 Website Update:

- In summary: Review entire site – correct errors; update information; remove “under construction sites” – B. Kapur
- Remove “under construction signs”
- Post updated Sponsor info
- Post ABC 2008 conference flyer
- Update past ABC information
- Post available BM Reference info
- What's new – modify; post ABC 2008 and newsletter link

#### July Action Items (Information Needed for July end Update)

- Technical information update
  - History of blow molding write up - S. Steele
  - Resin types, advantages/disadvantages, properties, test methods compile table with input from B. Fitch, M. Heitker, J. Rathman, W. Galla - B. Kapur
  - Fabrication methods: EBM, IBM, ISBM write up - S. Steele
  - Types of equipment, molds, tooling - B. Lopez
  - Troubleshooting obtain info from J. Headrick– S. Steele
- Provide any additional reference information - All
  - BM or Plastics websites
  - Pictures or videos
  - Colleges/Universities with BM programs
  - Brand Owners – T. Glass
  - Regulatory – T. Glass
  - Convert 2002-07 ABC papers to pdf format – Babli

#### August'08 Action Items (Information Needed for Aug end Update)

- All to review website
- Provide any additional information for reference section
- Check links

#### Aug'08 End Website Update:

- Finalize website format
- Finalize reference lists
- Industrial Links

#### Marketing – Gary Carr

Marketing Meeting: February 17, 2009

Last meeting: October 7, 2008

Action Item: Agreed to post student resumes on web site and table top at ABC.

**Continued on next page**

Status ?: Education committee chair Geoff Ward to provide resume's.

- ABC needs to increase brand owner involvement
- How to draw them in?
- Could we enlist them to speak?
- Broaden our scope, ask them, conduct a survey. Put it together and send out.

Action Item:

Board members to submit to Deirdre a few names each of brand owners we are aware of.

Board members can also elect to do direct mailings to contacts with conference details.

Status ?: The personal touch is needed, Board members to reach out to our contacts!

Action Item:

Proposal that each Sponsor be given two 2 free conference registrations for targeted attendees from their direct customer pool. Target end user and converters.

- New Business: ABC 2009 advertising: Improve mechanism to facilitate networking at the Next ABC.

Action Item: Table till the October meeting

OPTION #1: Tipped in AD in Plastics News

- Advertise the ABC with Plastics News
- Run a one time 8 1/2" x 11" Tipped insert in Plastics News to the 5,951 blow molding processors in their mailing list.
- Schedule insert for approximately 1 month prior to event

Action Item: Investigate cost of ad in Plastics News

OPTION #2: Repeat Plastics News e-mail blast:

- ABC 2008 sent 4,701 e-mails
- 3,156 received
- Unique open 414
- Unique clicks 55
- Visited registration page 15
- Cost: ~ \$2,000

Action Item: Focus on print material and have the ABC program ready prior to NPE, pass out in board member booths: G. Carr

Action Item: Investigate whether the Blow Molding Division can display at the SPE booth during NPE 09 or possibly have a 10'x10' booth with rotating board member support. Kyle G.

- Newsletter – Ron Puvak

Action Item: Full board support is needed to provide content. Most recent Newsletter was all ads! Postcards mailing to check efficiency. On hold – May be able to use e-mails for verification – RAP can use new blast program.

- This helps our ABC's e-mailing list.
- Speak with national.
- Newsletter editorial schedule for 2009:
  - Publish by:
    - Announce Lifetime awardees
    - ABC 2009 Major article and registrations
    - ABC 2008 presentation – one selected
    - Industrial Blow Molding column – Ben Lopez.
  - Publish by:
    - ABC 2009 focus
    - Column Extrusion blow – Gary Carr.
    - ABC 2008 presentation – one selected
    - Sabic ANTEC paper
    - Sponsorship supplied Press Release Jeff Light to send a note to the sponsors
  - Publish by:
    - ABC 2009 focus
    - Injection Blow Molding column – Ben Lopez.
    - ABC 2009 presentation – Preview???
  - Publish by:
    - ABC 2009 wrap-up
    - PET SBM column – Scott Steele.
    - ABC 2009 presentation – one selected
  - News Briefs
  - Focused columns could be generated.





Turning **New Ideas**  
into Blow Molded  
**Products**



“I was surprised by  
what Kautex Maschinenbau  
was able to do for us.”

With the innovative extrusion  
blow molding techniques of  
Kautex Maschinenbau, almost any  
shape can be produced repeatedly  
and cost effectively.

Kautex offers everything from expert  
consultations to complete turnkey  
production systems, always focusing  
on your bottom line.

**Your Future in Plastics**

# ***YOUR EXPERIENCED PARTNER IN ON-LINE PLASTIC CONTAINER INSPECTION***



**NexGen Rotary**

The current population of ALPS rotary, linear and integrated leak testing machines is assuring the integrity of more than 50 billion bottles per year.

*Visit our web site today for information on our entire line of leak testing products!*

**www.alpsleak.com**



**LeakMonitor**  
FOR BLOW MOLDERS



**SS-100**



**RS-100**



**DB-100 Downed  
Bottle Ejector**

**ALPS**  
Assuring Plastic Container Integrity  
A division of TASI

## ***ONE WEEK PROTOTYPING HDPE, P.P, PVC, PET, P.C....***

**GIVE US YOUR IDEA, WE WILL PROVIDE SAMPLE BOTTLES  
IN ONE WEEK, MADE FROM A REAL PRODUCTION MOLD,  
RUN ON A REAL BLOW MOLDING MACHINE.**

- 1. BOTTLE DRAWINGS-1 DAY**
- 2. SAMPLES-1 WEEK (SINGLE CAVITY MOLD-1 WEEK**
- 3.PRODUCTION BLOW MOLDS-2 WEEKS**

**“WE BRING GOOD THINGS TO BLOW MOLDING”**

**EXTRUSION BLOW MOLDING MACHINES  
P.E.T. STRETCH BLOW MOLDING MACHINES  
MEDICAL ASEPTIC BLOW-FILL-SEAL MACHINES**

**RAO DESIGN INTERNATIONAL, Inc.**

9451 Ainslie, Chicago / Schiller Park, IL 60176. USA

**Tel: (847) 671-6182 Fax: (847) 671-9276**

plastic machinery - Google Search - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search

Address http://www.google.com/search?q=plastic+machinery

Google plastic machinery

Web Images Maps News Shopping Gmail

**Google** plastic machinery

Web

**Plastics Equipment**  
www.stapco.com New & Used Machines for Sale

**Used Plastic Machinery**  
www.meadowworkinc.com Large Inventory. Web

**Plastics & Rubber Machinery | Equipment**  
Manufacturers and distributors of new and used plastic equipment, including molds and toolmaking for plastic  
www.polysort.com/tekstdirectory/machinery.aspx

**Used Plastic Machinery from Plastic Machinery Alliance (PMA)**  
Plastics Machinery Alliance (PMA) is a used machine Ohio. Our primary mission is to be the supplier of used plastic machinery  
www.usedplasticmachines.com/ - 5k - Cached - Similar pages

**plastic machinery - Offers for plastic machinery**  
plastic machinery supplier directory - over 300000 plastic machinery suppliers from China and around the world  
www.tradekey.com/tekstdirectory/machinery/ - 52k - Cached - Similar pages

**Plastic Machinery directory of Importers**  
TradeKey.com - Your key to Global Trade. U.S. buyer, wholesale buyer, distributor, reseller  
www.tradekey.com/buyoffer\_list?id=0054/PMA

**When it comes to Google, is your company web site a no show?**

Contact Polysort for assistance with your site's search engine placement:

- Search engine optimization
- Web site design/ redesign
- Internet marketing

**POLYSORT**  
The power of many.

**Tel. 800-326-8666 ext. 2104**  
**www.polysort.com**

www.PlasticExtrusion.com/Machinery

Internet

start

2book - PE... Fw: SP 2... Online free... about mac... Aaron SP... Document2... 2:27 PM

**TECHNOLOGY TO MEET ALL OF YOUR BLOW MOLDING NEEDS**

*Profit from our Experience*

**Large Size Machines**

**Single & Double-Sided Shuttle Machines**

**High-Output Systems**

**Tandem Blowing**

**Extrusion PET**

**Co-Extrusion**

**Sterile Blowing**

**BEKUM AMERICA CORPORATION**

www.bekumamerica.com sales@bekumamerica.com 517-655-4331





# Attention blow molders — are your cooling lines corroded, blocked, or cracked?

**ALUMEC 99®** aluminum mold plate by Alcoa helps to:

- Maintain cooling efficiency and cycle times with resistance to exfoliation corrosion.
- Minimize downtime needed for cooling channel maintenance.
- Avoid premature mold failure through substantially increased resistance to stress corrosion cracking in cooling lines and cavities.
- Substantially increase mold life.
- Decrease repair costs.
- Improve productivity.

To learn more, please contact:

Copper and Brass Sales Division

John M. Perryman

Phone: (800) 926-2600 or (248) 233-5725

Fax: (248) 233-5788

E-mail: [john.perryman@thyssenkrupp.com](mailto:john.perryman@thyssenkrupp.com)

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



**One Call Gets It All!**  
**(800) 926-2600**



ALUMEC 99® is produced by Alcoa, Inc. and distributed in North America exclusively by Copper and Brass Sales.

A ThyssenKrupp  
Services company

## ThyssenKrupp Materials NA

Copper and Brass Sales Division

AIN Plastics, Copper and Brass Sales, Ken-Mac Metals, TMX Aerospace, ThyssenKrupp Steel Services, ThyssenKrupp Hearn, TKX Logistics

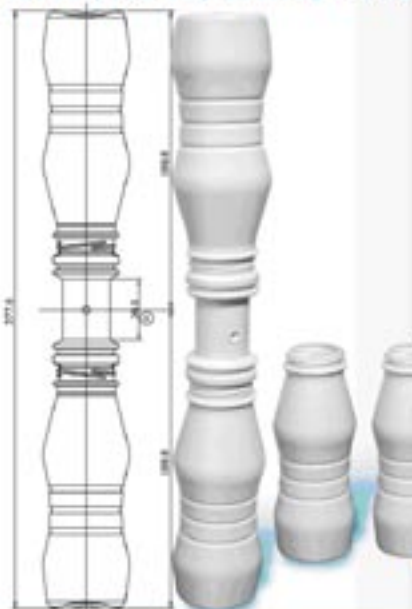


## ThyssenKrupp

**TECHNE®**  
Technipack Engineering Italia

Kyle Grodzinski  
Vice President Techne North America  
14845-6 Yonge Street, Suite #351  
AURORA L4G 6H8 ONTARIO - CANADA

[www.techne-it.com](http://www.techne-it.com)



- Complete line
- High productivity
- High profitability
- Low investment compared to the outputs granted
- Low electrical consumption
- Fully automatic



Neck to neck application

For further information:  
e-mail: [k.grodzinski@techne-it.com](mailto:k.grodzinski@techne-it.com)  
Telephone: 001 905-7511828  
Fax: 001 905-7510096

PEOPLE WHO FIND SOLUTIONS

Techne will  
be present at



HALL 14  
14 B 05

## PAST CHAIRPERSON



Ron Puvak  
Plastic Technology Inc.  
1440 Timberwolf Drive  
Holland, OH 43528-0964  
Ph: 419-867-5400 Cell: 419-708-1486  
E-mail: rpuvak@plastictechnologies.com

## CHAIRPERSON



Jonathan A. Meckley  
Penn State Erie  
REPC - School of Engineering  
5101 Jordan Road  
Erie, PA 16563  
Ph: 814-898-6147 Fx: 814-898-6006  
Cell: 814-572-2934  
E-mail: jmeckley@psu.edu

## CHAIRPERSON -ELECT



Scott Steele  
Plastic Technology Inc.  
1440 Timberwolf Drive  
PO Box 964  
Holland, OH 43528-0964  
Ph: (419) 867-5403/867-5400  
FX: (419) 867-7700 Cell: 419-392-2711  
E-mail: s.steele@plastictechnologies.com

## SECRETARY



Benjamin Lopez  
Bekum America Corporation  
1140 West Grand River P.O. Box 567  
Williamston, MI 48895-0054  
Ph: 517-655-7144 FX: 517-655-4121  
Cell: 517-944-9541  
E-mail: blopez@bekumamerica.com

## TREASURER / AWARDS CO-CHAIR



John Rathman  
Chevron Phillips Chemical Company  
155 Plastics Technical Center  
Highways 60 & 123  
Bartlesville, OK 74004  
Ph: 918/661-3431 Fx: 918/662-2220  
Cell: 918-327-9378  
E-mail: rathmjr@cpchem.com

## TECHNICAL PROGRAM CHAIRPERSON



Surendra Agarwal  
Kraft Foods  
1749 Henley Street  
Glenview, IL 60025  
Ph: 847-646-3598 FX: 847-646-3864  
Cell: 847-567-3750  
E-mail: sagarwal@kraft.com

## EDUCATION CHAIRPERSON



Mark Heitker  
INEOS Olefins & Polymers, USA  
Technical Center, TS&D Dept.  
1230 Independence Parkway South  
LaPorte, TX 77571  
Ph: 713-307-3702 FX: 713-307-3521  
Cell: 713-819-3702  
E-mail: mark.heitker@ineos.com

## EDUCATION



Robert Fitch  
ExxonMobil Chemical Company  
37567 Interchange Drive  
Farmington Hills, MI 48335  
Ph: 248-350-6512 FX: 248-442-2808  
Cell: 248-770-0618  
Email: robert.fitch@exxonmobil.com

## COUNCILOR



Mark Barger  
The Dow Chemical Company  
200 Larkin Center  
1605 Joseph Drive  
Midland, MI 48674  
Ph: 989-636-1263 FX: 989-636-0194  
Cell: 989-906-2083  
E-mail: markbarger@dow.com

## MARKETING



Gary Carr  
Bekum America Corp.  
1140 W. Grand River  
Williamston, MI 48895-0567  
Ph: 517-655-7135 FX: 517-655-4121  
Cell: 517-881-5764  
E-mail: gcarr@bekumamerica.com



Bob Jackson  
Jackson Machinery, Inc.  
3830 Highway H  
Port Washington, WI 53074  
Ph: 262-284-1066 FX: 262-284-5466  
Cell: 414-828-3808  
E-mail: bob@jackson-machinery.com



Daryle Damschroder  
FPM Tooling and Automation  
4711 North St., Rt 19  
Fremont, OH 43420  
Ph: 419-332-4466 FX: 419-332-2494  
Cell: 419-541-7017  
E-mail: daryled@hotmail.com

## MEMBERSHIP



Lewis Ferguson  
Parisons  
9900 Sunset Drive  
Stone Harbor, NJ 08247  
Ph: 609-368-7230 FX: 609-368-7229  
Cell: 313-506-4637  
E-mail: parisons@aol.com

## WEB SITE CHAIRPERSON

Mridula (Babli) Kapur  
The Dow Chemical Company  
Basic Plastics R&D  
2310 N. Brazosport Blvd, B-1470-D  
Freeport, TX 77541-3257  
Ph: 979/665-1611 Cell: 979-238-0488  
Cell: 979-709-1735  
E-mail: mkapur@dow.com



Win Burrington  
TI Automotive  
1227 Centre Road  
Auburn Hills, MI 48326  
Ph: 248-209-3322 FX: 248-377-1808  
Cell: 248-672-8155  
Email: wburrington@us.tiauto.com



Terry Glass  
The Dow Chemical Company  
Rigid Packaging TS&D Bldg. B-1607  
2310 N. Brazosport Blvd  
Freeport, TX 77541-3257  
Ph: 979-238-4246 Cell: 979-236-3617  
E-mail: TWGlass@dow.com



John Headrick  
NAMPAC  
4101 Lake Boone Trail, Suite 201  
Raleigh, NC 27607  
Ph: 919-791-2400 FX: 919-791-2390  
Cell: 919-559-4247  
E-mail: john.headrick@nampac.com

## Board of Directors



Geoff Ward  
Agri Industrial Plastics  
301 N. 22nd Street  
Fairfield, IA 52556  
Ph: 641-472-4188 FX: 641-472-7120  
E-mail: geoff.ward@agriindustrialplastics.com



William R. Galla  
Sabic Innovative Plastics  
7924 Eastbrooke Trail  
Poland, OH 44514  
Ph: (330) 757-6684 Cell: 330-310-0428  
E-mail: William.Galla@sabic-IP.com



Kyle Grodzinski  
Techne North America  
14845-6 Yonge Street, Suite 351  
Aurora, Ont. L4G6H8 Canada  
Ph: 905-751-1828 FX: 905-751-0096  
Cell: 416-276-2605  
E-mail: k.grodzinski@techne-it.com



Jeffrey S. Light  
A-ToP Polymers, Inc.  
47 Rockingham Road  
Windham, NH 03087  
Ph: (603) 893-4366 Cell: 401-486-3250  
E-mail: jeff@a-toppolymers.com

Gerald Hobson  
Hobson Consulting LTD  
21721 Wildwood Place  
Shell Rock, IA 50670  
Ph: 319-885-6564 Cell: 319-230-0994  
E-mail: ghobson@hobson.com

Clyde Bohne  
ExxonMobil Chemical Company  
37567 Interchange Drive  
Farmington Hills, MI 48335  
Ph: 225-673-2893 FX: 225-677-8214  
Cell: 225-937-7322  
E-mail: clyde.j.bohne@exxonmobil.com

## Active Members

Robert Slawska  
Proven Technology, Inc.  
5 Woodshire Way  
Hillborough, NJ 08844  
Ph: 908-359-7888 Fax: 908-359-1006  
E-mail: rslawska@aol.com

Karl H. Bruning  
KB InterTec, LLC  
1642 Pontchartrain  
Okemos, MI 48864  
Ph: 517-381-2343 FX: 517-381-2343  
E-mail: KBBrun@aol.com

Robert Delong  
Blasformen Consulting  
4914 Maple Terrace  
Kingwood, TX 77345  
Ph: 281-360-5333  
E-mail: blasformen@earthlink.net

Jack McGarry  
MBK/Blow Molding Machinery, LLC  
6 Towpath Way  
New Hope, PA 18938  
Ph: 215-630-2892 FX: 215-862-4963  
E-mail: beige2@aol.com

Dave Holliman  
Chevron Phillips Chemical Co. LP  
146 Plastics Technology Center  
Bartlesville, OK 74004  
Ph: 918-661-0144 Fax: 918-662-2220  
Cell: 918-327-9183  
E-mail: hollidc@cpchem.com

Elmar Spohr  
W. Muller USA Inc.  
1163 Suffield Street  
Agawam, MA 01001  
Ph: 404-787-0664 FX: 413-787-0642  
E-mail: elmar.spohr@mullerheads.com

Tim Noggle  
Ph: Cell:  
E-mail:

Roger Rhoads  
Basell  
6160 Brownstone Ct.  
Mentor, OH 44060  
Ph: 404-209-8901 Cell: 404-478-0471

Timothy W. Womer  
New Castle Industries  
1399 Countyline Road  
New Castle, PA 16107  
Ph: 724-656-5600 Fax: 724-656-5620  
E-mail: twomer@4spe.org

Lorie Struzik  
Basell USA Inc.  
912 Appleton Road  
Elkton, MD 21921  
Ph: 410-996-1728 Cell: 302-354-3811  
E-mail: lorie.struzik@basell.com

Gary Henneberry  
Polyone  
265 Shreve St.  
Mt. Holly, NJ 08060  
Ph: 609-351-9369 Fax: 609-499-6369  
E-mail: gary.henneberry@polyone.com

