

# SOCIETY of MANUFACTURING ENGINEERS

## TORONTO CHAPTER 26

### MARCH 2003



<http://www.sme-toronto-26.org/>



## Tour: GMC Truck Assembly Plant, Oshawa

Thursday March 20, 2003

NOTE: Tour at 6:00 pm  
Oshawa, Ontario; 905-644-3447

Enclosure:  
RPM Robotics Flyer

**SIGN-UP REQUIRED BY MARCH 17 '03**

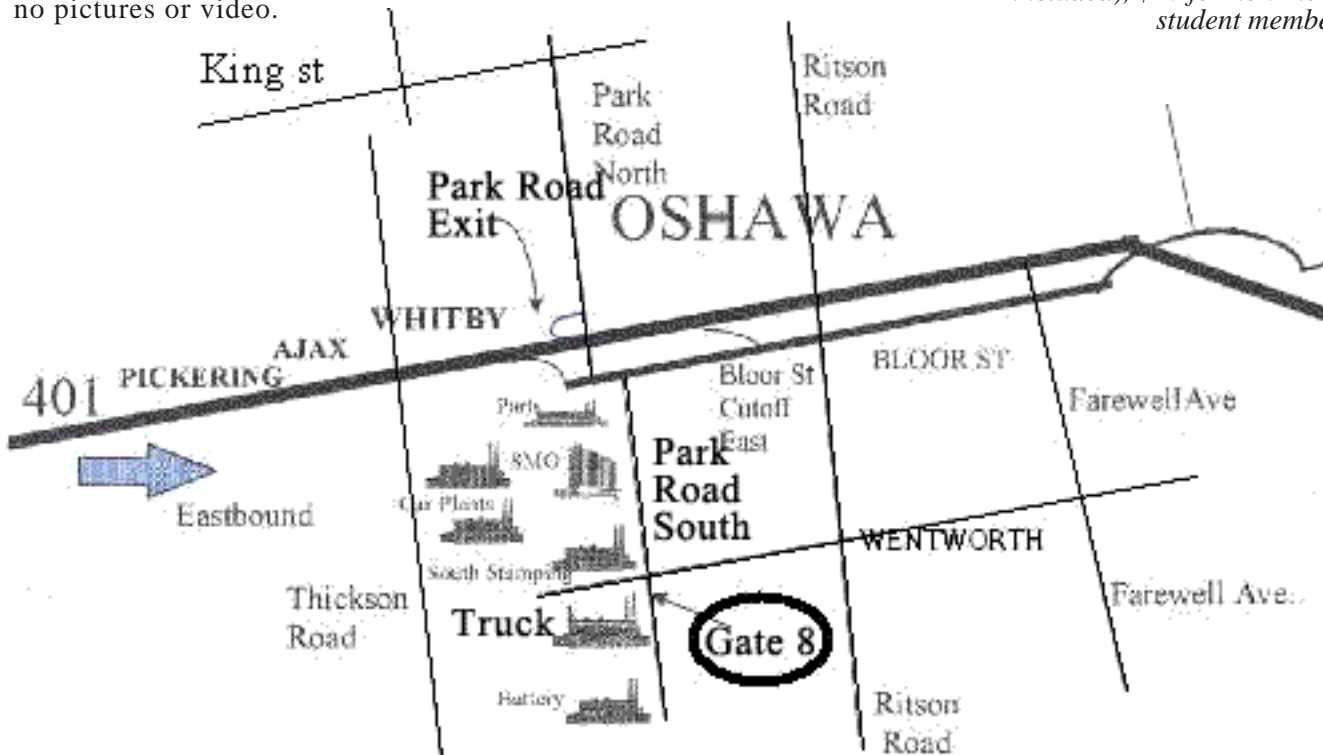
**Thursday March 20: Oshawa Truck Assembly Plant.** This plant makes the full size Chevrolet, Silverado, & GMC Sierra. The plant is 3.1 million sq. ft. with over 3,400 employees.

**Register today for this event with Loris Giuricich 416-448-2225, [Lgiurici@celestica.com](mailto:Lgiurici@celestica.com) or Amalesh Chakraborty at 416-894-5168 or [camalesh@sympatico.ca](mailto:camalesh@sympatico.ca)**

**Visitor Safety Rules:** Must be 12 years old; Must stay with host; No open-toed shoes/high heels' Behave industrially: stay in the aisles, watch for & give way to vehicular traffic, obey all warning signs, be alert to floor hazards, do not distract workers, do not interfere with AGV's, no smoking, no pictures or video.

**Directions:** From Hwy 401, take Park Road Cutoff. Go east on Bloor. Turn south onto Park Road. Go straight down Par. The Truck Plant is on your right just after Wentworth Street (4th set of lights). Gate 8.

*\$10 for members (CMMA & CTMA included), \$20 for non-members, student members \$5.*



## Mark Your Calendars: THIS SEASON: Topics & Schedule 2002-03

**Thursday April 10:** Talk: the potential use of R&D Tax Credit for Manufacturing Organization

**Thursday May 22:** Linda Hassenfratz, President of Linamar Corporation will be the speaker at this years joint society dinner hosted by the Grand Valley Chapter of OACETT. The participating organizations compliment each other on many different professional levels and this will give us the opportunity to network and learn more from each other. The regional chapters for PEO, the SME will act as joint hosts. The following societies are currently being invited to participate: ASM, ASQ, CIM, CSIE, CSCE, CSSE.

**Wednesday June 4:** TBD

### *NB: Please -update Your Information*

*Please* check that your information in the SME headquarters database is correct!

Phone (toll free): 1-800-733-4763.

Website: <http://www.sme.org/>

You can renew your membership on line by clicking on "Renew Membership" in the Member Services section.

### *Executive Meetings*

**EXECUTIVE MEETINGS 2003 6:30 pm start:**

**NEW LOCATION:** George Brown College Technology Board Room, C302, Casa Loma Campus, 160 Kendal Ave. (Davenport and Spadina). Map at <http://www.gbrownc.on.ca/campuslocations/index.html#CasaLoma>

Tuesday, March 11

Tuesday, April 8

Tuesday, May 6

Tuesday, June 3

For additional information on the next meeting phone 416-894-5168 or email: [camalesh@sympatico.ca](mailto:camalesh@sympatico.ca)

### *The SME Chapter 26 Bulletin*

The SME Chapter 26 Bulletin is published eight or nine times a season by the Toronto Chapter of the Society of Manufacturing Engineers (SME). The SME provides support for people and industries in manufacturing by providing opportunities for networking, professional development and technical information.

Headquarters of this 70 year old professional society are in Dearborn, Michigan. For more information or to join, phone or email the Chapter Chair, Amallesh Chakraborty, at 416-894-5168 or [camalesh@sympatico.ca](mailto:camalesh@sympatico.ca) or Headquarters at 1-800-733-4763. Talks and tours put on by the Chapter are listed on the Chapter web site at [www.sme-toronto-26.org](http://www.sme-toronto-26.org) Headquarters web site is at [www.sme.org](http://www.sme.org)

### *Companies at Husky Tour*

The following companies had representatives attending the Feb 20 plant tour to Husky Injection Molding

Art-K Canada	John Deer
Axis Tool Design Co.	Matcor
BC Instruments	MechatroSoft Inc.
Booz Engineering	Messier-Dowty
C-Mac Invotronics	Pacifex
Celestica	Queensway Machine
Commercial Roll Formed Products	RB Hope Ind Inc.
Fuchs Lubricants	Royal Machining
George Brown College	Royal Mould Tec.
Haworth	Ryerson University
Houghton	Temspec Inc.
Irwin Seating	Tristar Stamping
	University of Toronto

### *Your Company Flyer Bulletin Enclosure Opportunity*

Chapter 26 is offering companies the opportunity to enclose their company flyer in our monthly Bulletin mailing. The piece to be included must meet the following criteria:

- 500 folded flyers ready for stuffing into a #10 envelope supplied by 1 week after copy deadline.
- Is of interest to our membership - is manufacturing oriented (we don't want life insurance or travel brochures)
- Weighs less than 3 sheets of 8.5 x 11 in 20 lb bond paper. Larger items could be negotiated.

We reserve the right to reject pieces we do not feel to be consistent with our professional goals and objectives. Our mailing list is currently over 400 manufacturing professionals. The current price is \$300 per issue. We reserve the right to change any of the above items without prior notice. For more information please get in touch with Ken Kogej, 416-274-2540 or [Ken-dante.msn@attcanada.net](mailto:Ken-dante.msn@attcanada.net)

### *Bulletin Copy Deadlines*

**NOTE: Send material to Jenny Ono Suttaby at [jono@jentekcompany.com](mailto:jono@jentekcompany.com) by the following dates for inclusion in the upcoming Chapter Bulletin:**

April Issue: by Mar 7

May Issue: by April 11

June Issue: by May 2

### *Note: The Joseph R. Benedetto Scholarship*

The Application Form for the Joseph R. Benedetto Scholarship is available on the chapter web site at [www.sme-toronto-26.org](http://www.sme-toronto-26.org).

## EXECUTIVE LIST

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Our continuing thanks to Professor Mark Fox, U of T, for hosting the Chapter's web site on his server at <http://www.novator.com>

## Waste Management from a Manufacturing Viewpoint: Husky Injection Molding. SME tour of Feb 20, 2003

This was another great tour by Chapter 26! While the trip to Bolton was farther than most other SME events, it was well worth the effort. Glenn Atkinson who is Husky's Manager of Environment, Health & Safety provided an excellent and professional presentation. We also want to thank him for the coffee and muffins which we were treated to at the beginning and end of our tour.

Husky doesn't normally give tours of their facility, but an exception was made in our case. Why? Because Husky felt that many of our members also have a serious interest in environmental practices in industry. Husky wants to share their knowledge with other engineers in other fields to improve our total environment even more.

Husky, a company founded in 1953, is now an international Corporation with 2,600 employees and sales of \$640 million. While they are developing technology in a variety of new areas, their primary business focus has been to manufacture tools and presses for the blow molding of liquid bottles. They have been so successful that currently 60% of the world's bottles are being made on Husky equipment. Caring about the environment has recently made Husky #2 in the list of 50 best corporate citizens in 2002 in Canada. Given that it's only been a few years since a famous business person was cheered for announcing that "Greed is good", Husky Corp must have felt they were a real anomaly in their business community when they announced that a serious concern for the environment was to be integrated into their day-to-day business practices and policy statements. Typically our culture teaches us to measure our success by what we acquire, what we get, what we own. Husky is trying to conduct their business practices with a different set of values which includes "proactive environmental responsibility".

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Husky is very active in managing the waste stream from their factories. They have developed many methods to insure that waste is recycled. This includes separate waste streams for compost, paper, plastic, metal, and cardboard. They also insure that storm water and other water leaving the factory grounds are clean.

Husky also works hard to insure that their machines are not damaging to the environment. They no longer use CFC base coolants for their machine refrigerants and use systems which are far less environmentally harmful. You may say that Husky's motive for environmental concern is really just applying "a different method" to succeed in their business. I don't believe this is true. To simply say that "good ethics is good business", is to talk about what is good business and not about what your ethics reflect. I think for Husky, their ethics come first and they work hard to create the best business practices they can, sometimes in spite of some additional cost.

In some ways, Husky is actually teaching ethics to the whole community (including their employees) by reinforcing a new way of behaving. Want to buy a high fuel efficiency car? Husky gives their employees some company shares. Don't use pesticide on your lawn? Great. You get a few more shares. Eat health food in their cafeteria? Great, you save money since health food is sold at a discount within their cafeteria.

Who knows, maybe they have also convinced some of our SME members that environmentally sound actions can comfortably co-exist within manufacturing. Hopefully, some of our attendees will go ahead and give some of these ideas a try in their own organizations.

*Robert Hope*  
*bob@rbhope.ca, Program Committee*  
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# Many Thanks to our BULLETIN PUBLICATION and WEB SITE SPONSORS:



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Information and links at: <http://www.sme-toronto-26.org/>

## Welcome to the New Executive!

Welcome to the new members of the executive, Son Nguyen Chair-Elect, and Adam Poon. As space allows, there will be brief biographies on these new Executive Members.

**Son Nguyen, Chair-Elect:** Son Nguyen's interests is in the area of computer aided design and manufacturing as well as other uses of computers technology in

manufacturing and engineering. Son graduated from the University of Toronto in Mechanical Engineering and his professional experiences encompasses industries such as that of metals and plastics forming, telecommunications, and software. Son enjoys readings, sailing, skiing, and volleyball in his free time.

## Tour at commercial Roll Formed Products

It's a pity if you missed our tour at Commercial Roll Forming Products (CRFP) on January 23rd, 2003. There's nothing better than getting together with fellow Engineers to discuss interesting manufacturing processes. This SME event was no exception. The tour's very professional presentation included excellent food and drink and was led by enthusiastic and knowledgeable staff including Mr. Armin Schabel, CRFP's President. Our conference room presentation was led by our own Farhad Shafiei, an SME member and Engineer at CRFP.

CRFP's ISO9001 facility is a well laid-out 180 k-sq-ft factory with over 50 roll formers in operation. Their key product base includes office furniture, shelving systems, electrical cable trays, and building components. Their main incoming material is slit coil stock using a wide variety of steels and nonferrous materials including aluminium, copper and brass. These materials may be pre-coated or painted and are usually from 0.005" to 0.138" thick. Forming of these materials will result in cross-section tolerances as low as +/-0.005".

The common element of all these raw materials is that they can be bent longitudinally by rotational deformation using forming rolls. The primary advantage of roll forming is the ability to produce continuous lengths of 2 dimensional shapes which can be easily cut to a variety of lengths. As a result, this is a major manufacturing process and represents sales of over \$3.0 billion dollars worldwide per year.

If used properly, roll forming has the advantage of significantly

minimizing work-in-process for a manufacturing operation. For CRFP this includes in-line operations such as punching, piercing, notching, welding, embossing, lancing, louvering, slitting, bending, cutting, bundling and labelling.

A general rule of thumb for manufacturing is "never give up material orientation". Any time a product is transferred un-orientated from one stage of manufacturing to another, additional costs are incurred. This includes the costs for work-in-process material, delayed QA inspection of the product, additional loading and unloading of a machine, and usually a major cost of re-orienting the product for the next process step. CRFP takes great efforts to maintain material orientation throughout their processes. One major example of this includes a former which stops and starts allowing precision punching to occur. While stopping and starting a machine sounds easy, the ability to control the necessary product tolerances require very careful drive synchronization. Some of the processes we saw would not have been possible 10 years ago without having used state-of the-art electronic drives which are now available.

Rethinking a process by applying modern and current technology has brought CRFP to a leadership position in their marketplace. Given their caring and focused approach to the manufacturing process, I don't think they will be giving up this leadership position for a long time.

*Robert Hope*

*bob@rbhope.ca, Program Committee*