

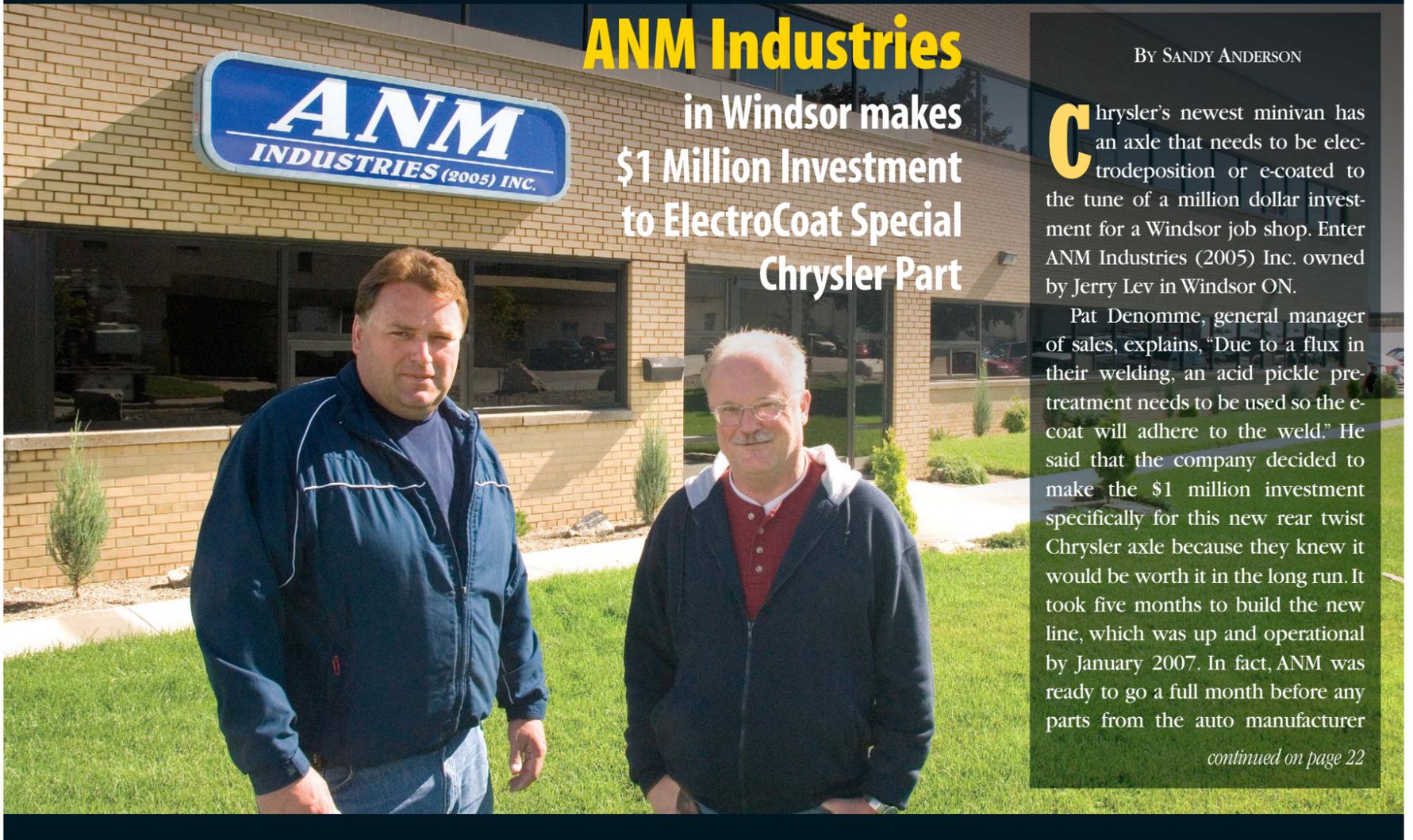


# CFCM

**CANADIAN FINISHING & COATINGS MANUFACTURING**

\$12.00

November 2007



**ANM Industries**  
in Windsor makes \$1 Million Investment to ElectroCoat Special Chrysler Part

BY SANDY ANDERSON

Chrysler's newest minivan has an axle that needs to be electrodeposition or e-coated to the tune of a million dollar investment for a Windsor job shop. Enter ANM Industries (2005) Inc. owned by Jerry Lev in Windsor ON.

Pat Denomme, general manager of sales, explains, "Due to a flux in their welding, an acid pickle pre-treatment needs to be used so the e-coat will adhere to the weld." He said that the company decided to make the \$1 million investment specifically for this new rear twist Chrysler axle because they knew it would be worth it in the long run. It took five months to build the new line, which was up and operational by January 2007. In fact, ANM was ready to go a full month before any parts from the auto manufacturer

*continued on page 22*

**ALSO IN THIS ISSUE**

- Environmental Update—VOC Regulations Status
- Coverage on FIN-X in Indianapolis and ICE in Toronto
- Emerging Technologies and New Products

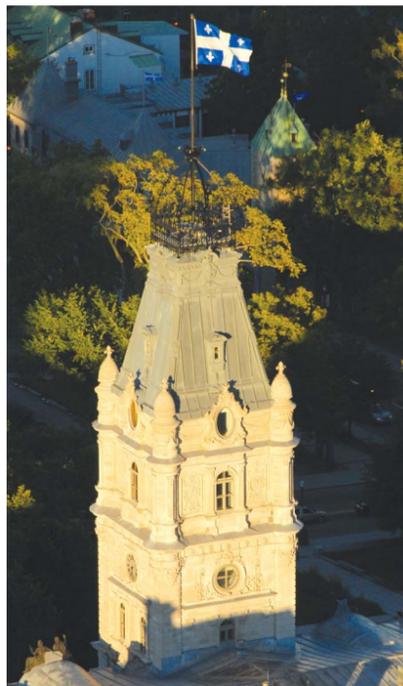
...and much more

## CPCA 2007 is Best Convention Yet — Quebec City

The Canadian Paint and Coating Association welcomed 130 to its convention in Quebec City this year at the Palace Royal, September, 8-11. Organizers are very pleased with the attendance and overall response to the four day event.

"It's more people than we have ever had at a convention," said Jim Quick, CPCA president. "We tried to do things a little different and people seemed to enjoy it."

The convention got off to a high start Saturday with sunset cocktails and hor d'oeuvres on the 31st floor of the Observatoire de la Capitale overlooking the Quebec Assembly, La Citadelle of Québec, the Old City and The Chateau Frontenac, the port and the St. Lawrence River. The city is under renovation everywhere, preparing for the 400th anniversary of the founding of Quebec City in 1608 by Samuel de Champlain.



Attendees got an early start Sunday morning with a discussion of environmental issues with Kim Headrick, Health Canada, The GHS: The Globally Harmonized System of

*continued on page 13*

## IN THE NEWS

### Akzo Nobel /ICI deal to finalize January 2008

Akzo Nobel N.V., Amsterdam, the Netherlands, plans to complete the acquisition of ICI, on January 2, 2008. Management estimates that the operating-cost savings relating to the ICI paints business will result in a total post-tax net of approximately EUR 2.5 billion after implementation costs. This is in addition to the pre-tax operating cost savings of EUR 280 million per annum announced in August 2007, a figure which includes preliminary assessments amounting to a post-tax net value of approximately EUR 375 million.

Akzo Nobel intends to sell ICI's Specialty Starches and retain ICI's Specialty Polymers business.

### Laboratory Merge at Clariant, Ontario Office Closes

As part of a restructuring, Clariant is closing its Markham, ON lab and moving to Rhode Island. For over thirty years, Clariant's Pigments & Additives Division in Canada has supported the local customer base with its Technical Application Laboratory in Markham, ON. But now, the company says, "as part of a transition to a regional administrative and business support structure, the Technical Application Laboratory will combine with the Industry-specific laboratories in Coventry, Rhode Island, effective December 1, 2007." The company states that this move will allow it, "to better service the increasingly complex needs of the Canadian market and focus our resources on the Coatings, Plastics, Printing and Specialties markets."

The contact for coatings is William Zonin, tel: 401-823-2769, E-mail: william.zonin@clariant.com.

*continued on page 5*

PM # 41515012 Return undeliverable Canadian addresses to Wilkinson Media Canada Inc., 250 The East Mall Suite 1103, Toronto, ON, Canada M9B 6L3

# BEYOND CHEMISTRY

AU-DELA  
DE LA CHIMIE



**YOUR**  
*active*  
**intermediate**

Inortech Chimie inc. is a distributor of specialized quality raw materials to the coatings, ink, adhesives and plastic compounding industries.

Inortech Chimie is the only Canadian chemical distributor who can back up recommendations and provide formulating support with a fully staffed and equipped with state of the art equipments R&D laboratory.

**Come and experience the difference!**

**VOTRE**  
*intermédiaire*  
**actif**

Inortech Chimie inc. est un distributeur de matières premières de spécialités pour les peintures, encres d'imprimerie, adhésifs et plastique.

Inortech Chimie inc. est le seul distributeur canadien qui a un laboratoire de R&D avec un personnel des plus qualifié et des équipements dernier cri.

**Venez profiter de cette différence!**

 **INORTECH**  
CHIMIE INC.  
[www.inortech.com](http://www.inortech.com)

**Head Office:** 3014, rue Anderson, Terrebonne, QC J6Y 1W1  
**Customer Service:** 1-800-661-2064  
**Sales Office:** 7025 Tomken Rd., Suite 259  
Mississauga, ON L5S 1R6  
**Warehouses:** Ville Lasalle, QC – Rexdale, ON  
Winnipeg, MB – Edmonton, AB

## SPINNING THE WHEELS

How do you like my new car? I wish. Actually it is a very old Duesenberg and part of the display at the Auburn Cord Duesenberg Museum. We stopped in Auburn, IN, on our way to the Fin-X show in Indianapolis. The cars we saw are worth a lot more money now than they ever were when they were first manufactured.

Speaking of money, a very fascinating thing happened to our money this year. My Canadian loonie was actually nine cents more than the U.S. dollar for a while. On Nov. 2, 2007, for example, the dollar set a new record at 109.0 before settling down to rest at 107.3 at the end of the trading day. In fact the loonie is considered the best performing currency in the trade market this year. It has also appreciated against the euro, yen, and several others, according the Canadian Press.

That doesn't mean that I can now take my loonies and toonies across the border and buy things without first converting them into US dollars. Merchants would still look at me sideways. But it does mean good news for the Canadian consumer. Now, if I buy something in US dollars I might actually be saving money. How about that? We visited trade shows in the US this year and for the first time it cost the same for us as it did for the Americans.

Canadians are now after the big retailers to lower their prices and sell items at least at the U.S. list price. Wal-Mart started and other retailers have followed suit. Canadian consumers expect retailers, including U.S. owned, to drop prices to reflect the dollar, especially when U.S. companies have a significant presence in Canada. What some retailers are doing with such items as books and magazines where the Canadian and U.S. prices are printed directly on the cover, is just crossing out the U.S. price.

What may be good news for consumers, however, is disastrous news for the trade. Manufacturers and Suppliers to the paint and coatings and finishing industries who built plants in Canada in order to take advantage of our lower dollar are now hurting. This will, and in some cases already has, forced these companies to pull out of Canada altogether and consolidate their manufacturing efforts close to the border, but on the U.S. side.

Opinions are mixed when it comes to our puffed up dollar. Some say it is not a true reflection of a healthy economy, that investors choosing other currencies over the lower U.S. dollar, is having a "disproportionate impact on the lighter-traded loonie," to quote the Canadian Press.

The Bank of Canada predicts good health in the whole situation. According to the Bank of Canada's October Monetary Policy Report, which discusses current economic and financial trends in the context of Canada's inflation-control strategy, "Against a backdrop of robust global economic expansion and strong commodity prices, the Canadian economy has been stronger than projected and is now operating further above its production potential than had been previously expected."

The report says, "Since the July Update, the outlook for the U.S. economy has



weakened. The Canadian dollar has appreciated sharply, and credit conditions have tightened. Despite these tighter credit conditions, the momentum of domestic demand in Canada is expected to remain strong." The Bank does say that all this implies that net exports will exert a more significant drag on the economy in 2008 and 2009 than previously expected, which results in a projected increase of Canada's gross domestic product of 2.6 per cent in 2007, 2.3 per cent in 2008, and 2.5 per cent in 2009.

Inflation is expected to gradually decline to 2 per cent in late 2008.

Then there's Canada's inflated job rate that has been reported in the news. Most of these jobs are in government and social services. In industry jobs are in fact disappearing, such as with the recent news from Chrysler LLC.

Under new private owners, the automaker announced Nov. 1, 2007, it is cutting up to 10,000 hourly jobs, 1,000 salaried positions, and discontinuing the third shifts at five assembly plants in the United States and Canada (1,100 jobs), which includes the Brampton, ON plant. Daimler AG sold 80.1 per cent of Chrysler to Cerberus Capital in the summer 2007.

The company also is dropping four models from its lineup, due to low demand, including the convertible version of its PT Cruiser sport wagon, Chrysler Pacifica, Dodge Magnum, and the Chrysler Crossfire two-seater.

The job cuts, which will take effect through 2008, are in addition to a plan announced in February that would eliminate 13,000 North American positions.

Canadian Auto Workers, (CAW) president Buzz Hargrove calls it "horrible, horrible news."

At least two Canadian suppliers to the discontinued cars will most likely shut down.

In Windsor, however, where the minivan is made, sales are still strong.

CFCM's pretreatment case study this issue, ANM Industries (2005) Inc. in Windsor, ON, says they are unaffected by the Chrysler cuts, because the minivan is still a big seller for the automaker.

On another note, CFCM received a lot of congratulatory letters and e-mails from readers on our premier issue. Please remember that this is your magazine and we want to provide news and information pertinent to your business. If you have any comments or suggestions about news and features that you would like to see or if you would like to write a "letter to the Editor" please feel free to e-mail me at [sandra.anderson@cfc.ca](mailto:sandra.anderson@cfc.ca).

Thanks for reading and see you in February when we will have lots of corporate profiles for you to read as well as special stories on TiO<sub>2</sub>, UV Curing; Thickness Testing; and much more.

Sandy Anderson

## CONTENTS

### FEATURES

**1 ANM Industries in Windsor**  
makes \$1 Million Investment to ElectroCoat  
Special Chrysler Part

**6 VOC Regulations**  
...where are they? A Historical Look

**13 Conference Coverage—CPCA**

**15 Biocides**  
Keeping a clean plant at various locations within  
prevents problems before they start

**20 Chromium Replacements**  
A look at the newest technologies and trends

**23 Spray Booth Maintenance**  
It's a good idea to post housekeeping rules

**25 Stripping**  
What's New

**27 FIN-X Show Coverage**

### DEPARTMENTS

From the Editor	3
News	5
Calendar of Events	12
People	12
New Products	29
Ad Index	30

### Volume 1 Number 2 November 2007

#### EDITOR

Sandra Anderson  
519-442-4071  
Fax 519-442-1359  
[sandra.anderson@cfc.ca](mailto:sandra.anderson@cfc.ca)

#### PUBLISHER

Pete Wilkinson  
416-255-1808  
Fax 416-519-1313  
[pete.wilkinson@cfc.ca](mailto:pete.wilkinson@cfc.ca)

#### VICE PRESIDENT

Brian Jones  
905-405-1500 #223  
[brian.jones@cfc.ca](mailto:brian.jones@cfc.ca)

#### GRAPHIC DESIGN

Allan S. Bates  
416-485-9229  
Green Apple Prepress  
[allan.s.bates@sympatico.ca](mailto:allan.s.bates@sympatico.ca)

CFCM Canadian Finishing & Coatings Manufacturing is published bi-monthly by Wilkinson Media Canada Inc. Subscriptions are free to qualified Canadian finishers and coatings manufacturers and their suppliers. Subscriptions (six issues): Canada \$60.00 per year plus taxes (GST #858877210 RT0001). United States U.S. \$57.00. Foreign U.S. \$85.00. Single copy \$12.00 CDN plus taxes.

#### Postal Information:

Printed in Canada. Publications Mail Agreement PM # 41515012  
Return undeliverable Canadian addresses to CFCM Magazine, 250 The East Mall Suite 1103, Toronto ON M9B 6L3 . Copyright 2007.

Contents of this publication may not be reproduced either in part or in full without the written permission of the publisher. CFCM makes every effort to report product news supplied by manufacturers accurately, however it is not responsible for the validity of any claims.

#### WILKINSON MEDIA CANADA INC.

250 The East Mall Suite 1103  
Toronto, Ontario,  
Canada M9B 6L3  
416-255-1808  
Fax 416-519-1313



# ZERO VOC Preservatives & Additives

## Dry Film Preservatives\*

Polyphase<sup>®</sup> 663 • Polyphase<sup>®</sup> 678

## In-Can Preservative

Mergal<sup>®</sup> K10N

## Wetting & Flow Additives

Troyso<sup>™</sup> ZLAC • Troyso<sup>™</sup> LAC

## Defoamers

Troykyd<sup>®</sup> D704 • Troykyd<sup>®</sup> D720  
Troykyd<sup>®</sup> D726

Troy Corporation sets the Gold Standard for material protection and performance — Environmentally friendly products designed to meet or exceed the toughest measures of compliance while improving performance:

- VOC-free biocides that set the standard for material protection in paint and coatings
- Zero and low VOC additives that maintain high performance with little or no contribution to VOC

To learn more about Troy's Gold Standard products stop by **Booth 504** at **ICE 2007** or visit [www.troycorp.com](http://www.troycorp.com)



**The Gold Standard in Performance Products**

8 Vreeland Road • Florham Park, NJ 07932 • tel 973.443.4200 • fax 973.443.0843

\* Soon to be registered in Canada

## IN THE NEWS

### Dupont/Integran Nanotechnology Alliance

DuPont has formed an alliance with Morph Technologies Inc., Integran Technologies Inc., and PowerMetal Technologies to develop and commercialize a nanocrystalline metal/polymer hybrid technology. The technology will be used to manufacture extremely lightweight components with the strength and stiffness of metal and the design flexibility and lightweight benefits of high-performance thermoplastics.

The new product, MetaFuse nanometal/polymer hybrids, uses a process that precisely applies ultra high-strength nanometal to components made of DuPont engineering polymers. This creates lightweight components in myriad complex shapes with the stiffness of magnesium or aluminum. Initial developments will focus on applications in the automotive, consumer electronics and sporting goods markets.

### Mattel Continues Lead paint recall

As the busiest season for toy sales approaches, Mattel Inc. is vigorously continuing its extensive investigation of toys manufactured prior to the implementation of the three-point check testing system. At presstime the latest is a recalled production run of a single product due to impermissible levels of lead.

The toy is the Go Diego Go Animal Rescue Boat from Fisher-Price, which has two painted logos that may be affected. The toys were sold at retail after June 2007 in the U.S., U.K., Ireland and Canada. Toys sold before this date are not affected. There are 38,000 affected toys in the U.S., 12,000 in the U.K. and the Republic of Ireland and 5,500 in Canada. No other countries are affected.

"Mattel has now tested samples of the vast majority of products expected to ship for the holiday season, including those produced before the implementation of our three-point check testing system," said Geoff Massingberd, senior vice president of the company's newly-created Corporate Responsibility organization. "This testing program continues and all toys manufactured since the adoption of the new system have been, and continue to be, sampled and tested prior to leaving the manufacturing facility."

Mattel sourced a piece of the product for molding and painting to Man Shing, a facility which then subcontracted the painting to Hua Yi, which used unauthorized paint. The toys were produced between May 17, 2007, and August 11, 2007.

Mattel is working in cooperation with the U.S. Consumer Product Safety Commission and applicable regulatory agencies in the EU and Canada. Mattel is also working with retailers in those three countries to identify and remove affected products from retail shelves.

For additional information regarding this recall, and a list of all the others contact Mattel at 888-299-0579 or visit the company's Web site at [www.service.mattel.com](http://www.service.mattel.com).

The Consumer Products Safety Commission also publishes details of the recalled items.

### Electrocoat 2008 Program Changes

The Electrocoat Association is geared up for electrocoat 2008, to be May 14-16, 2008 at the Indianapolis Marriott Downtown. It is being billed as the industry's most important event, giving attendees the opportunity to learn from suppliers and end-users; stay current with new, more efficient methods of managing electrocoat systems; develop cost-saving plans for systems; learn about new technology and applications; meet and network with industry colleagues. The Electrocoat Conference Steering Committee has been working hard to provide numerous program selections for conference attendees in 2008. Each morning will open with a Keynote Speaker during a General Session, but then attendees will choose from two educational options for the remainder of the morning. Afternoons may be spent in interactive workshops, meeting in Exhibit Rooms with suppliers to discuss products and services, or divided among both activities.

[www.electrocoat.org/conference](http://www.electrocoat.org/conference).

### Changes at Torrid Oven

A management buy-out took place at Torrid Oven PFS Ltd., effective July 1, 2007, whereby the Corcoran family relinquished control of the company and both Robert Corcoran, the founder, and Craig Corcoran retired.

The new management consists of: Jef P. Muyschondt, President; Jeff B. Hummel, Vice President Sales; Pat A. Jannetta, Engineering Manager; and Henry F. Kozyc, Operations Manager, which collectively represents over 100 years experience in the finishing industry.

Established in 1959 Torrid Oven designs, manufactures, supplies and installs custom-engineered paint finishing systems and heat processing machinery with

over 1,000 installations worldwide including most recently Canada, the U.S.A., China, Korea, and Mexico, with a large installation currently underway in Romania.

From the beginning, Torrid pioneered the concept of "turnkey" system responsibility, whereby a complete finishing system from concept to pilot production was conceived, engineered, designed, built, installed and commissioned by a single source. Over the years, Torrid solidified this with the introduction of the "clean room" concept for automotive finishes, designing hot wax systems for automotive frames, designing elaborate powder finishing systems and fully automated E-Coat systems.

With finishing systems becoming more sophisticated in terms of automation, environmental controls, energy savings, and the unrelenting pressure for more value at the same cost, Torrid is evolving to maintain a leadership position in this new economy.

### Call For Papers, SUR/FIN 2008

The National Association for Surface Finishing (NASF) is calling on researchers, chemists, engineers, and finishing industry experts to present technical papers at SUR/FIN 2008—North America's premiere event for the surface finishing industry set for June 16-18 at the Indiana Convention Center, Indianapolis, IN.

Abstract submissions should address one or more of 50



New Management Team at Torrid Oven, from left: Henry F. Kozyc, Operations Manager; Jef P. Muyschondt, President; Jeff B. Hummel, Vice President, Sales; and Pat A. Jannetta, Engineering Manager.

topics that include alternative cleaning methods; automation of surface finishing processes; electropolishing; environmental issues; automotive surface finishing; lean manufacturing; organic finishing (powder coating), water and wastewater treatment, and much more. See [www.sur-fin.net](http://www.sur-fin.net). Abstracts must be received with the appropriate documents by January 4, 2008; final papers are due April 15, 2008. Based on the subject matter of the abstract(s) submitted, the Conference Review

Committee will determine the appropriate conference track for the proposed presentation, which include:

- Technical Conference
- Automotive Symposium
- Airline/Aerospace Symposium
- Management Outlook

Potential speakers will be notified of the conference track upon acceptance of their submissions. Abstracts should be 100 words. As SUR/FIN continues to embrace








### Filtration & Separation Technologies,

your one stop choice for filtration products, new and used mixing and milling equipment and solvent recycling

**FILTRATION & SEPARATION TECHNOLOGIES INC.**  
 1333 Boundary Rd., Unit 37  
 Oshawa, Ontario L1J 6Z7  
 Phone: 905-723-5594  
 Fax: 905-723-0445  
 E-mail: [fsti@rogers.com](mailto:fsti@rogers.com)

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

Making Manufacturers More Competitive™



## Maximize Your Finishing Profitability

For the most extensive wood finishing equipment and innovative solutions look to the world leader... EXEL Industrial.

**"Nothing Compares to the Power of Airmix®"**

Bringing Innovation to Pumping

Serving all Industrial Markets with the most Extensive Plural Component Product Line







**Call Now**  
 1-800-573-5554    1-800-450-0655  
 USA                      Canada

Visit our website at [www.exel-na.com](http://www.exel-na.com)

Finishing
Fluid Handling
Two Component Equipment
Airmix®/HVLP

We're proud to be known by the company we keep.

1967 40<sup>th</sup> Anniversary 2007

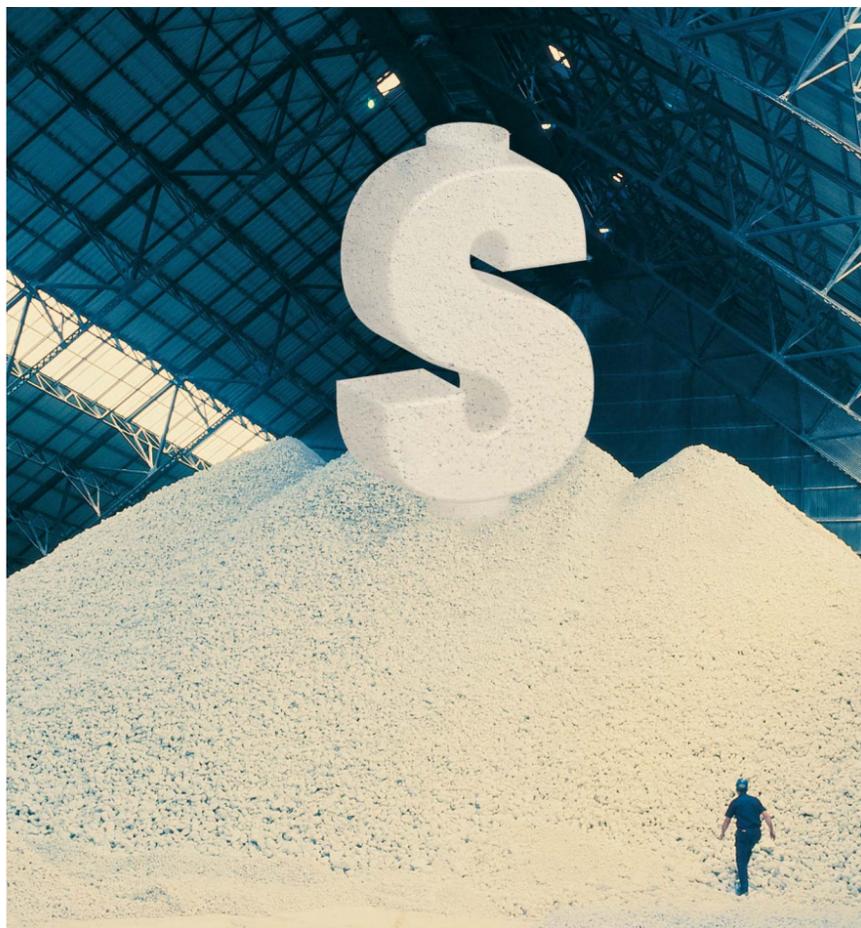
To our valued customers and suppliers thank you for your valued business.

Our goal is to continue earning your trust and support.



Vancouver, BC • 604.460.7610 | Toronto, ON • 905.789.0701 | Montreal, QC • 450.625.0505  
sales@chemroy.ca

www.chemroy.ca



Calcium Sulphate.  
The filler choice that  
is right on the money.

Calcium sulphate, commonly known as gypsum, can replace about 15% of titanium dioxide, resulting in substantial savings. And it's less abrasive than many fillers, so there's less wear on your equipment. To learn more about how calcium sulphate can improve your business and save you money, contact CGC at 905-803-5607.



www.cgcinc.com

## IN THE NEWS

### ENVIRONMENTAL UPDATE

# VOC Regulations... Where are they? A Historical Look

By Dave Saucier

I recently attended an association technical meeting where one of my colleagues, whom I have the utmost respect for, made a general presentation on the state of Canada's regulations in the chemical industry. The presentation began with a time line that started in 1994 when the New Substances Notification regulations came into effect. I thought wow, am I getting old or what. I used to sit in the steering committee meetings for the Transportation of Dangerous Goods Regulations (TDGR) and Workplace Hazardous Materials Information System (WHMIS) during the early 1980's.

During that same time, when I was much younger, while I worked for a multinational company that produced solvent based adhesives, the first murmurings of Volatile Organic Compound (VOC) regulations were beginning. At the time I didn't even know what a VOC was, nor did most anyone else. Significant millions were spent in the 1980s to develop water-based technologies based on the impending VOC regulations that were coming just around the corner.

### STILL NO REGULATIONS

Twenty years, and quite a few grey hairs, later we have the impending VOC regulations that are going to save mankind and as we approach 2008, still no regulations. Now I am hoping that all the delays are in fact because someone at Environment Canada in Gatineau actually did listen when we told them that the Global Harmonized System (GHS) was going to roll out later in 2008 and that all packaging for paints and coatings would therefore undergo a substantial change. Nope, according to another old friend at EC there will be no label requirements.

### GLOBAL HARMONIZED SYSTEM

GHS essentially replaces WHMIS. A completely new health and safety label on every can of paint will be required that incorporates new pictographs and standardized phrases. The good news is that GHS is global so a label should not have to be changed or affixed once an imported product arrives in Canada. Notice I said "should not" rather than "will not" – this is because we will still have to meet Canada's unique bilingual requirements.

So, if Environment Canada was is

in fact delaying the introduction of the VOC regulations so that all the labeling issues can be dealt with at one time, then this would make perfect sense. However, the grey hairs are standing up on the back of my neck leading me to believe that perhaps it is politics dictating the issue rather than common sense.

### R&D DRIVE THE INDUSTRY

One thing is for sure, just as in the mid-1980's when the rumors of impending VOC regulations came to be, the spending on new technology development was staggering. Regardless of the fact that only California has taken the situation seriously, the opportunities that research and development, which goes into new innovations and technologies are what is really driving the industry now. This has significant benefits for all companies in the supply chain. I would theorize that without these rumors or impending regulations, the coatings industry would only develop based on a market driven rather than regulatory driven basis, slowing the whole R&D process down. The market wants faster, better, but CHEAPER. New technology development is not cheap, but ensures we get to faster and better at some point.

The current electoral climate in Canada is now focusing in on environment issues. As I write this piece somehow the spinners in the Ontario political parties have deflected the environment to the private versus public schools debate. A savvy move that seems to have worked. And who knows maybe in another 20 years from now, someone else will be writing a piece with a time line that starts "Well in 2004, just as I was leaving university, began the timeline of regulations affecting the Canadian chemical industry in the following way..."

Another old friend from Environment Canada did in fact tell me that the VOC regulations would appear in Gazette I by December 2007 unless the minority government falls. There's that political angle again.

Dave Saucier is Business Unit Manager, Industrial Specialties, Multi Chem Inc. (Boucherville, QC) and works from the Mississauga, ON sales office. Dave is also the Secretary/Vice President of the Toronto Society for Coating Technologies (TOSCOT).

the entire supply chain, a balance of papers, panel discussions, and forums that best meet the goals and interests of SUR/FIN attendees will be considered in the selection process. Authors will be notified of their acceptance by Feb. 4, 2008.

The Conference will address technology innovations and cost-effective solutions to manufacturing concerns, as well as subject matter most important to those interested in the automotive and aerospace industries. The Management Outlook track will be further enhanced to update and inform managers of best practices, global trends and other initiatives that have a competitive

impact to their business.

For potential speakers, this represents a valuable opportunity to gain recognition and possible grants from the AESF Research Board—the educational arm of the NASF. As an added incentive, the association is offering the primary author/presenter a free registration to the show. This includes a complimentary proceedings CD, full access to the exhibition area, show floor receptions, and technical sessions. Also, all papers presented and included in the conference proceedings are eligible for the newly established SUR/FIN Best Paper Award.

Abstracts need to be submitted by January 4, 2008,

to Cheryl Clark, director of events, NASF, cclark@nasf.org, 202-457-8404, ext. 213; or at 1155 15th Street, NW, Suite 500, Washington, DC 20005.

SUR/FIN 2008 is organized by the National Association for Surface Finishing, www.nasf.org.

## PRICING BRIEFS

### Dow Chemical and Epoxy Raises Prices

The Dow Chemical Co. has raised off-list prices on several oxygenated solvent products in North America effective as of Nov. 1, 2007.

Dow Epoxy has announced \$0.10 per pound price increases in North America for D.E.N. Epoxy Novolac resins and solutions, effective October 1, or as contract terms allow.

www.dow.com

### Nuplex Resins Increases Price Coating Resins

Nuplex Resins has increased prices for coating resins sold in North America effective Nov. 1, 2007. The increase will vary by product based upon raw materials used, but will include alkyds, acrylics, polyesters and amino resins.

www.nuplexresins.com

### Wacker Polymers Raises Prices Functional Binders

Wacker Polymers raised its prices worldwide for Pioloform, Polyviol, Vinnacoat, Vinnapas solid resins and Vinnol surface coating resins. The increase averages 10 per cent. Prices are also being adjusted for dispersions and dispersible polymer powders, up to 15 per cent for different product groups and regions. Increases came into force on Nov. 1, 2007.

www.wacker.com

### Linseed Oil Price Hike Leads to Resin Surcharge

Due to the rising cost of linseed oil as a world commodity, Reichhold, Inc. brought forth a surcharge on products containing it in oil-modified urethanes, uralkyds and select alkyd resins manufactured by the company's Coatings Division.

The surcharge was effective October 2007.

www.reichhold.com

### Cytec Announces Price Increases

Cytec Industries Inc., West Paterson, NJ, has raised prices five to seven per cent depending on the product group, as contracts allow, of selected UV/EB curable specialty monomers, specialty oligomers and photoinitiators in the Americas for orders shipped on or after Oct. 15, 2007.

www.cytec.com

### Air Products Polymers Announces Price Increases

Air Products Polymers, L.P., effective Nov. 1, 2007, implemented a \$0.04 per-wet-pound price increase for all vinyl acetate homopolymer and copolymer, vinyl acetate ethylene copolymer, vinyl acetate vinyl chloride copolymer, and vinyl acrylic-based emulsions, applicable to all North American sales. The company under the Airflex, Flexbond and Vinac trademarks sells these products.

www.airproducts.com

### Aqualon Increases Prices

Effective Nov. 1, 2007, or as contracts allow, Aqualon has increased worldwide prices by five per cent for Natrosol hydroxyethylcellulose, Natrosol Plus modified hydroxyethylcellulose, Natrosol FPS fluidized polymer suspensions, Aquaflow rheology modifiers, Klucel hydroxypropylcellulose, Aqualon ethylcellulose and all Aqualon brands of carboxymethylcellulose supplied to the coatings industry.

www.aqualon.com

### Solvay Chemicals Raises Prices for Hydrogen Peroxide

Solvay Chemicals Inc. will increase off-list prices for all commodity grades of hydrogen peroxide effective Nov. 1, 2007 or as contracts permit. North American commodity grades will increase USD 0.04/lb. or CAD 88/mt (100 per cent basis); and export commodity grades will increase USD 88/mt. (100 per cent basis). Solvay Chemicals will maintain the current energy surcharge program as long as the NYMEX Henry Hub price for natural gas is above \$5.00/MMBTU.

www.solvaychemicals.com

# The FSCT and NPCA Enter Merger Discussions

The Board of Directors of both the Federation of Societies for Coatings Technology (FSCT) and the National Paint & Coatings Association (NPCA) have endorsed and agreed to enter into merger discussions. The FSCT has presented the NPCA with a proposal that includes the formation of a wholly owned subsidiary as well as an effort to combine International Coatings Expo (ICE) and the American Coatings Show (ACS). A task force for the FSCT and NPCA will be formed to develop the details of this proposed merger.

In the proposal the FSCT states, "It is clear through our interactions with our members and the industry that there is tremendous concern and confusion about the separate paths that the FSCT and NPCA are taking. This divide will prove detrimental to all our companies, our members, and ultimately to each of our respective associations."

The FSCT Board proposes the following:

1. The FSCT will merge with the NPCA and become the technical and scientific arm (including technical publications) of the NPCA, as a wholly owned subsidiary, preserving the mission and purpose of the FSCT through the NPCA's acquisition of its

assets and liabilities.

2. An immediate effort will be made to combine the International Coatings Expo and the American Coatings Show in 2008. Concurrently, the FSCT and the NPCA will work together to determine how best to honor any related contractual commitments and upon the successful completion of the merger, any remaining financial obligations will be satisfied by the newly combined organization.

If the NPCA agrees, FSCT representatives will meet with them by Dec. 31, 2007 to complete the details of the merger and to develop an implementation plan for its completion. A plan to promote and explain the details of the merger will be developed by Jan. 31, 2008. A final merger plan will be presented to the FSCT and NPCA membership for vote by March 1, 2008 with approvals to be completed by April 1st 2008.

"The FSCT believes that this merger of the FSCT and the NPCA would result in the strengthening of both organization's programs and resources and provide the highest level of benefits and services to our members and the industry," states the proposal.



 Clariant

Exactly your chemistry.

## G-Shield™

### Graffiti and dirt protection in one coat



Clariant has developed an easy-to-use, easy-to-clean, clear solution against aggressive and damaging graffiti and unsightly dirt.

G-Shield™ is an innovative, durable coating which provides protection from graffiti and grime. Markers, paints, inks, tar, sap, grease, dirt and other stains cannot permanently adhere to the G-Shield™ protected

surfaces. Additionally, G-Shield™ will not alter the normal appearance of the substrate and is resistant to commercial cleaning solutions, and aggressive brake fluids. The protected material can be cleaned numerous times without reapplication or damage to G-Shield™.

G-Shield™ can be easily applied and because it is a

thin coating, G-Shield™ is very economical – especially for large surfaces.

In addition to protection from graffiti and grime, G-Shield™ provides effective protection from UV radiation and weathering. Compared with unprotected surfaces, the G-Shield™ protected surface displayed no tarnishing, gloss reduction, scratching, or paint damage.

**Did we raise your interest?**

**Please contact us:**  
KION Specialty Polymers  
A Clariant Business  
1957-A Pioneer Road  
Huntingdon Valley, PA 19006

Tel: 215.957.6100  
Fax: 215.957.6324  
www.kioncorp.com

## CANADIAN ASSOCIATION NEWS

### Safety Group Results more than Double Previous Rebates

Canadian Association of Surface Finishers (CASF) members who participated in the Workplace Safety and Insurance Board of Ontario (WSIB), Partners In Safety program have doubled their rebate cheque from the previous year.

In 2005, the group's rebate cheque was for \$53,000 but for 2006, Partners In Safety is getting a total of \$119,338.41

The group performed as follows for each category:

Achievement: the degree to which the group completed the elements – 70.89 per cent – a score of 2.84 out of 4

LTI Frequency Improvement: 36.43 per cent reduction – a score of 2 out of 2. The group's reduction in frequency was way above the reduction accomplished by any other safety group.

LTI Severity Improvement: 15.27 per cent reduction – a score of 1.53 out of 2

The group's overall score was 6.37 per cent out of a possible 8 per cent. This was just about the average score for all 45 Ontario Safety Groups.

The average for all of the groups with regard to the amount of their rebate related to their premiums was 2.41 per cent, and the CASF group's were above average at 2.49 per cent. This means that groups with large companies paying high premiums did not necessarily do better than CASF members.

Though not an exact figure, but according to the distribution formula, each Safety Group member will receive at least \$2000. For 43 companies in the CASF Safety Group, this equals \$86,000. The rest of the rebate will be divided according to the percentage of individual premiums compared to the total premiums for the group.

If a company is not in good financial standing with

the WSIB, the rebate will be applied to whatever is owed them.

The rebate cap (which is no longer in place) reduced the amount each member should have received by approximately 60 per cent. If the cap had not been in place for 2006, Partners In Safety would have received over \$200,000.

### What is a Safety Group?

In Ontario, the Safety Groups Program has been designed by the WSIB to financially recognize businesses that make accident/injury prevention a daily habit. Firms in a Safety Group can receive rebates on their WSIB premiums if they participate fully in the program and can show they have made prevention elements an integral part of their businesses.

CAMF is one of the sponsors of Partners In Safety and it is time to register for the 2008 program. There are fees that must be paid by the end of January 2008.

<http://www.wsib.on.ca/wsib/wsibsite.nsf/Public/SafetyGroupsProgram>

### Sewer Bylaw Unchanged

The Canadian Association of Surface Finishers (CASF) is urging industrial facilities to write the Canadian Council of Ministers of the Environment (CCME) because it has not changed its Model Sewer Use Bylaw.

CASF feels that the Model Sewer Use Bylaw, should it remain with the current proposed limits, will create future needs for industrial facilities across Canada to fight municipalities to edit their proposed effluent limits in new or updated Sewer Use Bylaws whenever the municipality follows the Canada-wide Model.

Here are limits proposed for Inorganics:  
Total Concentration Limit– Preliminary Recommendation [mg/L, except as noted]

Ammonia – 24

Arsenic, total – 0.1

Cadmium, total – 0.2

Chloride – 1500

Chromium, total – 0.37

Cobalt, total – 5

Copper, total – 1

Cyanide, total – 1.0

Lead, total – 0.1

Mercury – 0.1

Molybdenum, total – 5

Nickel, total – 0.55

Nitrogen, Total Kjeldahl – 70

Phosphorus, total – 12

Selenium, total – 0.82

Silver, total – 0.29

Sulphates (as SO4) – 1500

Sulphide (as H2S) – 0.3

Zinc, total – 0.03

When CASF questioned the CCME about the Model Bylaw remaining unchanged, they replied, "...the Development Committee (DC) is proposing that the adoption of the model sewer use bylaw is voluntary. At this time, there is not enough support from stakeholders and jurisdictions to propose that it be made mandatory. As a result, the DC made no changes to the model bylaw. We felt that time and resources were best utilized in other areas.

If you have strong feelings about this, feel free to submit comments again and perhaps at some future date, revisions can be made. The disposition table which will be posted by week's end will reflect this decision by the DC."

CASF replied to the CCME, "Our concern with the Model Bylaw's current format is not whether it is voluntary or mandatory for municipalities; it is that it CAN BE used by municipalities to copy and implement with the current limits proposed. My auditing experience, in Ontario, is that the Model is basically implemented 'as is' in all municipalities (with exception of Toronto, who has a more stringent model, a version which is much more recent than most).

Industry has huge problems with limits set at fractions of ppm's (zero.something mg/L) – ie. Chromium, Nickel, and particularly Zinc which may as well be set at zero. By setting a zero limit, you are conveying to industry that we should phase out the zinc plating industry (for example) in Canada and have consumers purchase this process from other countries.

Another problem with this is that if the Model Sewer Use Bylaw remains with the current proposed limits, this will create future needs for industrial facilities across Canada to continually fight with different municipalities to edit their proposed effluent limits in new or updated Sewer Use Bylaws whenever a municipality follows the current Canada-wide Model.

I will resubmit comments, and I do appreciate the opportunity to do so again. I look forward to consultation sessions also."

CCME encourages all interested organizations and individuals to review the draft Strategy and provide comment.

To view draft visit [www.CAMF.ca](http://www.CAMF.ca)

Comments and suggestions must be received at CCME by January 31, 2008.

### CASF Postpones its Conference

The Canadian Association for Surface Finishing (CASF), formerly CAMF, has postponed its 8th Annual Surface Finishing Conference & Exhibition, originally set for November 21-22, 2007 at the White Oaks Conference Resort and Spa, in Niagara-on-the-Lake, Ontario.

The association quotes "unforeseen circumstances and scheduling conflicts" as the reason for deciding to postpone. At presstime a date had not yet been set, but the association is considering having it in fall 2008.

In other news, Brigitte Roth has left the association as a paid employee and is now be involved on a volunteer basis. She has returned to Kuntz Electroplating Inc. as Quality Management Coordinator.

## TOSCOT's First Meeting of the Season

The Toronto Society for Coatings Technology (TOSCOT) held its dinner meeting Sept. 10, their first after the long summer break.

Business of the evening included the presenting of scholarships to two deserving recipients and the handing out of diplomas for the Coatings Technology course taught by Peter Duncker (TOSCOT Education Chair).

Speaker of the evening Bob Schilling, of Union Process Inc. highlighted the principles and selection criteria of media mills, especially small media mills.

He spoke about stone mills to grind latex using flint stones from Belgium to ball mills, sand mills, then highlighted the pros and cons of small media mills.

TOSCOT's next meeting was Monday, November 5, 2007 at the Toronto Airport Marriott with Speaker, Dr. Jamil Baghdachi, Professor, Eastern Michigan University, Coatings Research Institute, Ypsilanti, MI, who talked about Adhesion of Polymeric Coatings. Attendees heard a qualitative overview of the adhesion phenomena, surface characteristics, and factors affecting adhesion of coatings to various substrates, including metals and plastics.

Tentative dates for the next TOSCOT events for 2007/2008 are:

- December 4—Christmas Luncheon
- January 7—OCCO Joint Technical

Meeting & Dinner with a speaker from Dominion Colour Corp.

- April 7—Mini Symposium (time & venue to be confirmed) with speakers from Degussa, Reichhold and more to come.
- March 1—Spouse's Night
- May 5—Annual General Meeting with a speaker from BYK
- June 3—Annual TOSCOT Golf Tournament

In other news, the society is looking for a new Publicity Chair as Mike Cadden moves into the Treasurer role. This person will be responsible for the monthly newsletter that

includes soliciting news from the Executive Board as well as TOSCOT members. The Executive Board is also looking for a Co-Chair for the Entertainment position who will assist the current Chair, David Hazell, in coordinating public events including the Annual Golf Tournament, Spouse's Night and the Christmas Luncheon.

Meanwhile, the TOSCOT Executive TOSCOT thanks all members who helped with ICE 2007, held at the Metro Toronto Convention Centre, October 3-5, 2007. The executive feels, "The show was a great success," and looks forward to Chicago in 2008.



Explaining adhesion and cohesion in coatings using metal samples plates and special markers.



Dr. J. Baghdachi led an interesting discussion on the adhesion of polymeric coatings at TOSCOT's November meeting



 **SPECTRAMAN™**



DuPont Coating Solutions  
7070 Mississauga Rd.  
Mississauga, Ontario L5N 5M8  
Toll Free: 1-888-447-2598  
e-mail: [info.powder@usa.dupont.com](mailto:info.powder@usa.dupont.com)

**SPECTRAMAN™ ROAD SHOW  
COMING TO YOUR TOWN SOON!**

**FALL 2007**

Check our website for dates in your area

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

## INTRODUCING SPECTRAMAN: YOUR POWDER COATINGS SUPERHERO

SpectraMan will rescue you with a **SPLASH** of color in a variety of creative finishes to enhance your product line.

With a **ZAP**, SpectraMan can bring you smooth finishes (matte and high gloss), textures, rivers, veins, ridges, and wrinkles.

And, with a SpectraMan **WHAM**, you can be inspired by tinted clears, metallics, color flops (illusion-effect), speckles, and chrome-look finishes.

But wait, that's not all. Just imagine . . . and SpectraMan's superpowers will continue to **WOW** your world with new possibilities and exceptional personal service.

Don't look for SpectraMan in the sky or climbing a nearby building, just open a box of Alesta® powder coating and let your imaginations fly.



Coating Solutions

Copyright © 2007 DuPont. The DuPont Oval Logo, DuPont™, The miracles of science™, and Corian® are trademarks or registered trademarks of DuPont and Company or its affiliates. All rights reserved.

## IN THE NEWS: OPEN HOUSES

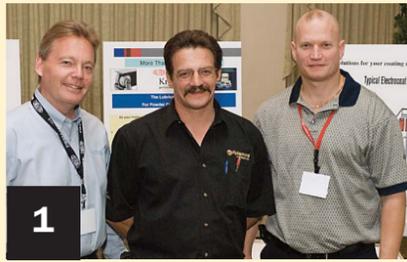
### DuPont's Powder Coatings Road Show

DuPont Coating Solutions Powder Coating Road Show held a two evening information and technology session in Mississauga to introduce their line of powder coatings for the Canadian market. The Alesta Powders Coatings include ant-graffiti, anti-microbial, chrome replacement, low energy, functional, ultra low bake, and UV formulations.

Don Carmichael Business Development Manager for Canada welcomed the attendees and outlined the increased marketing effort for powder coatings.

Wade Robinson Vice President Sales & Marketing Americas outlined the history of DuPont since its' beginning in 1802 and the future of DuPont's many new markets. The event took place October 22-23 2007 at the Mississauga Convention Center. Besides refreshments, there were prizes including tickets to a DuPont sponsored NASCAR event.

Photos by Pete Wilkinson



1: Brian Teakle, DuPont; Anthony Kircher, Kylmore Industries; and Paul Halik, DuPont, discuss powder coating for job shops.

2: Tyler Connelly, Ottawa Quality Paint Finishing; A.J. Mekkunnel, DuPont Sales, and Trena Benson Marketing Manager DuPont.

3: Robert Ablamowicz, DuPont, talks market trends with Bruno Simeone, BBS Sales & Marketing.

4: Don Carmichael, Business Development Manager for Canada.

5: Wade Robinson Vice President Sales & Marketing Americas outlined the history of DuPont.

# Brilliant Additions<sup>SM</sup>

We offer the industry's largest selection of reinforcing silicate fillers and extender pigments. A matrix of physical, chemical and functional properties, these mineral fillers are proven performers in architectural, OEM paint and powder coatings, wood finishes, and industrial and marine coatings.

With a portfolio this comprehensive, formulators have more options to effectively align filler performance with formulation objectives and help standardize global sourcing. Whether your objective is brightness and color development, transparency or hiding power, chemical and photochemical stability, consumer product labeling or non-reactive service, we can provide a solution.

- MINEX<sup>®</sup> nepheline syenite
- IMSIL<sup>®</sup> microcrystalline silica
- UNISPAR<sup>®</sup> micronized feldspar
- SILVER BOND<sup>®</sup> ground crystalline silica
- HIWHITE<sup>®</sup> barium sulfate
- AEROGEM<sup>®</sup> calcium carbonate
- SNOBRITE<sup>®</sup> white kaolin

**Unimin Corporation**  
 North America: 618-747-2311 Fax: 618-747-9318  
 Worldwide: +1-203-966-1306 Fax: +1-203-972-1378  
 E-mail: brilliantadditions@unimin.com

© MINEX, IMSIL, UNISPAR, SILVER BOND, HIWHITE, AEROGEM and SNOBRITE are registered trademarks.  
<sup>SM</sup> BRILLIANT ADDITIONS is a service mark. All rights reserved. © 2007

### Yorke Towne Hosts the Graco Road Trip

On September 11, 2007, Yorke Towne's Brampton, ON, location hosted over 60 customers who came by special invitation to have a look at Graco's mobile showroom.



The Graco Road Trip—Technology on the Move, rolled into Yorke Towne Supply in Brampton for its only Canadian appearance.



Mark Robinson, Cefla; Michael Harrison, Yorke Towne and Joe Sanders, Cefla, chat at the Falcioni booth.



Lino Chetcuti, Bombardier; Dave Pollock, Bombardier; Jeff Radichel, Graco and Avril Braganza of Bombardier discuss the latest technologies on the Graco truck.



Mario Santos of Pancor discusses the Promix Easy with Sam Cesario of Yorke Towne.

## A Successful ECO Day at ECE

ECE Canada Limited welcomed 62 people to its head office in Mississauga, ON as part of its Green-Tech or ECO day, Oct 23, 2007. The company hosted seminars on safety, transfer efficiency, colour change, electrostatics, pump technology, infra-red curing and a comparison of trans-tech, HVLP, conventional spray.

Photos by Pete Wilkinson



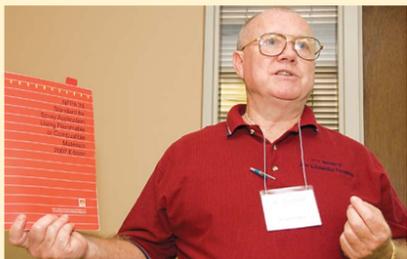
A.J. Smotherman, ITW GEMA, conducts a seminar on transfer efficiency in powder coating systems.



Dan Sanker, ITW Ransburg explained transfer efficiencies capable with electrostatics.



Gary Metzger ITW BGK described the cost savings in using electric infra-red heaters as a replacement or booster to conventional gas fired convection ovens.



Larry Utterback of ITW Ransburg gave a spirited talk on shop safety with enough horror stories about "finishers who should know better" and the harm they did to keep everyone's interest.



Steve Stalker from ITW Industrial Finishing came out guns a spraying in his comparison of the new DeVillbis Compact spray guns the Trans-tech, HVLP and Conventional and their best applications.



Dennis Pineau and David Wallace from Mator Metal Fabricating are greeted by Peter Wells and Larry Wilcox from ECE to ECO Day Seminars and Exhibits.



Ioan Hociota and Paul Jones from Skyjack and Andrew McMillen, Toyada Gosei talk spraybooth filters and coverings with Mike Pineau from Spray Finishing Services.

**ElektroPhysik**  
Advancing With Technologies

**Coating Thickness & More!**

Call: 800-782-1506  
or visit us at: [www.ElektroPhysikUSA.com](http://www.ElektroPhysikUSA.com)

ElektroPhysik USA, Inc., Quality Control Testing Equipment  
770 West Algonquin Road, Arlington Heights, Illinois 60005

## WHEN YOU MEASURE YOUR COSTS, DO YOUR CURRENT SUPPLIERS MEASURE UP?

**TOTAL PROCESS COST** IS THE TRUE YARDSTICK OF A SUPPLIER'S WORTH. YOUR METAL PRETREATMENT PROCESS ENCOMPASSES MANY FACTORS BEYOND DIRECT CHEMICAL PRICING. THESE INCLUDE CHEMICAL CONSUMPTION, PRODUCTION THROUGHPUT, FIRST RUN QUALITY, ENERGY CONSUMPTION AND WASTE GENERATION/DISPOSAL, TO NAME A FEW. INEFFICIENCY IN ANY OF THESE AREAS RESULTS IN HIGHER OPERATING COSTS FOR YOU.

AT CHEMFIL CANADA OUR FOCUS IS LOWERING YOUR OPERATING COSTS. WHETHER THROUGH SYSTEM DESIGN INPUTS, PROCESS OPTIMIZATION, AGGRESSIVE PRICING, OR ADVANCED CHEMICAL TECHNOLOGIES, WE HAVE BEEN DOING THIS FOR OVER 35 YEARS.

TO FIND OUT HOW WE HELP CANADA'S GENERAL INDUSTRIAL COATERS AND THE MAJORITY OF AUTOMOTIVE OEMS STAY COMPETITIVE, CONTACT US AT 1-800-265-5057.



TS16949 QUALITY CERTIFIED  
SINCE 1997

CHEMFIL CANADA LTD.  
3258 MARENTETTE AVENUE,  
WINDSOR, ONTARIO N8X 4G4  
PHONE (519) 969-5570  
FAX (519) 969-8512

**Woodworking Machinery & Supply Expo Mississauga**

Organizers are pleased with the attendance to the Woodworking Machinery & Supply Expo (WMS), October 26 – 28, 2007, International Centre, Mississauga, ON. The show targets the secondary woodworking manufacturing sector and 267 exhibitors featured machinery, technology, and more. The show also had an educational program featuring seminars on the closet industry, building green, selling, internet technology for business, training employees, trends in cabinet and millwork markets and much more. CFCM magazine was there.

*Photos by Pete Wilkinson*



Nick Menna & Pino Martella, Novapro Equipment chat with Joe Nieradka, ITW Industrial Finishing.



Mike Kurceba, Randall Rogers, Tim Felter and Mark Levesley are new distributors, ICA Wood Coatings.



Paul Benson, Benson Industries and Burkard Schuette of Venjakob North America talk business.



Phil Van Buskirk, McKaskell Hainol Design & Build with Paul Kelly, Exel Industrial at the Woodworking Machinery & Supply Expo Mississauga.



At the Chemcraft Akzo Nobel booth: Riyaz Meghi, Chemcraft; Eric Bertelsen, Clancy's Commercial High Performance Coatings and John Glover, Chemcraft.

**CALENDAR OF EVENTS**

**November 29-30, 2007:** European Coatings Conference, Berlin, Germany, [www.coatings.de/events/ecc35.cfm](http://www.coatings.de/events/ecc35.cfm)

**December 4-5, 2007:** AutoRussia 2007, Astoria Hotel, St. Petersburg, Russian Federation, [www.wbr.co.uk/autorussia](http://www.wbr.co.uk/autorussia)

**December 4, 2007:** TOSCO Christmas Luncheon, Marriott, Toronto, ON, [meeting@toscot.org](mailto:meeting@toscot.org)

**January 7, 2008:** TOSCO/OCCO Joint Technical Meeting & Dinner with Speaker: Dominion Colour Corp., Marriott hotel, Toronto, ON, [meeting@toscot.org](mailto:meeting@toscot.org)

**January 8 & 9, 2008:** Two-Day Powder Coating Workshop, Nordson Canada, 1211 Denison St. Markham, ON L3R 4B3, 800-463-3200 x 2985 Contact: Paul Kroes [pkroes@nordson.com](mailto:pkroes@nordson.com)

January 27-30, 2008: PACE 2008, LA Convention Center, Los Angeles, CA, [www.pace2008.com](http://www.pace2008.com)

**PEOPLE ON THE MOVE**

**New Senior General Manager at Motoman**  
Motoman Inc. is pleased to announce that Trevor Jones has joined the company as Senior General Manager of Yaskawa Motoman Canada in Mississauga, ON.

Jones brings more than 23 years of robotics industry experience to his new role at Motoman. He was a founding member of CRS Robotics. He has held key posts at CRS such as VP/Manager of R&D, VP/Manager of Product Development, Chief Technical Officer, VP and Business Unit Manager for OEM Markets, Director of North American Sales, and Director OEM Sales and Business Development.



Trevor Jones

Jones's educational background includes graduating with honors from McMaster University with a Bachelor's degree in Mechanical Engineering and Management. He also attended the York University Executive Management Program.

Jones is also president of the Robotics Industries Association (RIA).

Jones will report directly to Roger Christian, Motoman's VP of Marketing and International Groups. "We are confident that Trevor will play a key role in growing Yaskawa Motoman Canada above and beyond the achievements and milestones already realized," Christian said.

**Looks Are Everything.**

To potential buyers, how your products look and work is everything. Helping your products look their best is everything to us.

We are PPG.

Canada's leading supplier of electrocoat, pretreatment, liquid, and powder coatings.



PPG Supplies **ELECTROCOAT**, **PRETREATMENT**, **LIQUID**, & **POWDER** coatings solutions. We can meet all of your coating needs – from start to finish.

**WE'VE GOT IT COVERED.**

When you work with PPG, you work with our people – experts who can help you enhance your finishing process to meet your design, manufacturing and, most importantly, your sales objectives.

Helping your products look their best is our business – let us help yours. Call us today at **1.905.855.5658** or visit [www.ppg.com](http://www.ppg.com) for more information.



**PPG Industrial Coatings**

PPG Canada Inc, 880 Avonhead Road, Mississauga, Ontario L5J 2Z5



CPCA Co-Chairman Denis Blanchette, and Benoit Venne of L.V. Lomas get ready to launch on the evening boat tour.

Classification and Labelling of Chemicals. She stated that Canadian technical consultation is almost complete and they are about to enter the consultation phase. More info at [www.healthcanada.ca/ghs](http://www.healthcanada.ca/ghs)

Bernard Madé from Environment Canada's Science and Technology Branch presented on the development of a regulatory regime for manufactured nanomaterials under the Canadian Environmental Protection Act (CEPA). Nano materials may have different health and environmental concerns at the production and end user levels than the standard size material. Stake holder consultation is beginning this fall. Some U.S. information is at [www.epa.gov/oppt/nano](http://www.epa.gov/oppt/nano)

Ronald Hill, Exxon Mobil Chemical Company, proposed a more scientific measure of the creation of ground level ozone (smog) by measuring the photochemical reactivity of Volatile Organic Compound (VOC) as a more scientific measure of the creation of ground level ozone (smog), than a simple measure based on volumes of VOC. An article on this study is available in the June PCI Magazine <http://online.qmags.com/PCI0607/>

Sunday afternoon attendees had a choice of a guided walking tour of the old town or a trip to the Museum of Civilization. The Chairman's Dinner was held in the chapel at the Musée de L'Amérique. Brian Palardy, Benjamin Moore;



Captain Robert Piche, Air Transat speaks during the conference and can be reached through his web site [www.robertpiche.com](http://www.robertpiche.com)

Denis Blanchette, Sico; and Doug Thiemann, Home Hardware, received a 2007 Statesman Award that given annually to those who have retired, recognizing their contribution to the industry and to the CPCA. Micheline Foucher, Director of Administration and Member Services at CPCA received the Roy Kennedy Outstanding Achievement Award.

Monday's presentations on

"Where the Coatings industry is heading" began with Global Trends-Industry, Environment and Customer by Holger Ebbighausen, Akzo Nobel, covering worldwide architectural coatings trends, volumes, growth, marketing and look at future opportunities. The report is at [www.TheGlobalCoatingsReport.com](http://www.TheGlobalCoatingsReport.com)

Robert Dutton, Rona Inc., emphasized the importance of co-operation between the retailer and paint manufacturer in the marketing of decorating to the consumer. There is a trend as the baby boomers become older and Gen-X becomes more affluent for a reliance on painting contractors rather than do-it-yourself (DIY).

Pierre Dufrense, Sico, said in his talk on meeting customer's needs, "it is critical to stay connected to the market, to be responsive to customer needs and to be cost efficient." He continued, "Innovation in colour marketing, in products, in managing people and environmental trends is a key ingredient of our



Linda Lambert entertains people with her strong singing voice during the boat cruise.

future success."

Al Mordy from Cloverdale echoed Dufrense, but explained that as a private regional store based supplier to contractors, was much more proactive with their customers in store and even made onsite deliveries.

Later, the busses transferred everyone to Montmorency Falls which are located about 10 km east of Quebec City at the mouth of the Rivière Montmorency, just in front of the L'Île d'Orléans. The falls were named by Samuel de Champlain in 1613 after Henri II, duc de Montmorency who served as viceroy of New France from 1620 to 1625. The falls are 76 meters high, the highest in the province and 27

*continued on page 24*

**www.cfcfm.ca**

Ti-Pure® R-902+ Multi-Purpose Titanium Dioxide provides:

- Easy dispersion
- Superior hiding power and tinting strength
- Excellent whiteness and brightness

DuPont™ Ti-Pure® R-902+ is the easy choice

**DUPONT**  
The miracles of science™ [www.titanium.dupont.com](http://www.titanium.dupont.com)

Copyright © 2007 DuPont. The DuPont Oval Logo, DuPont™, The miracles of science™, and Ti-Pure® are trademarks or registered trademarks of E. I. du Pont de Nemours and Company or its affiliates. All rights reserved.

**TEAMWORK THAT DELIVERS**

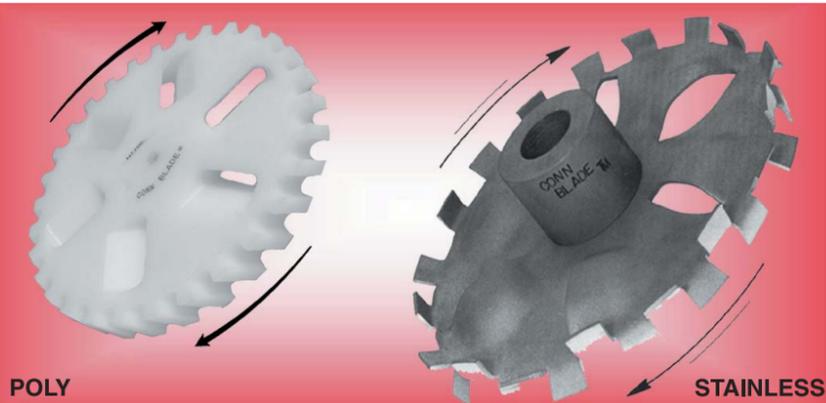
To succeed in any industry, you need to keep ahead of your competition. In any endeavor, individual performance needs to be backed up by a team of highly trained experts. By combining experience, education and technical training, the professionals at L.V. Lomas are able to give your company the competitive advantage. From order entry to delivery, the team at L.V. Lomas will keep your supply chain on the right track. A driver can cross the finish line, but a team wins the race! Join a winning team.

**L.V. LOMAS**  
your FIRST choice for responsible chemical distribution  
ON Ph: (905) 458-1555 PQ Ph: (514) 683-0660 West CAN Ph: (604) 521-7779  
[WWW.LVLOMAS.COM](http://WWW.LVLOMAS.COM)

**your FIRST choice for responsible chemical distribution**

# THE CONN BLADE®

Patented blending/dispersing blade design makes radical improvement over old saw tooth designs



- \* Most efficient and aggressive blending/dispersing blade available.
- \* Provides proper combination of pumping action and shear/dispersion essential for fast consistent results.
- \* Built in pumping action cuts processing time.
- \* Longer life due to heavier gauge construction.
- \* Less heat due to shorter required running time.
- \* Excellent for high or low speed and high or low viscosity.
- \* Supplied with hubs or mounting holes required to retrofit and upgrade present equipment.
- \* Pumping blades without teeth are available and are excellent for gentle blending and agitation.

DESIGNERS AND MANUFACTURERS OF INDUSTRIAL MIXING EQUIPMENT

Since 1948

## CONN AND Co., L.L.C.

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

Stirrers Or Complete Units For:  
 PAINTS URETHANE FOAMS  
 ADHESIVES SLURRIES  
 INKS GROUTS  
 CEMENTS ETC....

11 SOUTH MARION STREET • WARREN, PENNA. 16365 • PHONE 814/723-7980

FAX (814) 723-8502



## PAINT AND COATINGS MANUFACTURING: PVA

# The Scoop on PVA

In order to have Polyvinyl acetate (PVAc) and polyvinyl alcohol (PVOH or PVA), which have an abundance of applications, you first need vinyl acetate monomer (VAM).

VAM is a chemical building block used to manufacture a wide host of industrial and consumer products, including polyvinyl acetate used to produce paints, adhesives and coatings for flexible substrates; polyvinyl alcohol used to produce adhesives, coatings and water soluble packaging films; polyvinyl acetals used to produce insulation for magnetic wire, interlayers for safety glass, wash primers and coatings; ethylene vinyl acetate copolymers used to produce flexible films, coatings, adhesives, moldings and insulation; and ethylene vinyl alcohol used to produce gas barrier layers in co-extruded packaging.

Approximately 80 per cent of all VAM produced in the world is used to make PVAc and polyvinyl alcohol (PVOH or PVA). VAM is also used to make polyvinyl butyral (PVB), ethylene-vinyl acetate (EVA) copolymers, and ethylene vinyl alcohol (EVOH) resins.

Polyvinyl acetate (PVAc) resins are vinyl acetate containing thermoplastic copolymers used for making emulsion (latex) products. They are produced in both homopolymer and copolymer types and sold as powders, beads or latex basestock for compounded emulsions. Major applications include interior and exterior paints, adhesives, paper coatings, and textile treatments.

All PVA is manufactured using PVAc as a starting material. PVOH resins are powdered polymers produced by the controlled hydrolysis of PVAc. They are easily dispersed and readily dissolve in water, and are available in both fully hydrolyzed and partially hydrolyzed grades. PVOH resins have excellent film forming and adhesive properties. They also provide good resistance to oil, grease and many solvents.

Ethylene vinyl acetate (EVA) is a random copolymer of vinyl acetate monomer and ethylene. EVA resins are used in the manufacture of packaging film, heavy duty bags, extrusion coating, wire and cable jacketing, hot melt adhesives, and cross-linked foam.

Ethylene vinyl alcohol (EVOH) is a hydrolyzed copolymer of ethylene and vinyl acetate monomer. EVOH resins are used as a gas barrier in multi-layered food and beverage packages, and as a barrier layer in

automobile gasoline tanks.

### SUPPLIERS

PVA suppliers include Celanese, Reichold, Univar, Wacker Polymers, Rohm & Haas to name a few.

Celanese Corporation is currently undergoing revitalization plans for its emulsions and PVOH business. The business revitalization includes global manufacturing restructuring and a research and development and technology realignment, which the company says will better position the business for sustainable, profitable growth.

"Our goal is to create a stronger, more competitive position for our business," says Doug Madden, president, Celanese Acetate, Emulsions & PVOH. "We will continue to meet our customer requirements as we transition out of underutilized assets."

### WHAT IS IT?

PVAc is a rubbery synthetic polymer prepared by polymerization of VAM. Partial or complete hydrolysis of the polymer is used to prepare polyvinyl alcohol. Hydrolyzed alcohol product is typically in the 87 per cent to 99 per cent range (converted PVA). Dr. Fritz Klatte discovered it in Germany in 1912.

As an emulsion in water, PVA is sold as an adhesive for porous materials, particularly wood, paper, and cloth. For the average consumer, it is the most commonly used wood glue, both as white glue and yellow carpenter's glue. PVA is widely used in bookbinding and book arts due to its flexibility, and because it is non-acidic, unlike many other polymers.

PVA is a common copolymer with more expensive acrylics, used extensively in paper, paint and industrial coatings, referred to as vinyl acrylics.

PVA can be used for anything from making papier-mâché to leather handcrafted works and can be safely used without suiting up in safety gear. PVA is found in at least five different forms - adhesives, caulking, sealers, paints and textured coatings.

White glue PVA has been formulated into several well-known white glue products, some water-soluble and some that are highly water-resistant.

With PVA's diversified uses and non-acidity, it will have a steady future in the marketplace for a long time to come. ■



Good to Eat!



Good to Drink!



Good for your car!



Good for Paint!

## Great for the ENVIRONMENT!

CANADA'S LARGEST PRODUCER OF INDUSTRIAL AND FOOD GRADE ETHANOL

# GREENFIELD

## ETHANOL

**Commercial Alcohols**  
 The Industrial & Beverage Alcohol Division of GreenField Ethanol Inc.

Commercial Alcohols Inc.  
 2 Cheslea Lane  
 Brampton, ON L6T 3Y4  
[www.comalc.com](http://www.comalc.com)

### Contact Us

Sales - General  
 Ontario/Western Canada  
 John Bastedo:  
 (905) 790-7500 x300  
[ontariosales@comalc.com](mailto:ontariosales@comalc.com)

Sales - Quebec  
 and Maritimes  
 Michel Daemen:  
 (450) 655-7504  
[quebecsales@comalc.com](mailto:quebecsales@comalc.com)

Exports/Overseas Sales  
 Cameron Potts:  
 (905) 790-7500 x223  
[exports@comalc.com](mailto:exports@comalc.com)

Package Sales  
 Lesley Astbury:  
 (905) 790-7500 x228  
[packagesales@comalc.com](mailto:packagesales@comalc.com)

# Biocides

## keeping a product stable from start to finish

**B**iocides or anti-microbials are a necessary addition to chemical products so that they will stay microbiologically stable from one end of the delivery route to the other and until it is used.

Paint films especially can easily get contaminated.

Sometimes adding a biocide in the product for delivery is not enough. The product must first be manufactured in a tightly monitored clean environment.

In the manufacture of adhesives, caulk and coatings for example, keeping the plant clean in order to avoid microbial quality problems is a win-win situation.

First you need to pinpoint plant processes, procedures, practices, equipment, and raw materials that can contribute to microbial contamination. Knowing this will prevent any serious quality issues down the road.

Many steps of the chemical manufacturing process are common across the industry. Special attention should be paid to source water and recycled water and their handling systems; recycled raw material and recycled product; raw material storage and handling systems; mixing, milling, and reaction vessels and their associated piping systems; product packaging, transportation and delivery systems. At each of these locations the following questions should be considered:

1. Is this location a source of microbial contamination or a location allowing contamination "levels" to increase?
2. Is microbial control required at this location or could it be handled better elsewhere?
3. If anti-microbial control measures are present, are they adequate?

To answer these queries, more will need to be known about the status of the current location in order to know how to proceed.

### WHEN IN DOUBT DO A SURVEY

A regular plant survey on overall hygiene of the facility will stop any problems before they can start. Doing a quick survey on the spot when a problem is suspected isn't enough. It is more productive to do a thorough survey of the entire sys-



tem. Keep in mind that any survey is just a "snapshot in time" of the process being monitored. Only repeated surveys over time will present a true picture. Then with a normal background in place, remedial actions in the future will be completed successfully, quickly and at lower cost. With time the person responsible for plant hygiene will know more about the operation of the manufacturing plant than anyone else.

The best way to handle the biological part of plant hygiene is to collect microbial data on a regular basis through the plant laboratory, so that "out of bounds" conditions can be quickly spotted and corrected. Testing methods must be customized for each type of product manufactured and, to some extent, for each location sampled. Work can be subcontracted to outside consulting laboratories and biocide suppliers.

For a generalized list of industrial manufacturing processes that are common sources of biological contamination - coatings, adhesives, caulks, sealants, paper, textiles, polymer emulsions - a location/process specific hygiene plan can be developed for each manufacturing plant.

Source water and source water handling systems are one of the most common areas of microbial contamination into a manufacturing process. Most environmental water sources can carry a rich supply of microorganisms. The water pH, temperature, microbial load, nutrient load, hardness, oxidative-reductive poisoning, all can play a roll in determining if the water requires treating as well as the type of anti-

microbial treatment that can be used. Every plant should have a detailed understanding of the water source and a treatment plan for that water. Fortunately, anti-microbial treatment, if required, is often most effective and least costly when it comes to water. Treatment at other locations in the plant is more problematic and involved. If a treating program is used for the source water, it must be monitored appropriately to insure that it is effective. Testing for biocides should be done daily. Then biological testing should be done weekly.

Recycled water and recycled water handling systems are often used in plants and dramatically increases the potential microbial loading to the manufacturing process. Organic loading from the process, microbial contamination from within the plant, dirt and debris, and retention time all conspire to increase microbial numbers in this water. To monitor the problem, collect information as with source water, as well as a detailed "picture" of what the water contains, where it has been, what environmental changes have happened. This water should be considered a "highly likely" contamination source until proven otherwise and the more known about it, the easier it is to solve future problems. Anti-microbial treatment of this water requires higher concentrations than source water, but treating as you go is more economical than trying to preserve the final product to recover from poor water handling. Engineering controls such as reducing dead legs, increasing circulation rates, and adding filtration, can be

helpful in reducing the impact of this water on the manufacturing process. Daily monitoring of the use of biocides is needed until the data shows that a weekly schedule is sufficient. Biological testing should be done at least weekly once enough background data is collected to show this extended time schedule can be justified.

Recycled raw material or recycled product such as spilled product and/or raw materials, washouts of product or raw material handling systems, washouts of packaging systems, railcar washing, and container cleanouts can often become contaminated. It is necessary to understand, in general terms, the makeup and condition of this material, so contamination levels, pH and temperature should be taken. These processes tend to be heavily laden with solids that can have an impact on the Standard Reduction (redox) potential that develops over time. An understanding of this changing redox potential of the material is necessary because it has an impact on determining what biocides will be effective. At this point in the system, oxidizing biocides become less valuable and preservatives are usually required. Again depending on background data, it may be possible to test only weekly to insure quality control. Loss of biological control should trigger immediate daily, or even more often, testing, along with remediation steps, until control is again demonstrated.

Raw material storage and handling systems is the next most important factor to monitor in maintaining plant hygiene. It is important to have a keen understanding of the chemical and physical properties of the raw material being used. What is the pH; how was it made; how was it treated before it arrived and since its arrival; was a biocide added in production of the material; was a biocide added since; is that biocide compatible with the processes and chemicals to be employed in the plant? With a good understanding of the material and its handling history, the next issue is to ascertain the current microbial condition of the material. Is the material stable or is it deteriorating? Does it require treatment? Standard analysis methods, including target results, should be established for each raw material. It is important to recognize that a one-time measurement is not sufficient. Routine monitoring needs to be in place to measure the biological stability of all raw materials over storage time. This information must be known for each raw material in the plant. Some raw materials will be simple to handle and pose little risk;

*continued on page 29*

# Going Green in Toronto

## ICE 2007 Attracts International Audience

**E**ager to discuss innovative solutions for the global coatings industry, suppliers and formulators met at the Metro Toronto Convention Centre on October 3-5 for ICE 2007. A total of 3452 registrants evaluated the products and service offerings of more than 176 exhibitors. Focused on the theme "Clean-LEAN-Green," ICE 2007, sponsored by the Federation of Societies for Coatings

Technology (FSCT), offered opportunities for learning about the latest technology developments through its FutureCoat! conference as well as a forum for numerous companies to launch new product innovations to the marketplace.

Initially, FSCT was not planning to hold its next International Coatings Expo until 2008. The 2007 event was scheduled as a result of the special circumstances

that resulted with hosting the show in New Orleans in 2006, to address the concerns of many smaller exhibitors, and as a means to expand the international base of ICE.

"Prior to the events of September 11, 2001, the greatest area of growth for ICE was from international visitors. However, with increasingly restrictive visa requirements, this growth was sig-

nificantly impacted. Toronto was selected as a venue that would attract a new audience to attend ICE events," notes FSCT executive director Joseph S. Pontoski. And attract it did as the show this year drew visitors from 42 countries—with 35 per cent coming from outside the United States.

ICE will return to its every-other-year schedule in Chicago in 2008.

Not unexpectedly, however, attendance and exhibitor levels were slightly lower than at regular ICE events. The FSCT claims that the announcement by the National Paint and Coatings Association (NPCA), just a few months prior to ICE, of another industry trade show scheduled for 2008 also impacted the level of participation in Toronto.

"FSCT is a non-profit organization with a mission to serve its members with opportunities for professional development and educational advancement," Pontoski states. "ICE is a key source of revenue for supporting the various conferences, programs, and activities held by the organization. We are saddened that a rift has been created between us and NPCA and that the existence of this second event, rather than benefiting the industry, will in all likelihood cause confusion for industry suppliers, in addition to diverting funds from these important educational activities." (After having said this, the FSCT and NPCA have started negotiations about merging their shows. See CFCM "In The News" page 5.)

Given the current situation, FSCT says it is not surprised that many in the industry had lowered expectations for ICE 2007, but most participants were very pleased with the show. According to Holly Seese, global marketing communications manager for Celanese, the quality of visitors was very good. "Companies may be sending fewer representatives, but those that are coming seem to be real decision makers."

OXEA, the new company formed in March 2007 from a joint venture of Celanese's businesses and Degussa, found ICE 2007 to be an ideal forum for introducing the company to the coatings industry. "This show has been a very positive experience for OXEA. It has worked out very well as a first major indus-

### Andicor Specialty Chemicals

#### OUR CURRENT SUPPLIERS ARE:

##### Ball Aerosol & Specialty Packaging

Round Paint, General Line, Oblong & Aerosol Cans

##### Century Container

Plastic Pails

##### Chemguard

Fluorosurfactants

##### Dexter Chemical

Phosphate Ester Surfactants

##### Fuji Silysia

Silica Gel Flattening Agents

##### Goldschmidt Industrial Specialties

Masonry Water Repellents

##### Georgia Industrial Minerals

Mica

##### Phoenix Container

Steel Pails

##### Rieke Packaging Systems

Stolz Closures

##### RÜTGERS Chemicals

Hydrocarbon Resins

##### SI Group Canada

Alkyd and Oil-Modified Urethane Resins

##### Southern Clay Products

Rheological Additives

##### Wayne Pigment

Anti-Corrosion Pigments

#### AND NOW...

Huntsman Advanced Materials  
Epoxy Resins and Curing Agents

**HUNTSMAN**

Enriching lives through innovation



5940 Ambler Drive  
Mississauga, Ontario L4W 2N3  
Tel: 905-625-0800 • Fax: 905-625-0885

In Québec:  
Tel: 514-276-5736 • Fax: 514-276-5745

In Western Canada:  
Tel: 604-931-4002 • Fax: 604-931-4007

**ANDICOR**  
SPECIALTY CHEMICALS

...making waves in the pond



## PosiTector® 6000

### COATING THICKNESS GAGES

**New** Tougher, Smarter  
features and still...

**Simple. Durable. Accurate.**

- Tough probes, robust housing, strong warranty
- Automatic Ferrous/Non-Ferrous substrate recognition
- Free Certificate of Calibration traceable to NIST
- High resolution and accuracy

**DeFelsko**  
CANADA LTD.

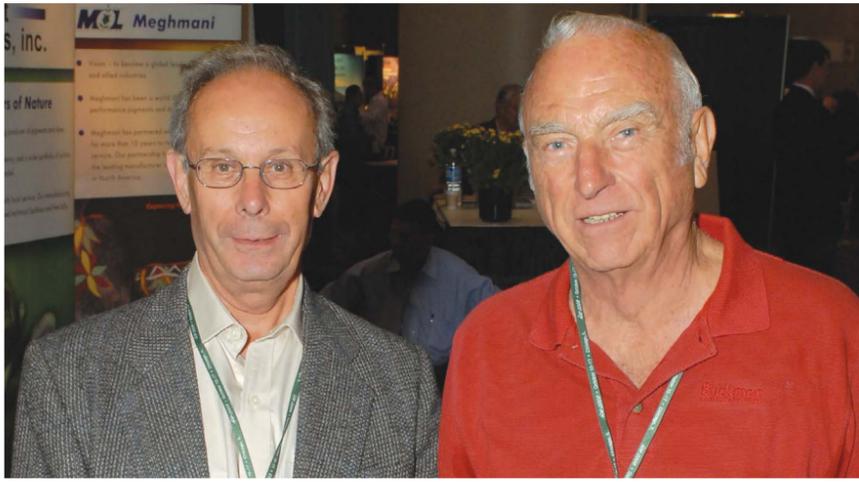
1-800-448-3835  
www.defelsko.com



Separate  
Probe  
Available



DeFelsko Corporation • Brockville, Ontario • Phone: 315-393-4450 • techsale@defelsko.com



David Jack, FSCT, and Hank Akenmann, Buckman Laboratories of Canada.

try event for us," said Birgit Reichel, head of communications for the company.

"It is very important to FSCT that all those who attended and exhibited at ICE 2007 understand the deep level of appreciation everyone throughout the organization feels towards them for supporting the show and the FSCT's activities," emphasizes Pontoski. He adds, "FutureCoat! and its outstanding speakers attracted a very high attendance level, too, and we are grateful for the time and commitment they made as well."

The International Coatings Expo opened on Wednesday afternoon with exclusive ICE show hours—the first time that a large block of time was set aside specifically for viewing the exhibits with no presentations being held. "The traffic on Wednesday was very good. It definitely demonstrated that having a block of time dedicated to the show is truly valuable," notes Robert O. Burk, marketing communications manager for King Industries.

A feature introduced at ICE 2007 was the New Products Showcase, where exhibitors highlighted products and services recently introduced to the coatings marketplace. Exhibitor Spotlight presentations provided further opportunity for attendees to learn about exhibitor capabilities, while the student poster presentations included information about recent research at a number of universities focusing on coatings technology.

The two Canadian schools represented were York University (York U) and the University of Toronto (U of T).

U of T had a poster on Improving Performance of Treated Wooden Decks through Coating. The university also showed a poster on Microstructural Development and Mechanical Properties of the Vacuum Plasma Sprayed Ti-6Al-4V Alloy. They also showed Dynamic Surface Tension of High Temperature Melts, A New Measurement Methodology.

York U showed Nucleation and Growth of Nickel on Industrially Relevant Surfaces.

Prior to the opening of the Expo, many attendees took advantage of several other continuing educational opportunities. Pre-show short courses offered information on pigment science, polymer technology, coating formula-



UNIVAR Specialties, Mike Stegmann, Anna Diretto of Rhodia and Eddie Cincinatto and Dave Hazell.

tion, waterborne technology, coatings for automotive applications, nanotechnology, and green chemistry for coatings. In addition, a special one-day course on the European Union's REACH (registration, evaluation, and authorization of chemicals) legislation reviewed the basic requirements and issues of which coatings suppliers and

formulators need to be aware.

The FutureCoat! Conference, organized by the FSCT Professional Development Committee, attracted 442 participants. Over 100 presenters discussed their research in the areas of environmental issues, waterborne technology, analysis and

## Meet the Newest Breed of "Cats" from the King of Catalysts



**New K-KAT® XK-604**  
Mercury Replacement Catalyst for Cast Elastomers

- ◆ Environmentally more acceptable
- ◆ Good latency before snap curing
- ◆ Similar cure profile to mercury

**New K-KAT® XK-602**  
Powder Catalyst for Urethane Crosslinked Systems

- ◆ Non-yellowing
- ◆ Excellent durability and gloss retention
- ◆ Effective in caprolactam blocked isocyanate powder systems



**NACURE® & K-CURE®**  
Acid & Blocked Acid Catalysts for Amino Thermoset Systems



**K-KAT®**  
Non-tin Catalysts for Urethanes



**NACURE® SUPER**  
Catalysts for the Thermal Cure of Epoxies

For additional information email: [coatings@kingindustries.com](mailto:coatings@kingindustries.com) or contact offices as shown

USA Headquarters: King Industries, Inc.  
Science Road, Norwalk, CT 06852 • Ph: 203-866-5551 • Fax: 203-866-1268

EUROPE Sales Office: King International  
Noordkade 64, 2741 EZ Waddinxveen, NL • Ph: 31-182-631360

**Visit Us At ECS 2007 - Hall 3 - Stand 337**



X-Rite Inc., Peter Hayes, Teresa Homrich with Murray Steves of Manutrol.

weathering evaluation, renewable resources, formulation, and the application of nanotechnology.

In his Keynote Address, John C. Warner, of the Warner Babcock Institute, discussed the potential value in designing processes based on tendencies common in natural transformations, which often rely on entropic forces (phase changes, mixing) rather than enthalpic manipulations, which require significant energy input and often involve or generate toxic/hazardous materials. A specific example of this



Dan Williams from Prism Instruments, Pickering, ON, mans the Datacolor booth.

approach applied to the development of photopolymers underscored the connections with green chemistry.

Gordon P. Bierwagen of North



ElektroPhysik Inc.'s Aivars Freidenfelds demonstrates a thickness tester to Fred Butler, Shazia Mir, and Rob Traccto from Chemque Rexdale ON.

Dakota State University gave the prestigious Joseph J. Mattiello Memorial Lecture on the physical chemistry of organic coatings from the perspective of a materials scientist. In the Technical Focus Lecture, Rigoberto Advincula of the University of Houston presented his strategies for developing conjugated polymer networks based on nanostructured electro-optically active smart coatings.

Some Canadians won ICE awards. The Roon Award for best Technical paper went to

“The Onset of Polymer Diffusion in a Drying Acrylate Latex: How Water Initially Retards Coalescence but Ultimately Enhances Diffusion—Jeffrey Haley, Yuanqin Liu, and Mitchell Winnik, University of Toronto; and Willie Lau, Rohm and Haas Company. Canadian compa-

nies winning the C. Homer Flynn Exhibit Award went to SI Group Canada, Toronto, ON, and Bowers Process Equipment, Stratford, ON.

Organizers say that sincere thanks go to the Committees, local Society members, and individuals who volunteered their time and effort to ensure the success of ICE 2007. The Toronto Society of Coatings Technology (TOSCO) members were on hand in full force helping with the conference.

The focus now is on next year's event set for October 15–17, 2008, at Lakeside Center, McCormick Place in Chicago, IL. The theme of the event is “Globally Responsible Coatings—Getting There from Here.”

For over 50 years Shamrock has been a major manufacturer and supplier of a broad range of coating additives:

- Micronized PTFE, PE, PP, natural waxes and specialty blends
- Oil, water and UV dispersions, compounds and emulsions of the above
- New nanoFLON line of submicron PTFE powders
- Unique texturing and matting agents

Key end use applications include:

**UV coatings • coil coatings • powder coating  
industrial coatings • thin films • can coatings  
architectural coatings • graphic arts**

Need a solution for your abrasion and mar resistance, texturing problems, slip, water repellency, gloss retention, wet rub resistance, matte finish?

Please contact us to discuss our:

**FluoroSlips, PowderTex, Hydropel, Textures, SST-4,  
S-394 SD2, VersaFlow EV, LoAngle, PowderMatte, TexMattes**

*Explore The Possibilities!*

**NOW REPRESENTED BY:**

**PRECEPT**  
International Inc.

**Precept International, Inc.**  
250 Trowers Road, Unit 12  
Woodbridge, Ontario, Canada L4L 5Z7  
Tel.: 905-856-6010  
Fax: 905-856-9272

**SHAMROCK**

Shamrock Technologies, Inc.  
Tel.: 800-349-1822 Fax: 973-242-8074  
www.shamrocktechnologies.com



Northspec Chemicals Corp's John Maclean, Duzy Setaidi, Ron Elfer.



At the Troy Corporation booth: Robert Tinsley, Guertin Coatings chats with Bob Miller and Michael Morden of Troy.



Clariant/KiON Specialty Polymers' Gregg McGraw and Frank Osterod.

# A Growing Market Despite Challenges

**P**olytetrafluoroethylene may be a mouthful to say without its acronym (PTFE), but it is a meaningful word to represent a healthy marketplace. Forms of PTFE are fibre, granular or micro powders, and aqueous dispersion liquids. They are basically resin particles suspended in water, forming a milky white liquid.

As in most successful commodity markets with growing sales, the ground can occasionally be uncertain.

## OFFSHORE PRODUCTION

North American suppliers to a global paints, coatings and inks market, find offshore competition is hovering as formerly strong sales areas have moved to South America, Eastern Europe, and the Pacific Rim to take advantage of lower labour pools. With off shore production of wax raw materials, quality should be tightly scrutinized to make sure lower quality, lower cost raw materials are not being substituted without the customer's prior knowledge. Architectural and do-it-yourself types of paints and printing inks that are made and consumed here in North America obviously cannot move offshore.

## RAW MATERIAL CONCERNS AND COSTS

Multinational coatings manufacturers are harmonizing raw materials with steady regularity. Technical and marketing groups responsible for product lines, whether industrial paints, inks or other coatings, are locating in one central facility, primarily due to the ease of data exchange and costs. Raw material, especially additive suppliers, need to be ready to supply a consistent product anywhere in the world. Centralized purchasing departments are demanding harmonized pricing. The demand for lower prices in the face of rising raw material and processing costs can lead to low quality coatings. When high-end manufacturers demand lower prices too, the additive manufacturer must always be ready to become even more efficient. When processing and energy costs are a high percentage of the finished price, as is the case with micronized wax and PTFE, high efficiency can be obtained by continually upgrading equipment and micronizing technologies. It also doesn't hurt to look into other raw material sources, but

always be aware of subtle differences and test it with the end user.

## GOING GREEN

There is a strong drive toward "environmentally friendly" coatings products and finishing processes. Waterborne or otherwise "green" technology has blossomed in some areas while radiation cure or high solids systems have emerged in other areas. The additive supplier is faced with the demand to provide products that can perform effectively in all types of systems. Since product inventories need to be kept in neat order by the end user, there is a call for products that are pure wax or pure PTFE because products containing a mixture of materials may cause problems if used in the wrong system. Specialty compounded waxes do offer benefits, however, and shouldn't be discounted. They just can't be considered universal.

In the past few years PTFE has received some media attention due to Perfluorooctanoic Acid (PFOA) concerns.

Data on PFOA's presence in humans and its effects on both animals and humans has been collected for more than 20 years and can be used to evaluate the potential for harm. Research has shown that very high doses of PFOA can cause harm in animals, but the amount of PFOA to which the general population is exposed is hundreds to thousands of times lower, and biological differences between human and animals make dangers irrelevant to humans. Additionally, studies of workers (who are exposed to much higher doses of PFOA than the general population) have not shown the same effects in humans that occur in animals.

Those in the micronized PTFE market are not concerned because the industry is moving towards the elimination of these compounds on its own.

## MOUNTAINS OF PAPERWORK

Another challenge is that government regulations all over the world require registering and testing of chemicals. This has created what seems like endless paperwork for manufacturers and suppliers. The REACH program undertaken by the European Union has recently become law. The United States introduced a similar bill two years ago called the Child, Worker and Consumer-Safe Chemicals Act, but it never became law.

## New Products Going Nano

Nano-technology is becoming a very common part of the coatings industry whenever new technology is mentioned. In waxes and PTFE, it is no different. Nano-waxes in spray and other application forms are being developed to penetrate deeper into scratches and swirl marks on a coating's surface. Some new products being developed include dispersions and lower cost micronized waxes that are simple to use and help reduce overall costs. Those in the industry feel that costs need to come down for nano-waxes in order for them to be competitive, although they do have unique uses such as in the automotive industry.

Suppliers feel Waxes and PTFEs should be in demand for the long term when it comes to coatings. Pricing continues to rise with oil costs. Supply is keeping up with demand. Freight costs due to gas prices have risen and continue to eat away at margins. Electricity

costs continue to rise. Some price increases, however, have been avoided by increased efficiencies in the workplace. ■

### Within R.E.A.C.H.

The Registration, Evaluation, Authorisation and Restriction of Chemical substances (REACH) is the new European Community Regulation on chemicals and their safe use that became law June 1, 2007.

The aim of REACH is to improve the protection of human health and the environment through the better and earlier identification of the intrinsic properties of chemical substances.

Manufacturers and importers are required to gather information on the properties of their chemical substances, which will ensure their safe handling, and to register the information in a central database run by the European Chemicals Agency (ECHA) in Helsinki. The Agency will act as the central point in the REACH system: it will manage the databases necessary to operate the system, co-ordinate the in-depth evaluation of suspicious chemicals and run a public database in which consumers and professionals can find hazard information.

The Regulation also calls for the progressive substitution of the most dangerous chemicals when suitable alternatives have been identified.

REACH is to be phased in over 11 years.

[http://ec.europa.eu/environment/chemicals/reach/reach\\_intro.htm](http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm)



www.cfcmm.ca

## CFCM February 2008 Bonus Circulation

The February issue will be distributed from our booth at the e/5 UV & EB Technology Conference and Expo- Chicago, IL, May 5-8, 2008

**Corporate Profile Issue**  
All Advertisers with a 1/2 standard page or larger ad will receive equivalent space in a Free Corporate Profile. We will even write it for you.

**Paint and Coatings Manufacturing**

- TiO<sub>2</sub> Titanium Dioxide
- UV Update

**Industrial Finishing**

- Thickness Testing
- UV Curing

**Plating and Anodizing**

- Testing Instruments

**Regular Sections**

- Association News ■ Calendar of Events
- Environmental Updates ■ New Products
- People ■ Pricing Updates

**Deadlines; Insertion: January 8th. Ad Copy: January 15th. Call Today to book your ad.**

Sales: Pete Wilkinson Tel: 1-416-255-1808 Fax: 1-416-519-1313 pete.wilkinson@cfcmm.ca	Editor: Sandra Anderson Tel: 1-519-442-4071 Fax: 1-519-442-1359 sandra.anderson@cfcmm.ca
--	---

# SILVER

"Is Our Business"

## PYROMET High Purity Silver Products

- Anodes
- Pillows
- Grain
- Cornflake
- Balls
- Rods
- Gumdrops
- Cones
- Wire
- Silver Cyanide
- Potassium Gold Cyanide
- Potassium Silver Cyanide
- Refining Services
- Sterling Products

### PYROMET

5 Commerce Dr., Aston, PA 19014  
Ph: 610-497-1743 Fax: 610-494-3349  
E-mail: silver@pyromet999.com  
www.pyromet999.com

Mention  
this ad

and SAVE \$25 on your next order

Plating - Powder Coat - E Coat - Anodize

## "RACKS"

Designers and Manufacturers of Fixtures  
for the Surface Finishing Industries

# ARC

Associated Rack Corporation

*"The Right start to a perfect finish"*

7 Manufacturing Locations in the USA

888 675-5000 / arcracks@associatedrack.com

www.associatedrack.com

We Now Accept Major Credits Cards

## Nanoplate® Cobalt Alloys – Environmental alternative for hard chrome & thin dense chrome

### Applications Include:



Integran has been working with the US DoD through the SERDP and ESTCP to develop this environmental alternative based on nanocrystalline electro-deposition of cobalt.

### NanoCobalt Benefits:

#### Material Properties:

- Corrosion protection – over 3X improvement
- Siding wear loss – 2X improvement
- Reduced coefficient of friction

#### Process:

- Drop-in technology
- Highly Efficient – up to 5X less tank time
- Low energy consumption – up to 20X savings

www.integran.com

Call Robert Samuel: 613-520-1000 / crm@integran.com



## PLATING AND ANODIZING: CHROMIUM REPLACEMENTS

# Alternatives to Chrome an Ongoing Concern

With government regulations and concerns about health hazards of chromium in coatings and metal finishing, more companies have come up with alternatives to hard chrome.

Hard Chrome has been used extensively for years in applications that require abrasive sliding wear resistance, such as hydraulic cylinders, rotating shafts, aircraft landing gears, bushing pins, pistons, valves, rolls and machines tools. The toxicity of the galvanic bath and the hexavalent chromium are environmental problems leading to high waste-disposal costs. Also adding to costs is the often required post-plate baking and if necessary, the grinding of an unevenly thick chrome layer.

In Canada hard chromium follows the mechanical industry and covers several industrial sectors.

### HIGH VELOCITY OXY-FUEL (HVOF)

One replacement process is High Velocity Oxy-Fuel (HVOF) thermal spray. Many studies have been conducted using this process in the aerospace industry in Canada, US and Europe. HVOF is a line of sight, automated, plasma based thermal spray process. Much of the funding for HVOF comes from the US Department of Defence (DoD). Canada is also involved.

HVOF uses a mixture of Tungsten Carbide – Cobalt, (with or without elemental Chromium) and is still the main alternative to conventional hex chromium plating for aerospace applications. The primary use is in replacing electrolytic hexavalent chromium (EHC) for external applications to landing gear. HVOF coating of Internal Diameters (IDs) are limited to about 8 inches.

For smaller IDs, nanocrystalline Cobalt – Phosphorous (Co-P) can be used by conventional pulse electroplating from solution. Therefore HVOF and Co-P are complementary processes.

Major US airlines and the DoD have approved HVOF as replacements to EHC.

Although much has been written about HVOF the only real markets are aerospace applications and some industrial operations.

HVOF will not work for decorative plating, as it is far too expensive for small components. HVOF also requires strict environmental controls and costly robotics. If the HVOF contains 4 per cent Crm, then hexavalent chromium will be created in the flame, which is at around

3000 Centigrade.

Several Canadian companies and Industry Canada are directly involved with HVOF and Co-P.

### TRIVALENT CHROMIUM PLATING (TCP)

The main driver for this technology is the acknowledged toxicity/carcinogenicity of hexavalent chromium for EHC.

TCP was developed in the mid 1970s and is used for decorative applications that don't necessarily require thick wear resistance.

Research is being done worldwide for trivalent chromium and the chemistry involves the reduction of Cr6+ to produce trivalent compounds.

Although research is ongoing, there is no TCP yet for hard chromium plating.

At the moment TCP is used for decorative chromium plating and is currently used in Canada (Mississauga, ON, area), however some companies gave up on TCP and have switched back to EHC.

At the moment TCP uses CrCl<sub>3</sub> as the trivalent source and chlorine liberation may or may not be a problem depending on solution chemistry.

Alternative solutions such as chromium hydroxide (from chromium chloride and sodium hydroxide) as the source of trivalent chromium are being looked at.

Also, the co-deposition of silicon carbide (SiC) and aluminum oxide (Al<sub>2</sub>O<sub>3</sub>), both in powder form, with trivalent chromium to produce composite chromium coatings has been tested. Codeposition with these powders doubles the hardness of the trivalent chromium deposit.

Another TCP test involves the electrodeposition of chromium from Choline Chloride and chromium chloride. These deposits are not as hard as EHC and they are also black. (Choline chloride is classed as a vitamin).

In general, trivalent chromium plating has been available since the mid 1970s and works well for decorative applications. There are serious questions as to whether TCP will replace EHC on a purely technical merit for hard chromium applications. This is because regulations are now in place in many countries to control hex chromium releases in air and water, and technology for zero discharge is very nearly technologically available.

### NANO-COBALT

A more viable replacement to TCP is that from

Integran Technologies of Toronto and the University of Toronto. This is nanostructured electrodeposited cobalt-phosphorous. Integran Technologies Inc. has introduced nano Cobalt alloy technology. The US Air Force has short listed three alternatives for hard chrome and two of the coatings were variations on Integran's nano Cobalt.

"In 2006 the technology won the CATA award for best new nano technology," says Bob Samuel Program Manager, Nano Cobalt Alloys.

Integran calls it nanoPLATE Coatings and say these nanostructured metal coatings have properties which meet or exceed those of hard chrome such as wear resistance, corrosion resistance, and coefficient of friction. It is produced using a cost-effective, high efficiency process with a simple drop-in or retrofit to current hard chrome plating operations (barrel, rack, reel to reel, brush, etc.) for line-of-sight and non-line-of-sight applications. There is a complete elimination of chromium.

Nanotechnology is a relatively new field and refers to the grain size of the deposited metal atoms. The growth of the deposit is "nanocrystalline" which means that growth is very ordered and with uniform crystal size, not "polycrystalline" which results in irregular grain size growth and columnar growth from the surface of the substrate.

Nanocrystalline growth imparts better properties to the plated deposit and uses less material for the same job. Nano grain size deposits are less than 100 nanometers, which can be accomplished by pulse plating (pulse means that the current is on and off) from a direct current source. These Co-P deposits show good hardness and coefficient of friction when compared with EHC. Integran conducts demonstration and validation tests for Co-P as a potential replacement to EHC.

### ELECTROLESS NICKEL (EN)

EN is an autocatalytic process using lead and cadmium as catalysts. EN has also been claimed to be a replacement for decorative chromium applications. However, with government regulations, especially in Europe requiring the total suppression of lead and cadmium from EN solutions its future as a replace-

ment is not clear.

Chemical suppliers say that the operational life of EN solutions (Enthone) can be extended by removing decomposition products to create lead/cadmium free EN solutions. The EU prohibits the use of hazardous chemicals such as chromium, lead, cadmium containing compounds for a wide range of applications, which came into effect July 2007.

To meet or surpass the requirements of EU directives, Atotech, with offices in Burlington, ON, has been focused on developing green processes for the metal finishing industry since 2000. These processes include bio-remediation pre-treatment, lead and cadmium free electroless nickel, hexa-valent chromium free passivates for painting and sacrificial coatings, and water waste treatment.

The new EN-free processes show similar qualities to conventional EN.

### LIMITATIONS

In conclusion, there is still much to be said in favour of EHC because there is no immediate "drop - in" replacement. EHC has two main advantages over other processes - wear and corrosion resistance. There are also other advantages such as no effluent treatment, closed looping of the EHC process, and automation possibilities.

HVOF, which is the closest replacement to EHC and the other thermal spray processes does have limitations such as the inability to be used for internal diameters and therefore relying on EHC or CoP. HVOF processes are also expensive. The primary market for HVOF remains the aerospace sector and the coating of landing gear.

TCP has limitations for hard chromium plating applications, but is available for decorative chromium applications and has been so since 1975. TCP, to function successfully as an alternative to EHC, requires heat treating to convert the structure to body centered cubic, which is how EHC deposits. This heating results in TCP cracking and therefore poor corrosion resistance.

Research into Chromium Replacement Technology is ongoing as formulators strive to determine the best most economical way to surpass government regulations worldwide. ■



## ELECTRO-STEAM GENERATOR

MONEY \$\$\$ stays in your pocket preparing metal surfaces when using an Electro-Stream Generator Steam Cleaner. Creates a total Phosphatizing and Cleaning System for preparing metal surfaces for Powder Coating or Painting.

### ADVANTAGES:

- 50-75% less chemicals used
- 50-75% less water used
- 50-75% less contained Effluent
- Exact continuous chemical mixing
- Meets several Mil Specs.
- Dries Quickly

### SAFETY FIRST:

- No Dangerous Flames
- No Noxious Fumes
- No Combustible Fuel
- No Fuel Storage

### MADE IN THE USA



ELECTRO-STEAM GENERATOR CORPORATION  
P.O. BOX 438, Rancocas, NJ 08073  
Tel (toll free): 866.617.0764 • 609.288.9071  
Fax (toll free): 866.617.0765 • 609.288.9078

sales@electrosteam.com • www.electrosteam.com

## Conveyor Checkup! Reduce and Prevent Part Contamination

### Nurse your conveyor back to health with a Non-Powered Brush

More effective than a power brush for a fraction of the cost



Check our website for additional conveyor cleaners



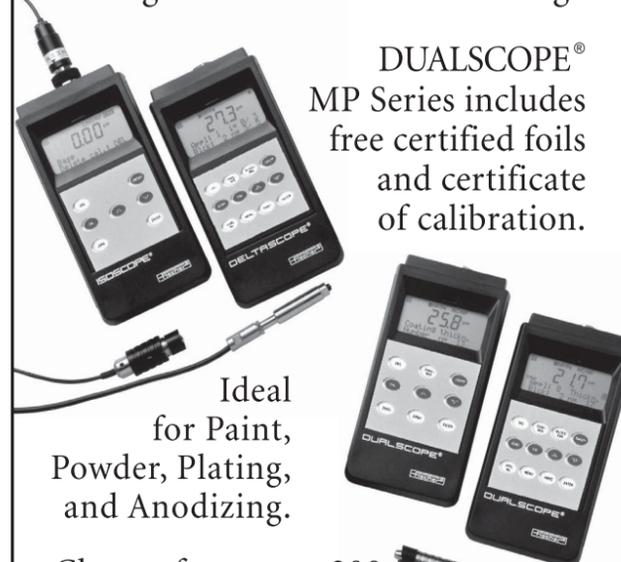
**MIGHTY LUBE®**

PHONE: (231) 924-6160

www.mightylube.com

## DUALSCOPE® Fischer®

Coating Thickness Measurement Gauges



DUALSCOPE® MP Series includes free certified foils and certificate of calibration.

Ideal for Paint, Powder, Plating, and Anodizing.

Choose from over 200 Smart Probes™ developed for your specific application.

Made in the USA

www.Fischer-Technology.com • info@fischer-technology.com

750 Marshall Phelps Rd Windsor, CT 06095  
1-800-243-8417 • Phone: 860-683-0781 • Fax: 860-688-8496

## Comprehensive Cyanide Waste Management Solutions

Treatment Facility | Precious Metal Recovery | Treatment Systems

www.cyanidedestruct.com

293 Saunders Road, Barrie, Ontario, Canada L4N 9A3  
Phone: (705) 725-6262 Fax: (705) 725-0036  
Toll-Free 1-888-886-9022



## ROTARY SCREW COMPRESSORS



## HEAVY DUTY PISTON COMPRESSORS



## COMPRESSED AIR DRYERS



## COMPRESSED AIR FILTERS



CONTACT US for a complete compressed air system solution:

[www.dvair.ca](http://www.dvair.ca)

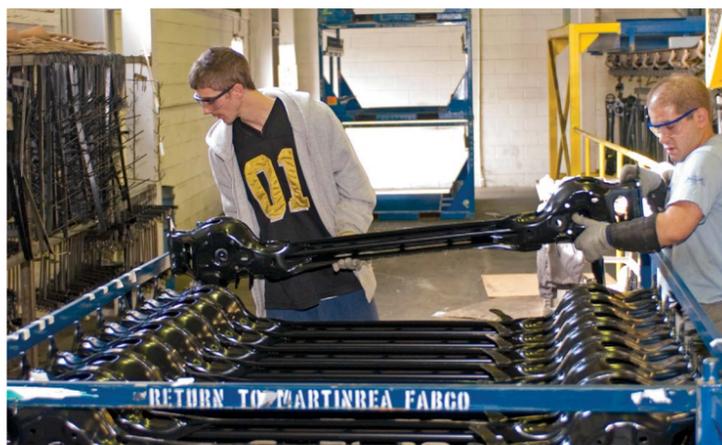
1 800 668-8558

Email: [sales@devair.ca](mailto:sales@devair.ca)

## INDUSTRIAL FINISHING: PRETREATMENT

**Photo front cover:** ANM Industries pic: General Manager of Sales Pat Denomme and Quality Control Manager Mark Barnes in front of ANM Industries in Windsor, a busy job shop primarily for coating automotive parts.

arrived. Two Chrysler plants, based in Windsor and St. Louis, manufacture the new minivans. ANM's painted parts go to each of these facilities. The new line exists specifically for



Jeff Fletcher and Mike Klymko load finished axles to return to Martin Rea

the acid pickle e-coat for the Chrysler part and runs three shifts, but ANM does not deal directly with the auto manufacturer, even though the Windsor factory that makes the new minivan is literally a block away. ANM is subcontracted through Martinrea Fabco Metallic Canada Inc. to paint the part for Chrysler and Denomme prefers it that way. He says he was relieved when the recent strike by Chrysler's autoworkers was very short lived, lasting only about 6 hours. "After a full day it would have affected us," he says.

ANM is a custom coater and does no manufacturing in its plant. "We are basically a job shop," says Denomme. The company does e-coat, powder coat, sub assembly, parts washing and inspections. ANM has another e-coat line beside the new one in its 77,000 square foot shop. Ninety-five per cent of what it does is automotive and it coats products for every automotive manufacturer often running many different parts from different manufacturers through the line at the same time. Non-automotive jobs make up the other 5 per cent, says Barnes, as he points to a metal plant stand in one of the offices.

### ON THE LINE

ANM's Quality Control Manager Mark Barnes took CFCM through the 13 stages of the coating process. He explains that the typical e-coat process has 11 stages, but that due to the acid used in this specific line, extra rinses need to be added.

All the chemical products used in the process are manufactured by Henkel, and Barnes swears by them.

"Henkel is a leader in pretreatment chemicals," says Barnes.

Denomme concurs, "They are a little more expensive, but they're really good."

The paint for the e-coat is made by Dupont. "We are using black instead of grey," says Barnes. "You can get e-coat in all kinds of colours now."

Barnes says cleaning and phosphating is the most important part of pretreatment. "It's like a primer for the e-coat," he says.

ANM uses a monorail system that they designed themselves to fit their space, right up to an entire rack which rotates so it will turn tight corners.

During step one and two of the pretreatment process on ANM's new line, the part goes

*continued from front cover*

through two washer stages with the chemical cleaner metered in. Then it goes through a rinse including a halo rinse before it goes into the acid tank where it receives the Henkel Deoxidine 7005 treatment. The paint specification is Chrysler MSPB60-2A, the A meaning acid pickle. After that, the part receives three neutralizing rinses in order to bring the PH up to 10 from 3. Then it goes through yet another rinsing stage, this time with the chemical Fixodine ZL. The next step is a zinc phosphate made up of Bonderite 952 and Accelerator 131D, which is also metered in with metering pumps. All the chemicals are metered in and everything is on temperature and pressure gages. The line is continually receiving fresh chemical. After the zinc phosphate the part then goes through two more

water rinses with no chemicals. Next is the non-chrome stage using Parcolene 99X which seals the phosphate coating.

"The zinc phosphate is the most critical stage prior to painting," says Barnes. The last pretreatment stage is recirculated reverse osmosis (RO)



Matt Reis loads conveyor

water and a virgin RO halo rinse.

The product then continues along the line into the paint bath, which is kept at 92 degrees. The filters for the paint are 10 micron bags. The Chrysler axle goes through three post rinses to preserve the coating. The drying ovens at ANM are kept at 365 to 390 degrees depending on the product.

Barnes says that if there is ever a problem the Henkel representative arrives in a timely manner



Twist axle for the new Chrysler Mini van

and comes weekly to test chemicals as well as the paint bath which is sent to their lab to see if any adjustments need to be made.

ANM is one company that devotes a lot of care to what it does. In fact CARE on its business cards means Customers Are Really Everything.

ANM employs 65 people and the combined senior management of the company has over 70 years experience in coatings.

As Denomme says, "We want to become the best e-coater in the business." ■

# It's a good idea

## to post housekeeping rules

BY CHARLES MAKAD

**T**he primary function of a spray booth is to reduce the accumulation of flammable or combustible materials applied with a spray gun. To provide the best working environment and reduce the danger of fire, the booth must be regularly maintained.

In the "Standard for Spray Application using Flammable or Combustible Materials", NFPA-33 2003 edition, upon which many jurisdictions base their fire code, the requirement for spray booth maintenance appears in Chapter 10, Section 5.3.2 and Section A.1.1.5 (5)

In some jurisdictions, the end user has a legal obligation to post and perform specific housekeeping rules relating to spray booth maintenance in order to reduce the risk of creating hazardous conditions. This is a good idea even if it isn't legally required.

Reputable spray booth manufacturers will provide detailed maintenance instructions for the booth in general as well as components such as fans, lights, door seals etc.

Typically, a schedule should be established by the end user for the performance of the following tasks on a regular basis. These are minimum recommendations. Site condi-



Photo: Col-Met Spray Booths Inc.

tions and booth type may require more detailed booth maintenance requirements.

### DAILY:

- Inspect paint arrestor filters. Clogged filters should be replaced immediately and disposed of in a safe manner.
- Clean spray equipment, including wiping down air and fluid hoses.
- Pick up and dispose of any "trash" in the booth
- Ensure that light fixtures are working

### WEEKLY:

- Vacuum or sweep out the interior of the spray booth
- Ensure that the area around the

outside perimeter of the booth is clean and free of trash

### QUARTERLY:

- Do a major clean up of the booth including wiping down walls, cleaning floors, cleaning floor grates/pits (downdraft), clean light fixture glass
- Inspect interlocks, belt tension on fans, door seals (if applicable), inlet filters (if applicable), and do a visual check of the fan blades and exhaust stack interior.

### SEMI-ANNUALLY:

- Re-coat the booth with strippable coating
- Replace protective lens covers on light fixtures

- Inspect fire suppression and safety related equipment.

### ANNUALLY:

- Clean fan blades and exhaust stack interior

Spray booth suppliers should also offer products and services that will assist the end user in developing and carrying out a maintenance program.

Such products should include:

- Paint Arrestor Filters
- Inlet Air Filters
- Light fixture lens covers- Protects glass from overspray, ensures proper light diffusion
- Flame retardant floor covering to allow fast, easy booth clean up.
- Peelable wall coatings to reduce costly clean up. Spray on, peel off.
- Door seals and gaskets

Several suppliers also provide services such as scheduled booth maintenance for the supply/replacement of filters, and the cleaning of booth fans and exhaust stack.

Spray booth maintenance is all about a partnership between manufacturers, distributors, authorities having jurisdiction and the end user to create a safe working environment. ■

*Charles Makad is in Spray Booth Sales at Paintline Products Inc. that provides product and sales support to several hundred ITW Binks/DeVillbiss distributors across Canada and also has its own air compressor line marketed under the "OMEGA" brand in Canada and the US.*

**PosiTector® 200**  
Coating Thickness Gages for **Non-Metal Substrates**

**NEW Models Available**

Non-destructively measure single or multiple layer coatings on Wood, Plastic, Concrete, Composites & more

**DeFelsko**  
CANADA LTD.  
The Measure of Quality

800-448-3835 or [www.defelsko.com](http://www.defelsko.com)  
Tel: 315-393-4450 • Email: [techsale@defelsko.com](mailto:techsale@defelsko.com) • Brockville, Ontario Canada

**ANNADALE FINISHING SYSTEMS (2003) INC.**  
**FIRST AT THE FINISH LINE**

Annadale provides manufacturing and processing industries with innovative, reliable and cost effective solutions for coatings application and fluid handling challenges.

With our 164 years of accumulated experience we are able to provide improved finish quality, reduced operating costs, increased productivity, enhanced application efficiencies and an effective return on investment.

Whether you require a custom engineered turnkey system, a finishing line component, upgrade or retrofit to existing equipment, we would appreciate the opportunity to assist you.

- Conveyors
- Robotics
- Blasting Equipment
- Solvent Recovery
- Water Wash Booths
- Application Tools – Conventional, HLVP, Air Assisted Airless, Airless & Electrostatic
- Pretreatment
- Automation
- Air Make Up
- Process Piping
- Paint Mix Rooms
- Liquid & Powder Dry Filter Spray Booths
- Gas, IR, & UV Dry Off & Cure Ovens
- Piston & Diaphragm Pumps
- Electronic Paint Proportioners
- Paint Circulation Systems

Annadale also represents the following quality equipment manufacturers:

- Graco •
- Aro •
- Titan Air •
- Wagner •
- AW Company •
- Jervis B. Webb •
- Binks •
- CCI DriQuik •
- Norspec Filtration •
- Maxon •
- Devilbiss •
- Fusion UV •
- Motoman •
- Sata •
- Carpenter Chemicals •

Annadale would appreciate the opportunity of working with your engineering, production, purchasing, and maintenance teams from the application concept stage through to installation, start up, training and after sales service.

**ANNADALE FINISHING**  
1201 Franklin Blvd., Unit 1  
Cambridge, On. N1R 6R7  
[www.annadale.com](http://www.annadale.com) • email: [info@annadale.com](mailto:info@annadale.com)

Phone: 519.622.5121  
Fax: 519.622.5028  
Toll Free: 800.265.8621

## PAINTLINE PRODUCTS INC.

### SPRAY BOOTH SPECIALISTS

SALES, INSTALLATION, AND SERVICE FOR

- Industrial Spray Booths
- Truck and Large Product Spray Booths
- Powder Booths
- Spray booth filters and service parts
- OMEGA air compressors, air dryers, air line piping and filtration
- ITW Binks and DeVilbiss spray equipment
- Gun washers and solvent recyclers.



**COL-MET**  
spray booths  
expect more

**OMEGA**

*Paintline  
Products  
Inc.*

#### PAINTLINE PRODUCTS INC.

37 Hamilton Rd.  
Barrie, ON. L4N 8Y6  
Ph: 1-800-668-8448  
Fax: 1-705-721-8646  
E-mail: spraybooths@paintline.ca

## CPCA 2007 CONVENTION QUEBEC CITY

continued from page 13



Jean-Marc Pigeon, Inortech Chimie; Karl Semper, Univar; and Errol Bonaventura, Inortech Chimie socialize during the CPCA Conference.



Jim Quick CPCA president presents Brian Palardy with the CPCA Statesman Award with Brian Edwards, DuPont.



Doug Theimann (centre) receives the CPCA Statesman Award from Jim Quick (left) and Brian Edwards (right).



Barbara Kelly, Kelcoatings chats with Rand Lomas, L.V. Lomas.

yard and winery and a craft sale located in the sacristy of the Saint Pierre Church.

A nighttime tour of the St. Lawrence with dinner and dancing aboard the ship Louis Jolliet highlighted the Suppliers Night.

Tuesday finished with a hair raising account by Captain Robert Piché, Air Transat, who in 2001 landed his Airbus without power in the Azores. A fuel leak dumped all the fuel and he flew the powerless plane for over 20 minutes to an emergency landing. No one was injured and the plane is still in service.

Plans have already begun for the 2008 convention which will be in Ottawa/Gatineau at the Hilton Lac Leamy, September 20-23 2008. ■

Story and Photos by Pete Wilkinson

### Can-Am's Turbine-powered Liquid Spray

application system is unique. Its variety of spray guns works very well at pressure ranges of 0.5-8.75psi and cfm outputs of 9-28. These spray guns are used in many industries utilizing liquid spray application.



**CAN-AM**  
ENGINEERED PRODUCTS INC.

Phone: 1-800-229-7551 Fax: 734-427-4282  
E-mail: turbo@canamengineered.com

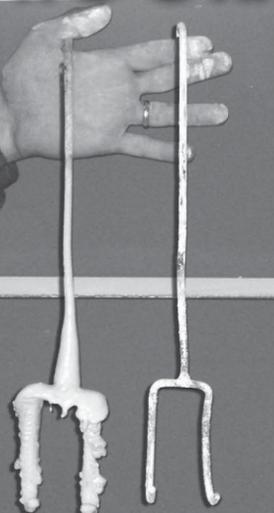
[www.canamengineered.com](http://www.canamengineered.com)

## STRIP PAINT AND POWDER COATING...

# OFF THE HOOK!

### HYBRID Burn Off Oven

- \*25% More Efficient
- \*Shorter Cycle Times
- \*One Touch Control
- \*Responds to the Load
- \*No Hot or Cold Spots
- \*Strips Sensitive Parts
- \*No Wasted Heat



**BEFORE AFTER**

- Over 30 standard sizes to choose from
- Tour the Oven Showroom
- Get specs on over 30 standard sizes

Since 1919 800-255-1241  
216-267-6366  
fax 216-267-4361

View the Proof!

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

ACE EQUIPMENT CO.  
4725 MANUFACTURING RD.  
CLEVELAND, OH  
44136

## Stripping Techniques—The Best Practices

Proper surface preparation is the key to the long life of a coating

Stripping organic materials from metals can be done with either cold or hot methods. There are chemical, pyrolytic, and mechanical processes. Corrosives and solvents are used in chemical stripping. Pyrolytic stripping uses burn-off ovens, molten salt baths, and fluidized beds. Mechanical stripping is pressure water blasting, plastic media blasting, sodium bicarbonate stripping, and vacuum sanding. The best method depends on the coating to be removed, and the type of metal the coating is being removed from. A recent NACE/SSPC study discovered that 68 per cent of all coating failures are attributed to poor surface preparation that could have been prevented. It was also found that the life of a coating depends as much on the degree of surface preparation as on the subsequent coating system. Since coating adhesion relies on the chemical bond to the substrate, all rust, scale and organic surface contaminants include oil, chloride salts, and sulfate salts must be completely removed in the stripping process.

### TYPES OF STRIPPING PROCESSES

The burn off stripping process includes placing parts in a commercial heat oven at temperatures 1200° F or 649° C in an oxygen-deficient space for approximately 6 to 8 hours. This type is not recommended for non-ferrous or small ferrous parts.

**Burn-off** ovens remove paint, grease, oil, varnish, epoxy, rubber, and other combustible materials. They are not recommended when the hydrocarbon coatings contain fluorine and chlorine, or when the substrate is magnesium, because of hazardous contaminants generated during heating. All metals with melting points above 900°F or 482°C are compatible. During combustion, carbon remaining on the part is burned in excess oxygen to form carbon dioxide. The remaining materials are removed by mechanical processes such as scraping, after the parts leave the burn-off oven. Water mist is used for temperature control. If the temperature goes too high, first and second water sprays go off oven to lower the temperature.

The **Molten Salt** process includes placing parts to be stripped in a molten salt bath at temperatures ranging of 550°F to 900°F depending on the salt. Molten salt baths can be used to

remove all types of organic materials, including paints, polymers, nylon, polyester, epoxies, and fluoropolymers. Lower temperature baths are used to fix blemished products and maintenance stripping. Higher temperatures are for stripping build-up on hooks, racks, and other carriers. Metals with low melting points, such as alloys and magnesium, cannot be stripped in a molten salt bath. The type of inorganic salt mixture placed in the bath is based on the operating temperature, the coating to be removed from the metal, and the metal and its

reactivity.

The stripping process occurs due to the agitation of the salts through the heated water.

Systems exist for all production needs such as a continuous version for a production line, as well as batch or manual. Cleaning time takes from seconds to minutes.

With **Chemical Stripping** parts are placed in a heated chemical solution at a moderate temperature of around 280° F or 138°C. Stripping time is dependent on the type of coating that is being stripped and thickness. The first

part of the process is to put the parts on a rack then dip them in the chemical solution. The second step is to rinse with water, then thirdly dip the parts in rust preventative if they are not going to be processed. The parts then head over to the pre-treatment of choice. Equipment requirements for chemical stripping are a #10 gage steel tank that is electrically welded throughout and insulated. Various sizes are available, the typical ones being 50 to 1200 gallons. Chemical stripping results in clean tooling, the ability to strip parts in-house, better control of production requirements therefore better production throughput and the whole system is easy to use. When it comes to environmental issues disposal of the water used in the process is a concern, but can be self

## Paint Filtration Experts



**NORSPEC**  
FILTRATION

Hamilton Tel: 905-544-3944 Toll Free: 888-544-4077 • Edmonton Tel: 780-468-9296 Toll Free: 877-468-9296 • Sarnia Tel: 519-332-2433 Toll Free: 800-265-0247

## Need a Stripper?

Canadian Finishing Systems has the Answer.

- Environmentally friendlier Resin and Paint strippers in Steel, Aluminum and Multi-Metal formulas
- Ozone safe-No CFC's
- No Methylene Chloride, Low VOC's
- Long Tank Life for manual or automatic finishing lines with ambient or hot tank stripping.

Canadian Finishing Systems Ltd.,  
3455 Harvester Rd., Unit 20-22  
Burlington ON, L7N 3P2  
tel: (905) 634-5168  
fax: 905-634-5699  
e-mail: [cfs-Patrick@cogeco.net](mailto:cfs-Patrick@cogeco.net)



ISO 9002-1994 Registered

[www.CanadianFinishing.ca](http://www.CanadianFinishing.ca)

# THINKING ABOUT UPGRADES?



THINK PULSE POWER. THINK PARKER IONICS.

**PARKER IONICS**

Powder Application Equipment

COMPLETE SYSTEMS • GUNS • NOZZLES • POWDER HOPPERS

WWW.PARKERIONICS.COM • 734.326.7630 • FAX 734.326.7638

contained and treated in-house.

The **Fluidized Bed** stripping process can be used instead of chemical paint stripping and degreasing of non-aluminum and non-heat-sensitive metal parts. All types of organic materials, including paints, polymers, nylon, polyester, epoxies, and fluoropolymers, can be removed using fluidized bed stripping. This process removes paint or other organic coatings by heating the part to greater than 650° F, causing pyrolysis and decomposition of the organic part of the coating to be removed inside the fluidized-bed furnace or hot bed. A granular material such as aluminum oxide is used as the heat transfer medium. Air passing through the bed keeps the media fluidized. Parts being cleaned are lowered into the fluidized bed, which quickly heats the part to a temperature where organics on the surface material pyrolyze into carbon oxides, other gaseous combustion products, and char. The composition of the atmosphere within the furnace can be varied easily and quickly, according to the required treatment. Pyrolysis takes between one and six hours depending on the base material and the type of coating being removed. After pyrolysis of the organics, the fluidized-bed cooling system or cold bed is used to cool the parts. Carbon monoxide and volatile organic compounds (VOCs) generated during pyrolysis are burned in the afterburner. The thermal decomposition of paint leaves some carbon and inorganic char on the part. Most of the char may be removed in the fluidized bed; however, most parts need further cleaning before they can be recoated. Fluidized bed stripping produces no solvent wastes.

The **Mechanical Abrasion** -media blast process involves placing parts in a media blast chamber and then manually blasting parts. Typical media used in this process includes sand, walnut shells and peach pits. Abrasives commonly used for stripping include steel grit, aluminum oxide, garnet, and glass beads. Blasting propels abrasive by centrifugal force through a controlled blast pattern and direction. Blast media is pressurized in a blast tank and propelled through a nozzle or multiple nozzles. Items to consider in mechanical stripping are: initial condition of steel; organics; final condition of blasted product; media reclaim and ventilation; importance of abrasive mix, flexibility and environmentally friendly; machine types and developments in technology.

In choosing the best stripping system for the job an operator needs to take into consideration the size of the part, what it is made of, cost, the environment and any other specific needs. ■

## JB Finishing Inc. COMPLETE FINISHING SYSTEMS

### New Compact Gas Fired Batch Oven

- Size, 8'x8'x10'L
- Energy efficient
- Optimal Heat Uniformity and Heat Flow
- Approx. start up time is 10 MIN
- Minimal on site installation



Electrical Control Panel



**JB Finishing Inc.**  
Complete Finishing Systems

560 Piercey Road  
Bolton, ON L7E-5B4  
Tel: 905-951-9529  
Fax: 905-951-0656  
Toll Free: 1-877-247-2635

WWW.BISCOEFINISHING.COM

- ▶ CAPS & TUBING
- ▶ HANGING PRODUCTS
- ▶ DISKS & TAPES
- ▶ PLUGS

2538 Speers Road, Unit 7 • Oakville, Ontario, Canada L6L 5K9  
4610-97 Street • Edmonton, Alberta, Canada T6E 5N9  
Email: sales1@allianceplastics.com  
Web: allianceplastics.com  
Call: 800-847-0486



**ALLIANCE**  
PLASTICS

**FULL CIRCLE OF MASKING PRODUCTS**

# FIN-X '07 Delivers

Organizers say that judging by exhibitor and attendee evaluations, the FIN-X Conference & Expo for Industrial Finishers, Indianapolis, IN, Sept. 17-20, 2007, delivered high quality exhibits, an outstanding conference program and attendees who were seriously looking to improve their finishing operations and technologies.

Attendees came from 42 U.S. states, four Canadian provinces and 12 foreign countries. Total registered attendees and exhibit personnel were 2,320.

New and innovative features launched at FIN-X '07 were highlighted in the Demonstration Lab on the expo floor. These included a batch powder coating booth and IR oven where attendees could go from conference sessions to the show floor for hands-on training. The lab also featured the VirtualPaint training system for simulation of liquid finishing. Here attendees could test their spraying skills and measure mileage and transfer efficiency on a variety of different shaped parts.

"I was delighted with the Demo Lab area," commented FIN-X Programming Director Rodger Talbert. "This was a new experience for us and everyone appreciated the opportunity for non-commercial training on the show floor. It was great and we already have ideas to make it even better in the future."

A keynote address from author Mike Collins on "Saving American Manufacturing" provided insights into a wide variety of American manufacturers and methods for keeping their companies competitive and prosperous.

## FOR CHARITY

Anne Goyer, Conference and Expo Manager says the FIN-X '07 Monday Night Football Party generated \$3,500 that will be split between two charities — the V Foundation for Cancer Research and the New Orleans Mathematics and Science High School.

"It was a fun evening of food, drinks, raffle prizes and football, but the best thing is that we raised money for two very worthy charities. We plan to continue these efforts at future shows."

## ON THE FLOOR

Organizers say that many felt FIN-X to be a more diverse show than past finishing events. "This was truly a diverse exhibitor show floor," noted Bruce Bryan of Wagner Industrial Solutions. "There was a much wider variety of finishing technologies represented and it was great to see new technologies from industry segments such as robotic suppliers. Every attendee had the opportunity to visit with suppliers from multiple finishing technologies."

Exhibitors say that they made key contacts on the floor. There were 134 exhibitors. Of the show evaluations handed in by attendees, 87 per cent said it was worth their time to attend FIN-X '07 and 94 per cent said they obtained useful information on the show floor.

Several new products were introduced.



Jay Cressman, Uni-Spray



At FIN-X, Jeff Thomas, TriMech Finishing Solutions and Jake Wesseldyk in the Carpenter Chemical booth.



At the Mighty Lube Systematic Lubrication booth; Brian Kittle, Anthony Brown, Rolly Wolford.

## EDUCATION

Education or Technical conference sessions dealt with everything from Diversifying your Business, Fundamentals of Porcelain Enamel; Running Efficient Batch Systems; Finishing Around the World; Troubleshooting; Electrocoating; UV Curing; Compliant Metal Finishing; Cost Reductions; IR Applications; Emerging Technologies; Running an Economical Powder Coating System; the Business of Finishing; Stripping and Energy Costs.

A plant tour to Schafer Powder Coating closed the expo. Attendees saw a new state-of-the-art powder coating system and were able to ask questions owner Mark Schafer and Midwest Finishing Systems who installed the equipment.

FIN-X '07 was sponsored by five of the leading industry trade associations: The Chemical Coaters Association, The Electrocoat Association, The Society of Manufacturing Engineers, The Porcelain Enamel Institute and the Infrared Div. of the Industrial Heating Equipment Association, along with Products Finishing magazine. ■

# E.T.C. HOT-LINE For Painting, Baking and Electrostatic Processes

**For Quality** Our Enclosed Track Conveyor is the hottest thing going, providing you continuous, trouble-free service.

**For Design** Our engineers can retrofit, redesign, and customize to bring your operation up to date at a fraction of the cost, in a fraction of the time. That's hot!

**For Service** When things get hot, you're within easy reach of a representative 24-hours a day, seven days a week. Just call 800-319-7134.

## PRODUCT HANDLING EQUIPMENT INC.



3615 Mattingly Road, Buckner, KY 40010

*The Industry's Hot-Line*  
**800-319-7134**

[www.phei.net](http://www.phei.net)

# Technologies Emerge in Indianapolis

Emerging Technologies, an educational session at Fin-X 2007, Indianapolis, IN, featured eight 15 minute presentations on advancements in the finishing marketplace.

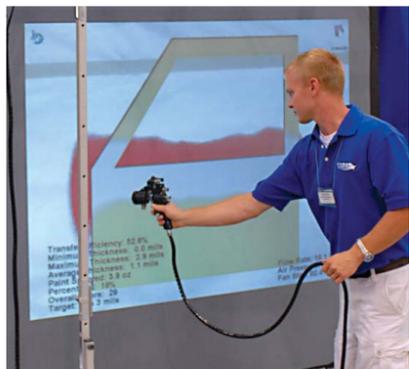
The Virtual Paint Training System presented by Rick Klein, Spray Technique Analysis and Research, (STAR4D) Program Manager, University of Northern Iowa, allows people to virtually "paint" a screen without any paint or mess. The design originated in 1994 to train Military Painters in proper spray techniques for automotive refinishing. With LaserPaint two laser dots are brought together putting the painter at the proper distance from the product. The targeting tool attaches to any model spray gun. It measures the transfer efficiency, paint consumption and much more. There is free play, learning mode



and test/lesson mode.

Next, John Cole of Parker Ionics presented the Pulse Power II GX8000 series powder coating gun and controller. It offers higher first pass transfer efficiency, reduces back ionization, eliminates orange peel and much more. Cole went on to explain the benefits of pulse power.

An Open Air Plasma Treatment for Improved Coating Adhesion was shown by Larry Armbruster of PlasmaTreat. He explained the fundamentals of the technology and presented case studies. He concluded by saying that Open Air Plasma is suited for inline and robotic processing; is an effective environmentally friendly process; and has long



term stable activation for printing, bonding or coating.

Then, Jerry Trostle of Wagner Industrial Solutions explained the Improved Transfer Efficiency with Application Technology of its Hi-Coat system. It is a combination new gun and patented pump technology that uses less air and delivers a softer delivery of the paint to the part. It reduces speed to insure less bounce back and better charging, reduces powder usage, reduces compressed air usage and reduces cost of wear items for equipment.

New Conversion Coating Technologies were presented by Bruce Goodreau of Henkel Corporation. He spoke about the company's research into pretreatment technologies and New Generation Coatings (NGC). Henkel has a new metal oxide conversion that addresses environmental concerns of the Zinc Phosphate Process. What zinc does in seven stages, the NGC does in five.

Dennis Stephens from ITW Ransburg showed Flexibility in Liquid Robotic Applicators. He also spoke about Robotic Atomizers and that there is a recent trend in cutting capabilities. He also outlined hybrid systems that allow both

waterborne and solvent borne coatings through a single applicator.

Gary Nelson of Chemetall Oakite presented Non-Phosphorus Silane Treatments starting with their basics and then going on to Silane in the pretreatment process. He said Silane is better for the environment, is phosphorous-free, uses less energy, creates no sludge and results in simple waste treatment compared to Iron Phosphate and Zinc Phosphate.

Lastly, Clingier is Better—An Innovation for Batch Pretreatment by Bruce Dunham of Dubois Chemicals dealt with ready-to-use Gel Technology for Cleaning & Surface Preparation with a focus on rust, & scale removal. He outlined the strengths and weaknesses of gel for cleaning and spoke of its advantages over foam and liquid. He talked about the importance of proper safety equipment. When you use a gel you let it cling then there is a chemical reaction, then you rinse to a clean surface. Dunham said the key is in the rinsing.

All presenters entertained questions and invited attendees to their booth, or hands-on demo area on the expo floor. ■



WOOD • PLASTIC • FIBERGLASS • METAL

## We cover all types of coating applications



www.ececanada.com



Mississauga, Ontario Tel: (877) 890-1920 • Montreal, Quebec Tel: (800) 363-4863 • Vancouver, British Columbia Tel: (888) 882-4657



others will be significant contamination concerns. Once the appropriate background information is gathered, weekly routine biological monitoring may be sufficient. A treatment plan should already be established in advance for each material.

When it comes to mixing, milling, and reaction vessels and their associated piping systems, as the raw materials, recycled materials, and water come together in the processing required to produce a product, a quality plant hygiene program begins to pay off. If the raw materials are in good biological condition, as well as any water used, it results in good biological control in the final product. The plant hygiene concern for this part of the process can center on using only treated ingredients and protecting those ingredients from contamination during processing. In a typical process, every batch should be tested for microbial contamination until sufficient background data has been gathered to allow a more relaxed testing schedule.

After processing, the concern is transferred to insuring complete removal of each batch from the system, including elimination of 'heels' of product in tanks and low points in piping. Intermittently used equipment requires an established cleaning and disinfection program. It should be cleaned immediately and stored dry, or if not practical, have a biocide added and circulated around the equipment. As with other areas in the plant, look for and eliminate dead end zones with low or no circulation. Another obvious step is to keep vessels, drums, bags, etc., covered and protected from foreign materials, including dust, dirt, and water. Another is to keep the plant as a whole clean and dry to avoid fostering the growth of microorganisms that can become airborne. Scheduled shutdowns should be used for more thorough

cleaning and disinfecting of the whole plant including floors, walls, ceilings and railings. Testing the thoroughness of the cleaning is often best done immediately upon the plant returning to work. The first product batches are good indications of the cleanliness of the plant. Experience will dictate the time recommended between shutdowns and cleaning; semi-annually is sufficient with a good plant hygiene program.

Product packaging systems is the traditional point where most think of adding a biocide. However, without plant hygiene, it may not be possible to economically eliminate, or even control, microbial contamination present in the product, let alone prevent any subsequent contamination during packaging, shipment, and storage. With proper care and monitoring throughout the plant, the addition of biocide at this point should be just a precaution.

A product sampling schedule should be set up to monitor the condition of product ready for delivery. Experience will dictate how often to sample, starting with each batch and ending with perhaps weekly samplings when sufficient data is collected to justify this extended schedule.

At the product transportation and delivery systems stage, plant hygiene has done all it can to allow the manufacture of a microbial clean product. The biocide added during packaging is supposed to see the product through to its use by the customer. In some cases, there are off-loading issues in which partial batches of product are used over an extended period of time. In other cases, the shipping containers are returned for refilling. The proper cleaning and care of these containers obviously impacts the delivery of the next batch of product shipped in these containers. As with the packaging systems, it is necessary to make sure that biological contamination is not entering the product at these locations. Random samples should be taken, perhaps weekly, until sufficient data is collected to confidently reduce this schedule. Once the product reaches the customer, then a program must be in place to handle customer complaints about contaminated product. However, with a good plant hygiene program in place, these complaints will be minimal and it should be possible to rapidly locate and eliminate problem areas in the plant.

*Information for this article was provided by Michael Morden, Manager of Troy Chemical Company Ltd.*

**NEW PRODUCTS**

**Powder Coating Solutions for Fine Finishes**

Nordson Corporation offers several new powder coating solutions. It has introduced a new Sure Coat gun nozzle kit featuring an assortment of nozzle types and sizes that allows matching a particular powder spray pattern and part shape to improve finish quality and consistency, while minimizing powder overspray and waste. A new, smaller-size (3'w x 3'6"h spray area) Econo-Coat powder spray booth properly contains and recovers powder overspray when coating parts such as automotive wheels, springs and a variety of other smaller parts. This new booth rounds out Nordson's line of powder spray booths capable of coating virtually any product, from valve stem covers to entire automotive frames, to entire dump truck beds. The Sure Coat mobile system incorporates Nordson's most advanced gun and control technology with both 50-lb. (23 kg) capacity fluidized hopper and vibrato-

ry box feed version, it is a self-contained mobile powder spray systems. Its extensive operational controls and self-diagnostic capability provide optimum performance across a wide range of powder coating applications. The Vantage mobile system provides more basic functionality at an exceptionally affordable price. A new, round, stainless-steel 25-lb. (11 kg) capacity fluidizing hopper and optional 3-caster dolly will also be featured. The 25-lb. size is ideal for today's fast color-change production. Its smaller size allows for convenient handling and storage. And being highly affordable, several of these can be used as dedicated-color hoppers for even faster color change, and with less chance for color contamination.

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

**Nordson Introduces nVision Tools**

Nordson Corporation has introduced nVision™ Tools, a series of interactive

**Bookmark [www.cfc.com.ca](http://www.cfc.com.ca)**

**PACLINE OVERHEAD CONVEYORS**  
ISO 9001

**TOUGH RELIABLE CONVEYORS THEY WORK ...and PAC a Punch!**

**PACLINE OVERHEAD CONVEYORS**  
1-800-955-8860  
sales@paccine.com • www.paccine.com  
Mississauga, Ontario • Buffalo, New York

25 YEARS PROVEN RELIABILITY

**Production Proven Finishing Systems to Customize and Restore**

- ▶ Powder Coating and Liquid Painting
- ▶ Manual and Automatic Systems
- ▶ Custom Solutions
- ▶ Nordson Quality

For more information visit our website at [www.nordson.ca](http://www.nordson.ca).

Nordson Canada, Limited • 1211 Denison Street • Markham, ON L3R 4B3 Canada  
877.463.3200 or 905.475.6730

**Nordson**

Photos courtesy of IKON Powder Coating Inc. © 2007 Nordson Corporation

# NEW PRODUCTS & TECHNOLOGIES



the use of varying parameters or combinations of parameters to address pressing questions, like: Liquid or powder? Is fast color change the right choice? What are the best liquid coating options? Should we reclaim powder or not?

Nordson nVision Tools address more than 30 separate variables across both liquid and powder coating applications that can be used to provide several options for analysis, depending on a finisher's future requirements. Models created with nVision Tools are available for calculations in both English and Metric units, as well as for multiple currencies. [nVision@nordson.com](mailto:nVision@nordson.com).

## Datapaq's New EasyTrack2

Datapaq's new EasyTrack2 temperature profiling system is designed specifically for paint and powder coaters. With twice the choice, power, speed and accuracy, this system features a rapid sampling interval of 0.5 seconds, greater accuracy of  $\pm 0.9^\circ\text{F}$  ( $\pm 0.5^\circ\text{C}$ ), and USB communication.

The EasyTrack2 features an easy to use data logger that is available in 4 or 6 channels and has an internal operating temperature of up to  $185^\circ\text{F}$  ( $85^\circ\text{C}$ ). The ther-



mal barrier provides two hours of protection at  $400^\circ\text{F}$  ( $200^\circ\text{C}$ ) - keeping the data logger at a safe working temperature as it travels through the process. Datapaq's Insight software will analyze data over time, confirm cure against your paint suppliers' specifications, make comparisons probe to probe and identify peak temperatures and time-at-temperature. Increase throughput, reduce rejects and save energy with this powerful system. [www.datapaq.com](http://www.datapaq.com)

## Global Ionix Lauches New Website



Global Ionix inc., Boucherville, QC, invites you to take a look at its new and improved website featuring its metal recovery technology. Contents, pictures and new sections are now available.

"It is important for us that visitors have an educational content website, so we added case studies and articles that people can relate to and can share with colleagues and friends." said Lyne Maisonneuve, Sales & Marketing Director at Global Ionix. [www.globalionix.com](http://www.globalionix.com)

## Enmet Respiratory Air Line Monitor



Spectrum On-Line is a compact, easy to install and operate, compressed air line co monitor. This instrument incorporates a rotameter for confirmation of proper air flow, a digital display and a highly specific electrochemical carbon monoxide sensor for trouble free and reliable operation.

Spectrum on-line is designed for use in a wide variety of applications ranging from automotive, and similar spray painting/coating operations to wood finishing. This monitor can be used in any commercial or industrial process that requires co monitoring of compressed breathing air for personnel working in such operations. [www.cdnsafety.com](http://www.cdnsafety.com)

computer modeling tools, to help global coaters in analyzing best available solutions for coating systems for liquid and powder lines.

nVision Tools is designed to handle the number of variables, permutations and calculations for options available to finishers when looking to upgrade or convert to a different finishing method.

"The computer models can help evaluate many options quickly and thoroughly to make decision based on hard dollars and cents comparisons," states Ken Kreeger, Director of Business Development Worldwide, Industrial Coating & Automotive Systems.

"The effect of any variable on the overall profitability can be tested and evaluated," Kreeger continues. "Detailed 'what-if' scenarios allow for various input data so users can input what they know in the most convenience format to help them make educated decisions."

nVision Tools' flexibility allows for

## CLASSIFIED

**KERSOL Specializes in Solvents, Recycling Loops, and Solvent Waste Management.**

We are committed to help our customers fully utilize recycling solutions for their solvent applications.

**KERSOL INC.**

Phone and Fax: 416-923-9120  
General Email: [kersol@rogers.com](mailto:kersol@rogers.com)  
Sales Contact: Glenn R Webber  
E-mail: [glennwebber@kersolinc.com](mailto:glennwebber@kersolinc.com)

## CONVEYOR CHAINS

**Replacement Conveyor Chains for:**

- Allied
- Richards-Wilcox
- Rapid
- Jervis.B.Webb

**Replacement Parts & Systems**

**ENCLOSED TRACK CONVEYORS**

Tel: 905-436-7856 Fax: 905-436-8872  
Email: [sales@enclosedtrackconveyors.com](mailto:sales@enclosedtrackconveyors.com)  
Web: [www.enclosedtrackconveyors.com](http://www.enclosedtrackconveyors.com)

**Chemroy, a privately held chemical distributor is seeking candidates for the following positions:**

### Senior Technical Sales

Chemroy is recruiting for experienced Sales Personnel for Quebec and Ontario. We are seeking highly motivated self-starters that are conversant with all elements of chemical distribution. A technical background is required. Familiarity and experience in the CASE market is a major asset.

### Sales and Marketing Assistant

Chemroy is seeking a Sales & Marketing assistant for our Brampton office. This is an inside office support position with promotional growth opportunities. The individual that would fit this role is interested in advancement and can independently manage and coordinate functions on behalf of the commercial team. This would be a fast paced dynamic job. Duties would include but are not limited to market information system development, sales and management support, market surveys, telemarketing, troubleshooting and logistics coordination. A background in chemical distribution would be beneficial.

Chemroy offers a base salary, bonus incentive program and health and pension plans. Our outside sales personnel are provided a company vehicle for business purposes.

We thank all candidates in advance for your interest in Chemroy Canada Inc. Please reply in writing or via email, indicating the position that you are applying for. No phone calls will be accepted. Only those individuals selected for interviews will be contacted.

Hiring Manager, Chemroy Canada  
106 Summerlea Road, Brampton,  
ON, Canada, L6T4X3  
E-mail: [sales@chemroy.ca](mailto:sales@chemroy.ca)



**Yes ! I would like to receive a FREE SUBSCRIPTION to CFCM Canadian Finishing & Coatings Manufacturing Magazine.**

*(Free to qualified Canadian readers.)*

Signature (required) \_\_\_\_\_  
Name: \_\_\_\_\_ Date: \_\_\_\_\_  
Position/Title: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_  
Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

**Please Check the line that best describes your business.**

### Paint & Coating Manufacturing:

- Adhesive & Ink Manufacturer
- Paint & Coating Manufacturer
- Raw Material Supplier
- Paint Manufacturing Equipment Supplier

### Industrial Finishing:

- Automotive & Transportation Products
- Automotive Refinish
- Commercial Coating Contractors
- Custom Coaters & Job Shops
- Electroplaters & Anodizers
- Woodworking
- General Manufacturing
- Plastic Product Finishers
- Supplier of Finishing Equipment
- Manufacturing not otherwise classified

### Other:

- Consultants
- Education & Government

**Please fax this signed form to: 1-905-405-1502**

**Or mail to:**

**Canadian Finishing & Coatings Manufacturing**  
250 The East Mall, Suite 1103  
Toronto, Ontario, Canada, M9B 6L3



**CFCM**  
CANADIAN FINISHING & COATINGS MANUFACTURING

## AD INDEX

ACE Equipment	24
Alliance Plastics	26
Andicor Specialty Chemicals	16
Annadale Finishing Systems	23
ARC Associated Rack Corporation	20
CGC	6
Canadian Finishing Systems	25
CAN-AM Engineered Products	24
Chemfil Canada	11
Chemroy	6
Comet Chemical	31
Commercial Alcohols /Greenfield	14
Conn Blades	14
CDS Cyanide Destruct Systems	21
DeFelsko	16,23
DuPont Coatings Solutions	9
DuPont Titanium Technologies	13
DVAIR	22
ECE Canada	28
Electro -Steam Generator	21
ElektroPhysik	11
Exel Industrial	5
Fischer Technology	21
FST Filtration & Separation Technologies	5
Henkel	32, Outside Back Cover
Inortech Chimie	2
Integran Technologies	20
J B Finishing	26
King Industries	17
KiON Specialty Polymers/ Clariant	7
L.V.Lomas	13
Mighty Lube Systematic Lubrication	21
Nordson Powder Coating Systems	29
NORSPEC Filters	25
Pacline Overhead Conveyors	29
Paintline Products	24
Parker Ionics	26
PPG Industrial Coatings	12
Product Handling Equipment	27
Pyromet	20
Shamrock Technologies	18
Troy Canada	4
Unimin	10

# Need Solvents?

## Our people deliver



**Quality. Service. Satisfaction.**

- Aliphatic Hydrocarbons ● Alcohols ● Ketones
- Ester Acetates ● Chlorinated Solvents ● Glycol Ethers
- Glycol Ether Acetates ● Glycols ● Plasticizers

**Private Label Packaging**

**Custom Blending**



● For more information call **1.800.281.7556**

**COMET CHEMICAL COMPANY LTD.**

3463 Thomas Street, Innisfil, Ontario L9S 3W4

Tel: (705) 436.5580 Fax: (705) 436-7194

Email: [info@cometchemical.com](mailto:info@cometchemical.com)

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



# HENKEL



## Henkel - the Choice of Champions



Henkel

Henkel is a driving force and trusted teammate in adhesives, sealants and surface treatments, delivering customized solutions at every turn, and a winning formula for every challenge.

With a portfolio of world-renowned brands and over a century of chemical expertise behind us, Henkel has the answers for your engineering, design and manufacturing needs. Our Autophoretic<sup>®</sup> Coating Chemicals, Non-phosphate Bonderite<sup>®</sup> Conversion Coatings, metalworking fluids and adhesive technologies keep us in front of the competition while providing unsurpassed customer value.

Choose the winning team – The Henkel team.

***World Leader in Adhesives, Sealants and Surface Treatments***

***Some of our leading brands include***

**LOCTITE<sup>®</sup> Autophoretic<sup>®</sup> Bonderite<sup>®</sup> Multan<sup>®</sup> Terocore<sup>®</sup> Hysol<sup>®</sup> FREKOTE<sup>®</sup>**

**For more information,  
call 800-263-5043  
or visit  
[www.henkeln.com](http://www.henkeln.com).**