



The SPECTRUM

MIAMI VALLEY SECTION
SOCIETY OF PLASTICS ENGINEERS

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NOVEMBER MEETING INFO

The Importance of Design



The United States is, and always has been, a great manufacturing country. Product design is important to our continuing success. Why? Because manufacturing can only produce what engineers design. The U.S. is still a world leader, but our manufacturing base is being eroded. Most of the emerging countries have now learned how to produce acceptable plastic parts. These countries' lower labor rates and standard of living, coupled with the absence of ISO certification, worker compensation, minimum wage, OSA and environmental regulations allow them to assemble these parts into low cost products. Open border policies and low import duties allow these products to be shipped back into this country to be sold at a profit. Original Equipment Manufacturers (OEMs) have now learned how to use off-shore suppliers to increase their profits. OEMs don't relish having their products produced this far away from their markets, but the lure of increased earnings is overcoming their apprehensions.

The large number of OEMs who continue to produce their products locally are now putting extreme pressure on their domestic suppliers to realize the maximum value for their purchasing dollar.

All suppliers can purchase the same plastic materials, tools, processing machines, hopper loaders, robots, etc. One of the things that set a processor apart from the competition is the design of the parts being produced. Every processor knows that many of the new products being released for production have not been designed as well as they could be. Redesigning these products for efficient production will give a supplier an advantage over the competition by providing the OEM with more value for his dollar.

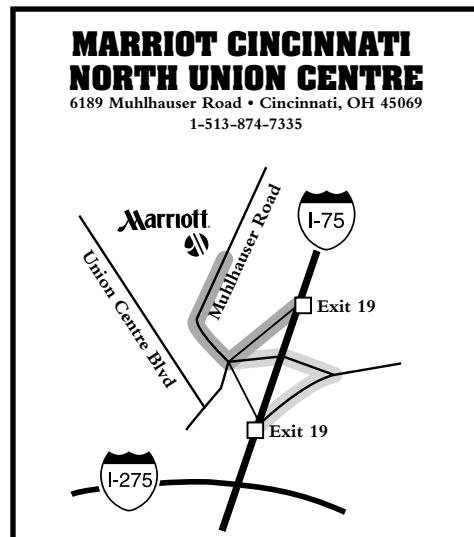
As time passes, the way new products are designed has changed. An important current change is that many OEMs are laying off their experienced design engineers. Increasingly OEMs are expecting their suppliers to help them finalize the design of their plastic components. It is a foregone conclusion that processors are going to become more involved in the design of their customer's products. No one is looking for more work to do, but this is a not-to-be-missed opportunity to provide OEMs with a valuable service that will turn them into repeat customers.

With these thoughts in mind the Miami Valley Section of SPE has scheduled a presentation entitled "The Importance of Design" for their November 7, 2002 dinner meeting. The speaker will be Glenn Beall, an outspoken plastics industry activist who has been designing plastic parts for over 40 years. Those attending will learn how and why the design process has changed over the years. Of more importance they will gain insight on how to take advantage of these changes to gain that all important competitive edge.

Driving Directions Marriott Cincinnati North Union Centre

From Dayton, OH and points North: Take I-75 South, Exit at Union Centre Blvd. (Exit 19) and turn right. Turn right onto Muhlhauser Road. Marriott Union Centre is on the right.

From Greater Cincinnati/Northern Kentucky Intl. Airport: Take I-275 East towards Cincinnati to I-75 North. Exit at Union Centre Blvd. (Exit 19) and turn left. Turn right onto Muhlhauser Road. Marriott Union Centre is on the right.



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Go to www.mvspe.org if you are interested in receiving an e-newsletter and NOT a printed copy. Fill out the contact info and hit the submit button.

The screenshot shows the Miami Valley Section website interface. At the top is a navigation bar with a logo and the text "Miami Valley Section". Below this is a section titled "To help the Miami Valley SPE section save money on printing, we will no longer receive the printed newsletter and just download your copy. The information must be the same as found on the printed mailing list." Below this is a "Contact Information" form with fields for "Member ID", "Name", "Company", "Address", "City, State", and "E-mail". There are "Submit Information" and "Reset Form" buttons. On the left side of the form, there is a "Site Navigation" menu with links for Home, Newsletter, Online Meeting, Registration, and Join SPE. Below the form, there are links for "Feedback", "Meeting Schedule", and "Past Events".

CALENDAR OF EVENTS

Nov. 7th	Cin./Marriott Union Centre Plastic part design - Glenn Beall
Dec.	No Meeting
Jan. 9*	Krauss Maffei Plant Tour
Jan. 11	Spouse/Date Night Belterra Resort & Casino
Feb. 6	Dayton/Alex's Additives, fillers, blowing agents
Mar. 6	Cin./Marriott Union Centre Taking the fear out of OSHA
April 3	Dayton/Alex's Student Night/Economic Development
May 1	Plant tour Comet Automation - weigh blenders, loaders, dryers, conveying equip.
June 9	Golf outing Hamilton Elks
June 22-26	Chicago NPE '03

MEETING NOTICE DETAILS

MEETING DATE: NOVEMBER 7, 2002
Advance Reservation required by November 5, 2002
To reserve, call or fax:

Dick Hauck	Mickey Brandon
Cincinnati	Dayton
513-871-5544	937-890-7834
Fax 871-8495	Fax 890-5854

MEETING AGENDA - NOV. 7, 2002

SPE Board Meeting	4:30 - 6:00 pm
Networking	6:00 - 6:30 pm
Dinner	6:30 - 7:15 pm
Program	7:30 - 8:30 pm

MEMBERS \$20 NON-MEMBERS \$25 STUDENTS/RETIREES \$10
MEMBERS \$25 AT THE DOOR WITHOUT A RESERVATION

*We are now taking VISA and MASTERCARD
for registration and other events*

PRESIDENT'S MESSAGE



Frank Maus

Thanks for everyone who attended our October meeting. Joachim Kragl of Engel put on a very good technical presentation on the advantages of water-assist molding. He took a very objective approach in comparing the process to gas-assist molding.

It was our biggest non-tour meeting in years. It was great to see all of the new faces, as well as others getting back involved in SPE.

I would like to thank Roger Shearer and all of the Edison State students who attended the meeting. Mickey Brandon of Marco Molding, Jack Bell of Midwest Plastics Systems, Dean Kroger of General Polymers, Rob Jergens of Jergens Innovative Technologies, and The Minco Group (ASPM) sponsored the students. Roger and Edison State also provided the needed A/V equipment.

If you know of non-SPE members who would enjoy attending a meeting, certainly invite them. They are more than welcome. At our website, www.mvspe.org, they can download an abridged version of the newsletter with all of the meeting information.

This month's meeting is one you don't want to miss. With the topic being plastic part design, it affects almost all disciplines in plastics. Product designers, mold designers, moldmakers, processors, material suppliers, and new people in the plastics industry will all benefit from Glenn's 40+ years in designing plastic parts. I urge you to get your reservations in early.

SUMMER BOARD MEETING: JULY 2002

ATTENDEES: Mickey Brandon, Jack Bell, Robert Jergens, Bob Rajkovich, Dan Tomo, Don Keyes, John Pierce, Dick Hauck, Frank Maus, Rolly Bedard, Dean Kroger.

TREASURERS REPORT: Accepted. Dick moved for acceptance. Dan Tomo seconded to pass it.

AUDITORS REPORT: Rolly Bedard, Mickey Brandon, Dean Kroger.

AWARDS: Bob Rajkovich said that National SPE wants us to tell them some names of past senior members.

ADVERTISING: Raised prices. Letters have been sent to all past and current advertisers.

EDUCATION COMMITTEE: Nothing New.

COUNCILORS MEETING: Dan Tomo attended the meeting. Dan will be submitting for the newsletter. ANTEC was not too well attended. Edison is finished.

GOLF OUTING: Summarized this on a sheet of paper. The dates of the Golf Outing were discussed because next year is a National SPE meeting. Committee should contact surrounding sections to avoid the overlap like we had this year, with the Cleveland and Detroit chapters. Dean thought we should move north. Dan would like to bring some new people in to help with running Golf Outing.

HOUSE: Some of the dates are set, but not all of them are. Mickey wants the books from ANTEC. May meeting is in there.

IT COMMITTEE: Ken, Dean and Bob met. Big thing is to get the website going. Working on getting members to take the newsletter via email instead of hardcopy. Past Presidents sometimes get two newsletters.

MEMBERSHIP: Nothing.

MINUTES: Mickey motioned to accept. Dan seconded the motion.

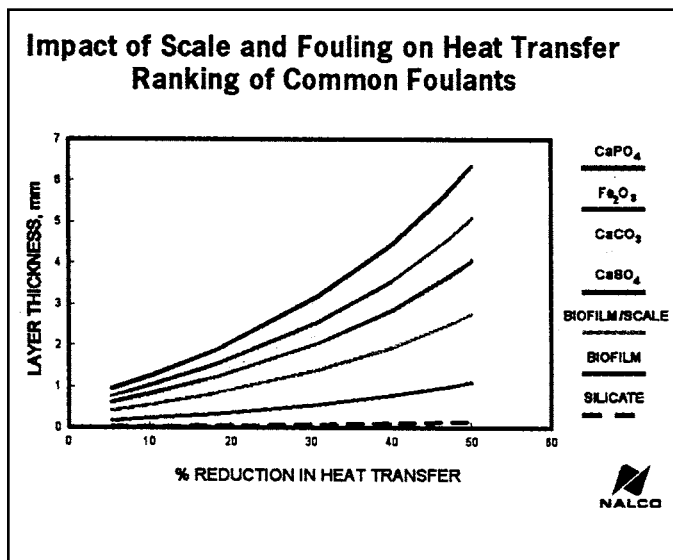
NEWSLETTER: Needs logos from Edison State and Sinclair Community College in order to change the letterhead. We also need to add a copyright symbol to the SPE logo.

COLUMBUS SPE: Has been dissolved. We might like to try to adopt them. Possibly by inviting them to the Honda trip. It was brought up that Stanley Electric would be a good tour. They are in Columbus.

PUBLIC INFO: There is a call for papers, mostly to do with recycling.

OLD Business: Nothing.

COOLING WATER PROPERTIES FOR CAST FILM UNITS AND ROLL STACKS



Controlled, even temperatures across chill rolls are crucial to the quality of your finished product. It is important that the water used to cool the roll be properly treated and monitored.

Impurities can clog and corrode pumps, valves, pipes, rotary unions, and the flow channels inside the chill rolls, which will all cause a decrease in performance and reduce the life of the components. A good, properly controlled inhibitor program will help eliminate the need for more aggressive methods such as acid flushing.

BGE recommends:

- Weekly checks for proper inhibitor levels
- Monthly visual and culture checks for bio-growth
- Quarterly inspection by a qualified water specialist to ensure water quality and system integrity, including corrosion and scale resistance, and microbiological fouling

Once corrosion begins, the metal surface forms blisters or "tubercles," which release oxide particles, adding suspended solids to the water. In addition, the tubercles will also build up on the surfaces and restrict flow and heat transfer. Scale buildup can be extremely difficult and costly to remove. Microbial problems are caused from the excess growth of algae, fungi, and bacteria. The graph shows that "bio-film" is actually more insulating to heat transfer than other common iron and mineral deposits. If poor conditions are left untreated or uncontrolled in cooling water, these problems can cause:

- Increased maintenance cost
- Decreased equipment life
- Reduced heat transfer efficiency and therefore greater energy losses
- Downtime
- Lots of aggravation

Your chilled water-cooling system should have the following performance characteristics:

Supply Pressure

Recommendation:

10 - 40 psi (0.7 - 2.7 bar)
Variation: +5 psi measured over a 24-hour span

Temperature

Recommendation:

54°F maximum (12°C) Variation on inlet: +4°F (2°C)

If the temperature of the water is 40°F (4.5°C) or below, Glycol solutions should be added to the water to prevent freeze-ups.

Heat transfer capacity will be reduced as the Glycol concentration increases. Your local minimum ambient temperature will determine the concentration of Glycol.

Caution: Glycol must not be added to cooling water if the process water contacts the web.

pH index

A scale from 0 to 14 that indicates the acidity or alkalinity of the water, where 7 is neutral. Numbers less than 7 mean the water is more acidic, while numbers greater than 7 mean the water is more alkaline. Recommendation: Between 7.5 and 9.5 with a suitable inhibitor to protect against steel and copper corrosion. Higher pH is better for steel, however copper corrosion increases above 8.8 or below 8.0 unless an inhibitor is used.

Solids

Material in the water that can be introduced from corrosion, airborne materials, or makeup water. These may include mud, sand, oils, debris, organic material or microbes.

Recommendation:

Less than 25 parts per million (ppm) for total suspended solids (TSS)

Hardness

Refers to the amount of calcium and magnesium minerals present in the water, which can leave a hard scale on surfaces it contacts.

Recommendation:

Less than 3.8 grains/gallon or 65 PPM (CaCo3)

Make up water

This is water added to the cooling system to replace water that has leaked, evaporated or been removed (blowdown) from the system to reduce contaminants.

Recommendation:

Same quality and treatment as above.

Excessive leaking in a system will bring in new hard makeup water, leading to a vicious cycle of fresh scale and a constant build-up. New makeup water is high in oxygen, which will cause deep pitting in steel and excess oxidation on other ferrous metals. Therefore, it is best to minimize water loss where feasible.

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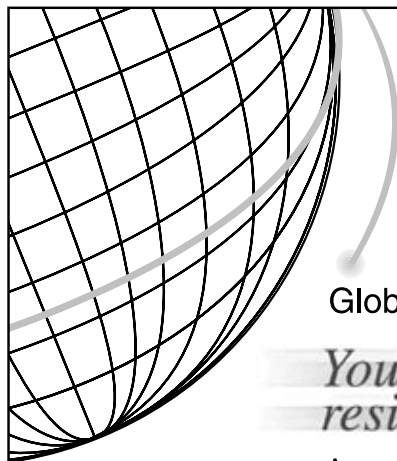
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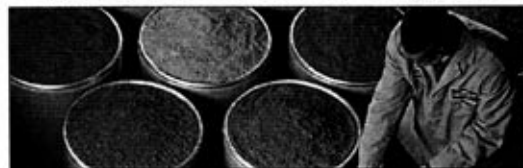
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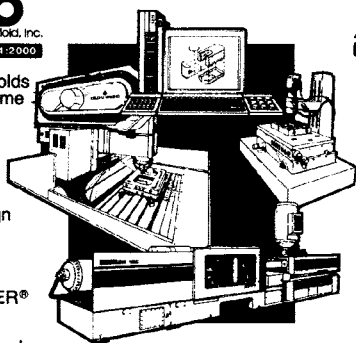
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SMS PLASTICS TECHNOLOGY APPOINTS NEW NORTH AMERICAN PRESIDENT

Effective October 16th, Michael Santacaterina (called Mike Santa) has been named President and CEO of Battenfeld of America, Inc. He succeeds Thomas Lenz, who is leaving the company to continue his career outside the SMS Group.

Mike Santa entered the machinery business in 1984. In 1993 he joined Krauss Maffei Corporation in the United States as Business Manager for the Chicago region. After nine months with Krauss Maffei he was appointed Executive Vice President, North America with responsibility for the North American operations including sales, marketing and service. During his six years with Krauss Maffei he has gained a vast amount of experience in the plastics machinery business.

He left Krauss Maffei in 2001 and joined Yamazen, Inc a company that markets metal cutting equipment. Mr. Santa championed Yamazen's diversification program into plastics.

"I am confident that Mr. Santa will strengthen and expand our injection molding business in the U.S." said Helmut Eschwey, President of SMS Plastics Technology Group.

SPOUSE/DATE NIGHT

This January 11th, 2003 we are bringing back the once popular Spouse/Date Night. If you would be interested in this event, please fill out the form below and mail, with check to: (or bring to Nov. 7th meeting with check, Visa/MasterCard)

Mickey Brandon
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We need to get twenty couples (forty people) to get the best price breaks on food and entertainment. We need this info **before the next meeting date of Nov. 7th**. If you have questions, special needs (handicap access) or other questions please call 937.890.7834 during business hours (8-5) and someone will get back with you about this exciting night.

Names of Couple _____

Company (optional) _____

Mailing address _____

City _____ State _____ Zip + _____ - _____

Daytime phone _____ FAX _____

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The social evening will include a buffet dinner and gambling, room for two for only **\$150.00 per couple**. This social event has in the past been one of great joy and profit to those in attendance. Any profits from the outing will be added to the Education Grant Fund. Looking forward to starting your 2003 year with you.

INTERNATIONAL COUNCILOR'S REPORT BY DAN TOMO

The fall council meeting was held in Danbury, Connecticut on September 21, 2002. I did not attend the meeting due to illness. The following meeting summary was supplied by Mr. Mike Cappelletti—Executive Director. I thank Mr. Cappelletti for this summary which I will share with you.

COUNCIL SUMMARY

The summary is intended to help you review the highlights of the Council Meeting held in Danbury, Connecticut on September 21, 2002.

The meeting was called to order by the SPE President Claudius Feger.

FINANCES: The major Council action was the approval of the 2003 calendar year budget amounting to \$7.187 million in revenue with a net revenue contribution of \$37,000 to retained earnings.

STUDENT CHAPTERS: Council voted to charter a Student Chapter at ISTIL, Villeurbanne, France.

SECTION NAME CHANGE: Council voted to approve the name change of the Republic of China Section to the Taiwan Section.

SIG PETITION: A petition was presented to form the Plastics Educators Special Interest Group.

COMMITTEE MEETINGS: 12 Committees met prior to the Council meetings.

PRESENTATIONS: Karen Winkler, SPE Vice President and Tobi Gebauer, Manager, Member Recruitment and Retention gave a membership presentation which included audience participation entitled “Drive for Five.” It was requested by the Councilors that this well received presentation be made available on the SPE website. The entire presentation can now be found on our website at: <http://www.4spe.org/sectionsdivisions/ld/drivefive.htm>.

SPE Deputy Executive Director, Susan Oderwald gave a presentation entitled “What’s New at SPE.” Highlights of the presentation given by the individual department heads were:

- 1) SPE Foundation Highlights
- 2) The success of SPE’s new training products—Plastic Technician’s Toolbox, The Extrusion Blow Molding video series, The Ten Fundamentals of Thermoforming, The SPE Guide on Extrusion Technology and Troubleshooting.
- 3) SPE’s new Event Management department
- 4) SPE’s new Section/Division Services department
- 5) SPE’s new Customer Relations Team
- 6) The newly redesigned Plastics Engineering Magazine
- 7) Interactive marketing on www.myplasticsinfo.com
- 8) Online Journal and ANTEC Papers

CONTRIBUTIONS: Dave Arndt, Automotive Division—reported that \$1,000 was given to the India Section for Student Sponsorship and \$17,500 was given in sponsorship of the Plastivan.

Frank Palmer, Tennessee Valley Section—\$1,000 to the SPE Foundation for the opening reception.

Jack Hill, Milwaukee Section—\$100 for the Essay Contest.

COUNCIL COMMITTEE-OF-THE-WHOLE: Mr. Rick Wilson called the meeting to order at 7:30 a.m. prior to the formal Council meeting.

SPE Vice President & Treasurer, Len Czuba gave a comprehensive presentation on the 2003 budget.

An ANTEC presentation was made by Bill O’Connell.

The next formal meeting is scheduled for Saturday, January 18 in San Antonio, Texas.

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