CFCM
CANADIAN FINISHING & COATINGS MANUFACTURING MAGAZINE

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Mach-Jet Powder Spray Gun.
Photo Credit Exel North America

Manufacturers of Powder Coating Spray Equipment say customers are asking for innovation. They are looking at the best and most efficient ways to make improvements to their finishing lines.

**EXEL North America**, Inc., manufacturer of SAMES Manual & Automatic Powder Coating Equipment & Solutions has designed the new InoBell Powder Bell Applicator.

The InoBell is a high transfer efficiency applicator that delivers: higher first pass transfer Efficiency; Better Uniformity; and High Finish Quality.

The InoBell can be installed on a robotic or reciprocating system for various types of markets. The company has proven installations worldwide.

By using the InoBell, the company says one of their customers, an office furniture manufacturer, had an improved finish quality, uniformity and a 35 per cent powder savings.

**Gema USA Inc.'s** Greg Taylor says, "Today's user of powder coating equipment is evaluating where to make improvements and invest in their powder finishing processes." He adds, "Many hope to

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# Innovations in Powder Coating Spray Equipment

## ALSO IN THIS ISSUE



# SUSTAINABILITY:

## Impacts and Challenges in the Coatings Industry

By Gary LeRoux

Companies in the paint and coatings industry woke up a long time ago and smelled the coffee. Industry leaders fully realize that an industry requiring a broad range and varying mix of chemicals for their products must be conscious of the health, safety and environment within which these chemicals are used. The coatings industry embraced the need for a renewed focus on environment and health protection, green practices and sustainability before regulators and the public ramped up demands to impose stricter rules. Much has happened since then.

By definition, sustainability is a relatively new concept that has emerged and evolved worldwide over the past 20 years as a result of significant concerns about the unintended social, environmental, and economic consequences of rapid population growth, economic growth and consumption of our natural resources. A focus on sustainability practices in industries and corporations ensures that we will

*continued on page 41*

## In the News

### Association News

**Canadian Coatings Industry Honours Three Individuals**

The Canadian Paint and Coatings Association honours three individuals who have contributed much to the work of the Association and the coatings industry in Canada.

Dick Glassford, Vice President Human Resources, General Paint Corporation was presented with the Industry Achievement Award at the annual conference in Ottawa on October 20-22, 2013, at the Chateau Laurier. Glassford has worked for General Paint for almost 40 years and has participated on several Association committees such as Product Stewardship, and is also the current Chair of the Product Care Association handling post-consumer paint recycling programs in seven Provinces.

Valerie Tunstall, of Dupont Performance Coatings and Mike Livermore of Valspar Corporation received the Industry Statesman Award. This award is presented to individuals who have recently

Dick Glassford, General Paint, winner of the Industry Achievement Award.

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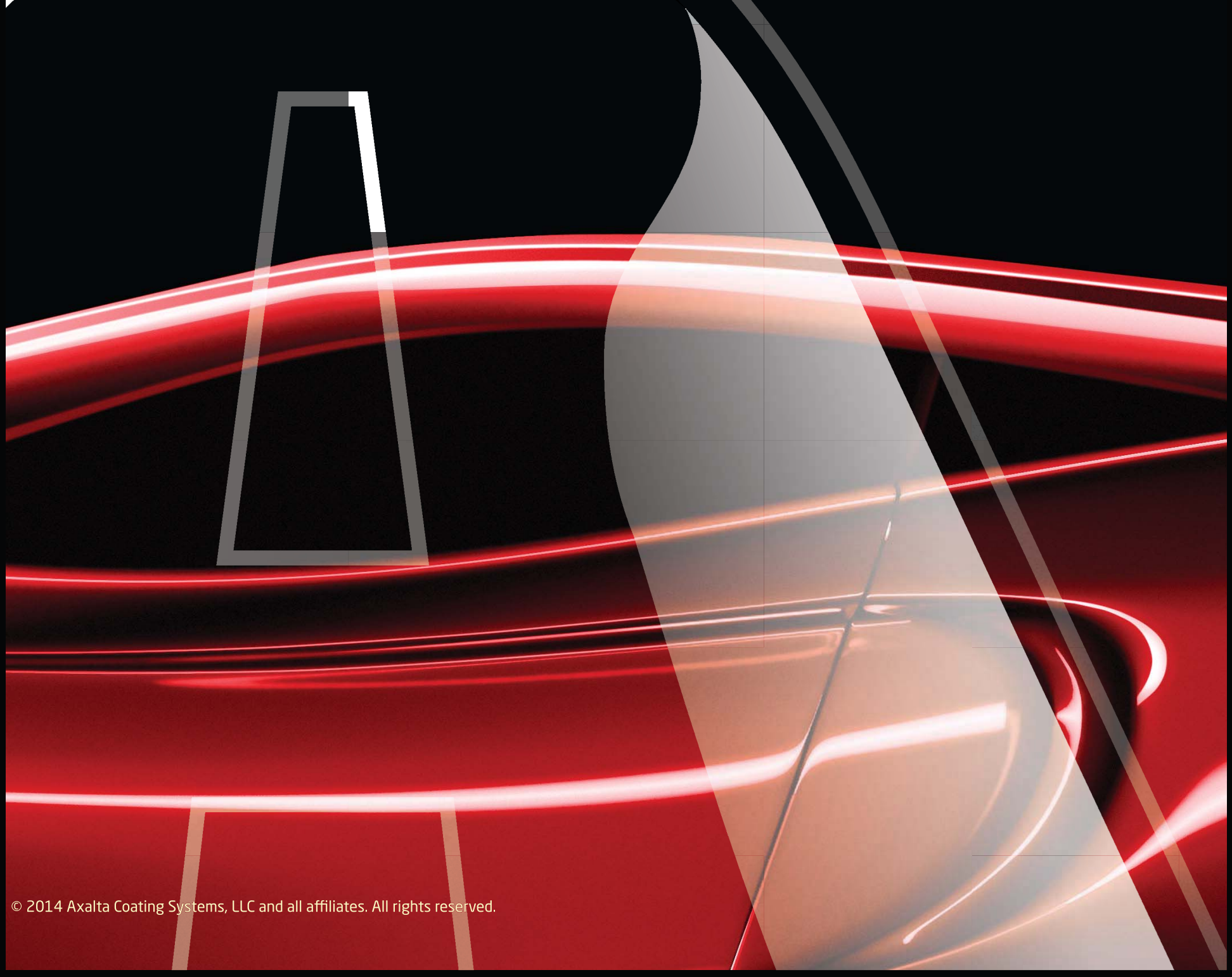
# Built for performance.

Performance is what connects us to our work and to our customers. It reminds us to push harder. It drives us to serve. And it inspires us to never stop.

Our powder coatings are easy to use and backed by the technical support of Axalta specialists. Alesta® decorative, Nap-Gard® FBE functional and Abcite® thermoplastic powder coatings meet performance standards set by leading manufacturers and industry organizations.

Read more about us at: axalta.us



## Built for Performance.

Performance is what connects us to our work and to our customers. It reminds us to push harder. It drives us to serve. And it inspires us to never stop. High-performance coatings drive process and business efficiency. At Axalta, we take a systems-based approach to our work. We not only develop and manufacture products but also support and educate our customers in their use. From start to finish, the people of Axalta are driven by something bigger. We're technologists who specialize in discovery, constantly working to advance coatings and tools that drive better performance across industries. We're also manufacturers who uphold the highest quality and sustainability standards to create brilliant products for a new era. And we're on-the-ground experts who go one step further to support customers.

At Axalta Coating Systems, we're driven by the belief that singular focus is the key to big performance. That's why we're 100% dedicated to the science and technology behind coatings. In every measure and every way, we're built to be faster, tougher, and brighter.

## Where Others See Color, We See Science.

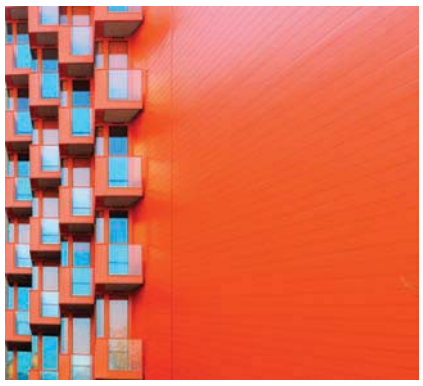
Our history of 145 years of coating innovation leads to today, when research and development teams around the world work tirelessly to create new products—and improve on existing ones—that meet the evolving needs of our customers.

## We Don't Just Meet Standards. We SetThem.

At Axalta, we pursue quality in a process that meets not only the benchmarks of our industry but also our self-imposed standards of excellence. We monitor ingredients and processes; track customers' needs in an active, responsive feedback loop; and assess every employee with performance metrics that reward progress.

## Our Products.

Axalta powder coatings deliver superior coverage and transfer efficiency so more can be accomplished in less time. But higher yields are just the beginning. Available in a variety of technologies for a broad range of applications, Axalta powder coatings are easy to use and



backed by thetechnical support of Axalta specialists. Our team is dedicated to helping you find new ways to improve productivity and reduce overall costs—so you can deliver superior quality products while also increasing profits. Our leading powder coating brands meet performance standards set by leading manufacturers and industry organizations.

## Powder Coatings Brands.

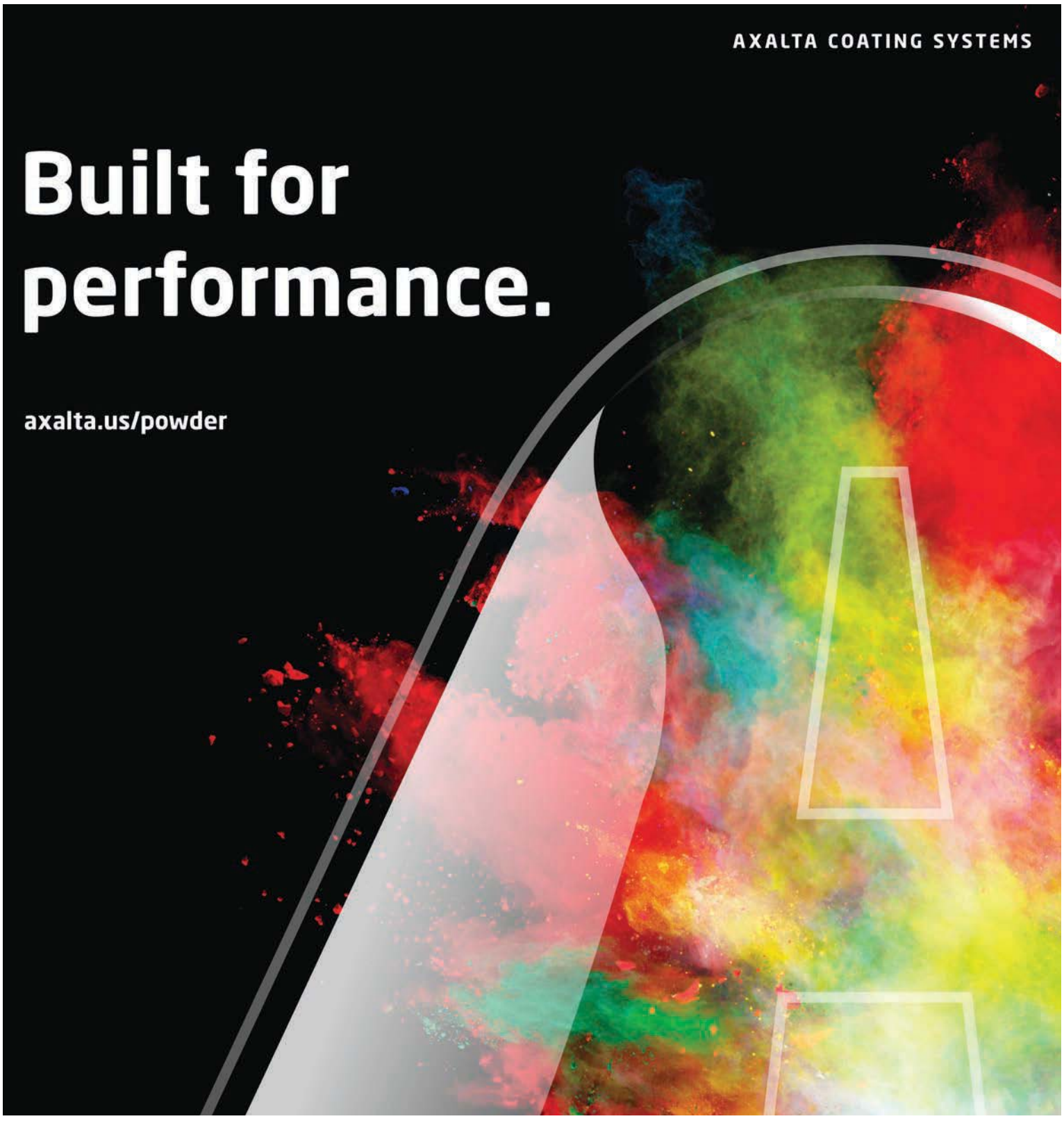
Alesta® powder coatings serve a variety of applications. Alesta® AM is a proprietary powder coating that uses environmentally sustainable silver ions to inhibit the growth of harmful microbes on surfaces. The Alesta® Spotless AG anti-graffiti coating's easy-to-clean properties protect surfaces in public and non-public places from the permanent effects of spray paint and marker graffiti. Alesta® RAL HAA powders offer many color options in 25 lb. boxes. Alesta® AR architectural coatings are designed for aluminum windows, aluminum entryway doors, hand railings, fences, which meet AAMA standards.

Nap-Gard® , our corrosion protection coatings, are used for exterior and interior coating of oil and gas pipelines, protection of steel rebar used to add support to concrete in highway, bridge and other construction, valves and fittings, storage tanks, and electrical insulation.

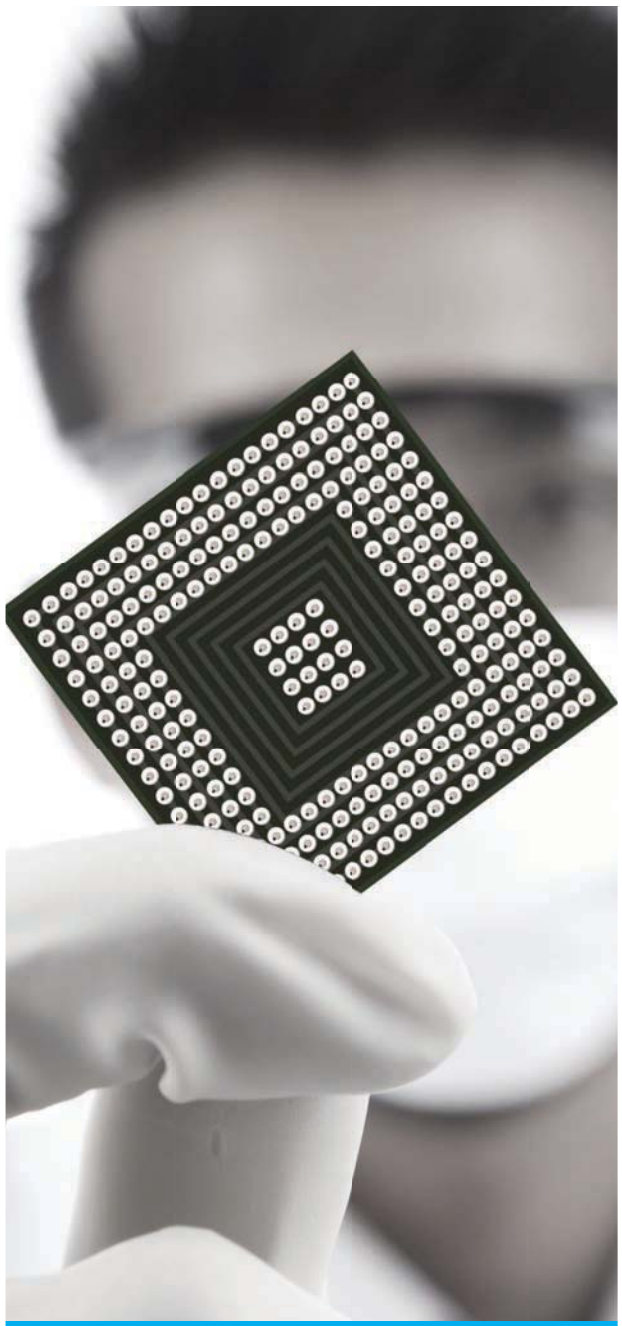
Abcite® thermoplastic coatings can be used in functional corrosion protection applications. Abcite® has excellent resistance to moisture and chipping and can be used for outdoor furniture, light poles, sign posts, railings and stairways, fencing panels, bike racks, cable grids, battery trays, and perforated steel.

When a project requires immediate attention, the Axalta FasTracSM custom color match service delivers the quick turnaround you need, with a 5-day color match and a 10-day production schedule.

Learn more about us at: Axalta.us/powder



AEROSPACE PAINTING

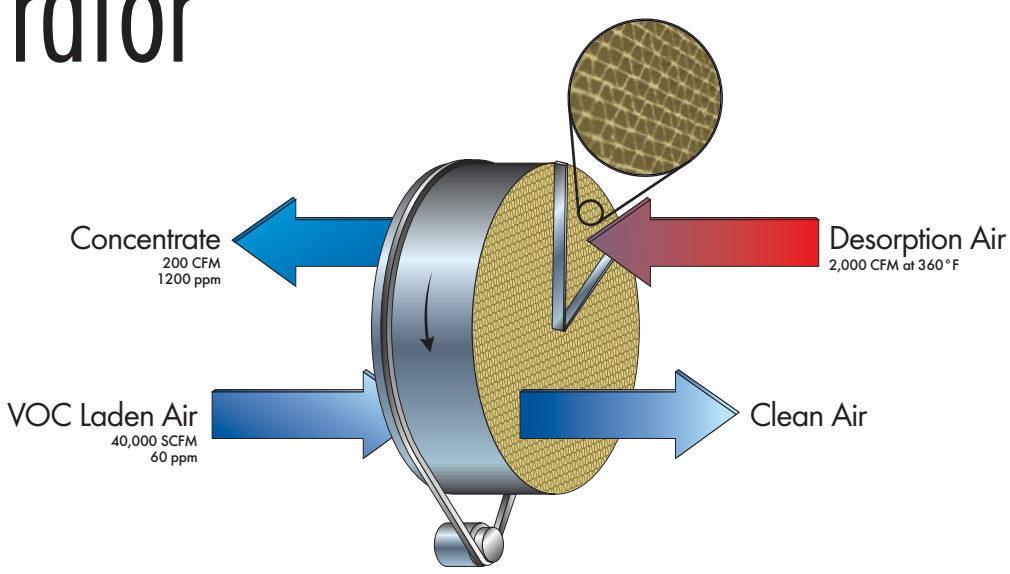


SEMICONDUCTOR

AUTOMOTIVE FINISHING

# Energy Efficient Air Pollution Control with Zeolite Concentrator

- Energy efficient VOC Abatement
- Zeolite rotor concentrators with thermal oxidizers, RTOs
- Capture and destroy organic solvents
- >95% Capture efficiency




Munters Corporation, Air Treatment Division
Phone +1 800 843 5360 / Email dhinfo@munters.com / munters.us/zeol

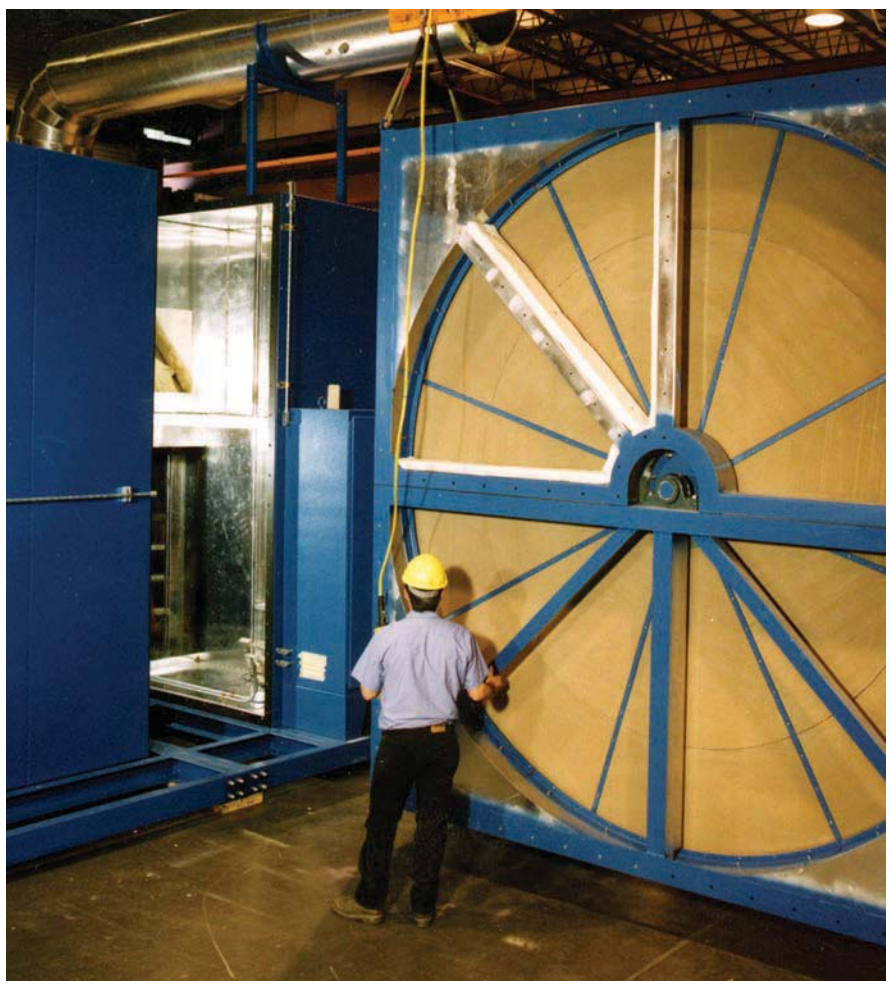
Munters

Munters is a global leader in energy efficient air treatment solutions based on expertise in humidity and climate control technologies. Munters equipment can help cost effectively meet ASHRAE Standard 62 and 90.1, reduce $CO_2$ emissions, and save energy. Using innovative technologies, Munters expert engineers create the perfect climate for customers in a wide range of industries, with the largest being food, pharmaceutical and data center sectors.

Munters Zeol Rotor Concentrators with hydrophobic zeolite adsorb low concentration volatile organic compound (VOC) emissions. The VOC is concentrated and sent to an integrated oxidizer for destruction. These systems provide the lowest energy cost solution for VOC emissions control, reducing fuel costs by up to 90%. Rotor concentrators can be retrofit to existing oxidizers to increase plant capacity and reduce fuel costs. Typical applications include printing, packaging, paint finishing, and plastic parts coating.

Munters' business is based on fundamental relationships between water, air, and energy. Changes in any of these elements will immediately have an effect. Such are the laws of nature. Different climates create different prerequisites. The relationship between the components of dry air is constant in all parts of the world. The amount of water in outdoor air varies significantly however. The higher the temperature, the more water vapor the air can contain. This means that the relative humidity indoors is lower than the outside air when premises are heated and higher when they are cooled.

Because humidity can increase when a room is cooled, air conditioning, contrary to what many people believe, create humidity problems in many situations. In warm climates, air conditioning and dehumidification are therefore required, while cold climates need heating and humidification. What every climate has in common is the need to regulate both temperature and air humidity. For companies with business operations in different climates, it is important to ensure that products maintain the same quality, regardless of where they are manufactured. Based on these everyday requirements Munters continually refines its product and system offering.



Munters has a number of core technologies:

- Dehumidification
- Air cooling and heating
- Humidification
- Heat-exchange technology
- Mist elimination
- Contaminant elimination

Munters is the largest manufacturer of dehumidifiers in the world. Since developing the first desiccant dehumidifier in the late 1930's, Munters has continued to innovate in the fields of dehumidification and energy recovery. Our long history and extensive expertise in dehumidification makes us the premier choice for your sustainable air treatment needs.

Munters offers the most versatile line of custom and standard energy recovery products. Our dehumidification and DOAS systems maximize performance, increase productivity and improve indoor air quality, while minimizing energy consumption and decreasing building maintenance costs.

With Munters indirect and direct evaporative cooling technology customers can reduce energy costs up to 50%. Indirect heating recovers heat from energy-consuming processes to be utilized for heating, process make-up air and preheat combustion air applications. Indirect heaters allow a clean process airstream to be heated without the typical contamination caused by combustion byproducts while providing fuel conversion efficiencies up to 95%. Munters also provides the most energy efficient air pollution control solutions. By concentrating VOCs 10-20 times prior to oxidation, system energy consumption and secondary combustion emissions (NOx, CO and $CO_2$) are reduced by >50%.

Munters serves all types of customers around the world, from one-man entrepreneurs to the world's largest industrial players. Holding a strong position as a preferred supplier to customers is important, which is why Munters is constantly developing products and solutions for new applications, improved efficiency and environmental awareness. It is Munters policy to develop, manufacture and market the highest quality products and services in accordance with contractual demands to ensure full satisfaction from our customers.

Munters has been defining the future of air treatment since 1955. Today, manufacturing, sales and service are carried out in 30 countries by around 3,000 employees. E-mail dhinfo@munters.com or call 800-843-5360. Web: www.munters.us

Munters

Your Perfect Climate

# CORPORATE PROFILE: UNIVAR SPECIALTIES

For almost 90 years, Univar has connected the paint and coatings industry with the world's premier chemical manufacturers, and has served Canada for over 60 of those years.

Established in 1924 as a local Seattle source for soda ash and a handful of related products, Univar has grown into a global chemical distributor, employing 7,000 people at 180 sites in North America, Europe, Asia-Pacific, the Middle East, Africa and Latin America.

Univar began serving Canada in 1950. Today, Univar Canada, Ltd. is Canada's leading chemical distributor, and serves Canada's industrial chemical and agricultural chemical needs from over 20 facilities coast-to-coast, from British Columbia to Newfoundland. Univar supplies its CASE (Coatings, Adhesives, Sealants and Elastomers) customers with a comprehensive line of raw materials ranging from core products to specialty chemicals. Our extensive distribution network, global reach and unparalleled logistical expertise provide our customers a consistent and reliable source of supply.

We take great pride in maintaining close, hands-on relationships with our customers, linking them with the latest technologies and products, and with a commitment to deliver what they need to be successful. In today's rapidly changing regulatory landscape, our team of business development specialists can provide unique insights on new market opportunities and advanced product development, offering assistance with green and alternative formulations, including low-VOC.

## Our commitment to the Specialties industries includes:

- A knowledgeable team of technical specialists
- Real solutions to green formulation challenges
- Expertise in safety and legislation
- An extensive warehousing network and dedicated logistics

Univar is dedicated to delivering leading-edge application and formulation strategies to help you meet and exceed your goals. Our team of technical experts has over 120 years of formulating experience to help our customers with solutions to the problems that may arise in any stage of the production process — from concept and formulation all the way to commercialization.

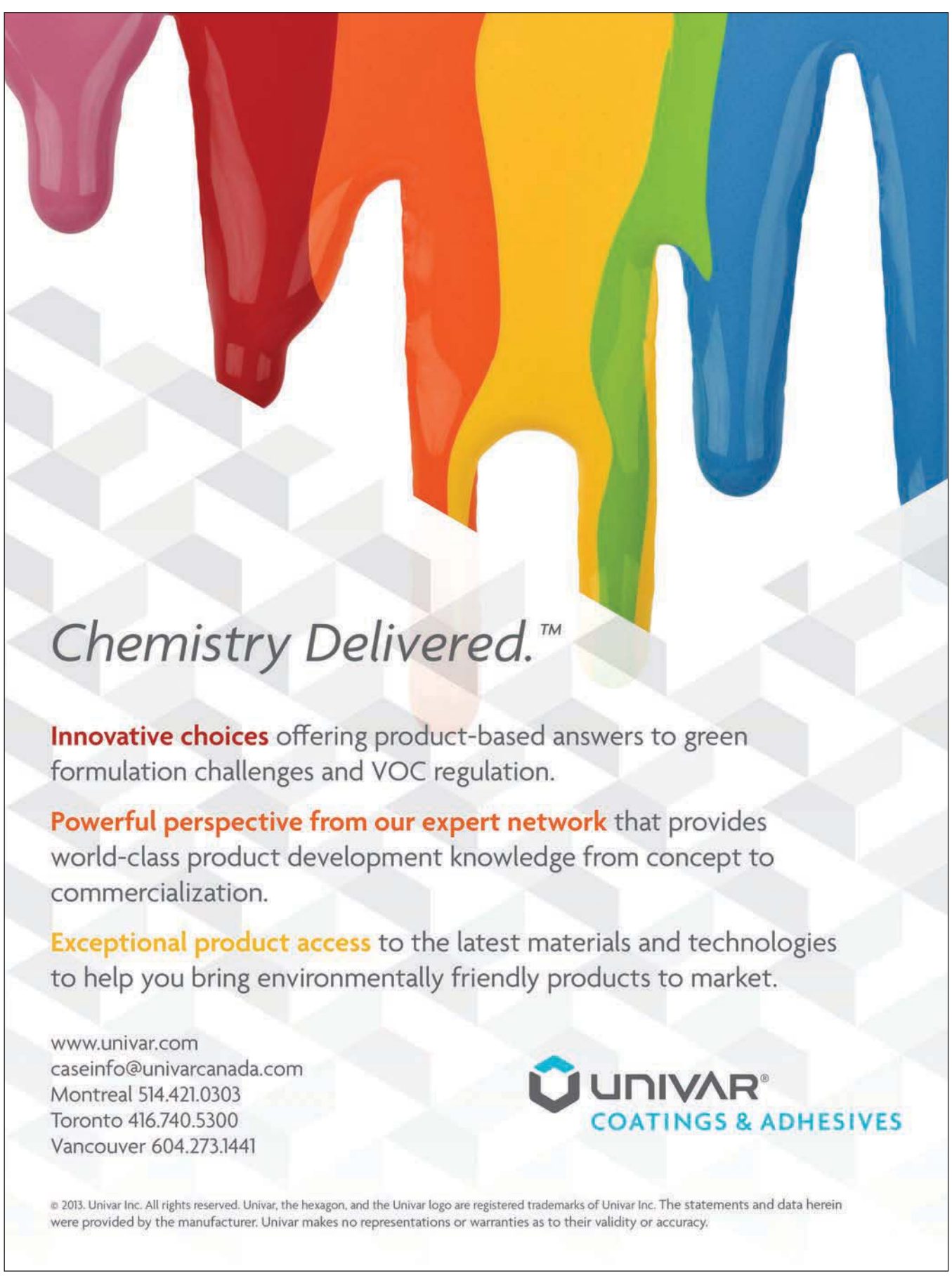
We also offer our customers with a set of unique product selection tools, designed to help customers choose the right product for their application. The Specialties Product Selection Guide gives a detailed overview of products we offer, and there are seven guides available, segmented by market focus and application: Architectural, Powder coatings, Epoxy, Polyurethane, Plastics, Robber and Low-VOC.

## Unsurpassed product line

Univar offers an extensive portfolio of products to the Canadian coatings, inks and adhesives manufacturing industry, representing the world's premier suppliers. The breadth of our product line is unsurpassed, including solvents, titanium dioxide, resins, dispersants, defoamers, biocides, surfactants, plasticizers, pigments and much more.

## Our CASE product line includes:

- Adhesion promoters • Algaecides
- Antiblock and slip aids • Antifoams
- Anti-setting agents • Biocides
- Block copolymers • Coalescents
- Coupling agents • Cross linkers
- Cure agents • Defoamers
- Dispersants • Epoxies
- Epoxy vinyl esters
- Functional Extenders and Fillers
- Flame retardants • Flexibilizers
- Monomers, reactants and intermediates
- Pigments, opacifiers and colorants
- Plasticizers • Polyols
- Resins, rosins and tackifiers
- Rheology modifiers • Rust inhibitors
- Solvents • Surfactants
- Thickeners • Urethanes
- Vinyl esters • Wax additives
- Wetting agents




## Services: Innovation. Expertise. Value.

Univar continuously refines its distribution business model to provide suppliers and customers with the highest level of service, reliability and timeliness of deliveries while offering cost-competitive products. We have several channels to market, including warehouse delivery and direct-to-consumer delivery.

## Product availability and inventory management

We manage inventory in order to meet customer demands on short notice. Our key role in the supply chain also enables us to obtain access to chemicals in times of short supply. Our global distribution network also permits us to stock products locally to enhance just-in-time delivery and provide outsourced inventory management to our customers.

## Blending and repackaging services

We provide our customers with a full suite of blending and repackaging services. Leveraging our technical expertise, we are able to utilize our blending and mixing capabilities to create specialty chemical formulations to meet specific customer performance demands. Additionally, we can fulfill small orders through our repackaging services, enabling customers to maintain smaller inventories.

## Other available services include:

- Application development expertise
- Automated documentation (C of A, MSDS, Labeling, Bar Coding)
- Consolidated invoicing (summary billing)
- Custom blending
- Document control
- E-Blasts (new product introductions and market trends)
- Environmental and regulatory expertise
- Paint testing lab
- Private label packaging
- REACH advice
- Remote Sentry bulk tank storage monitoring
- Vendor-managed inventory

## Safety, health and the environment — our number one priority.

The highest priority in the conduct of our business is safety and environmental protection. Univar mandates commitment to this priority, requiring thorough compliance with our own stringent standards and all government regulations. We are committed to constant vigilance and continuous improvement.

Our operations are guided by the Distributor Code of Practice, the industry standard developed by the Canadian Association of Chemical Distributors (CACD). We participate in the Canadian Paint and Coatings Association (CPCA), Canadian Chemical Producers (CCPA) Responsible Care Program. Our major locations are registered to ISO 9002 standards. Our commitment to these codes and standards is paramount, and is stated in our Policy.

## Quality Policy

Univar is committed to contributing to the success of our customers, suppliers and partners by providing value added products and services that consistently meet requirements. Univar's Quality Improvement Process is a fundamental tool to achieve the company's mission and to focus on customers. The Quality Process is integrated into all aspects of the company's business practices. Quality is woven into strategic planning, training, and all the daily activities of our core work processes and the processes that support them.

## For more information, speak to a Univar CASE Specialties technical specialist:

**Dorval**
Simon Lavallee
+1 514 421 0303

**Toronto**
Andrea Gibson
+1 416 740 5300

**Vancouver**
Hugh Andrews
+1 604 273 1441

**…Helping you succeed.**

# Sexy Snails Saved

In the world of industrial Coatings, not too much changes. News tends to be filled with acquisitions and new government regulations and education seminars and people moving to new positions and new products/technologies and trade shows. But every once in while you run across a news item that makes you look again and say, "Wait…What??!!"

The first line went similar to this, (I am paraphrasing): "Thanks to a Coatings ban, female snails with unwanted, non-functional penises on their heads are finally seeing some relief to their decades-long struggle with this sex change."

Apparently, this "imposex" condition appearing in generations of female marine snail populations has been blamed on ship hull coatings that contain tributyltim (TBT). TBT has been used in ship hull coatings since the 1960s as a biocide. And in the 1970s, the imposex in snails was found worldwide.

TBT antifouling coatings have been widely banned for six years, and the paint and coatings industries worldwide have cooperated, but it isn't until recently that scientists report that the snails are recovering from their sexy condition.

Things have taken their time. The International Maritime Organization (IMO), the International Convention on the Control of Harmful Anti-fouling Systems on Ships, decided to prohibit the use of TBT antifouling coatings on ships and establish a mechanism to prevent the potential future use of other harmful substances in antifouling systems in 2001, but it didn't take effect until 2008. And now, in 2014, the snails are getting back to normal. Slow process, but we are talking about snails after all. In Canada, the use of tributyltin compounds in antifouling paints was prohibited in 2002. The IMO is the United Nations specialized agency with responsibility for the safety and security of shipping and the prevention of marine pollution by ships.

According to the IMO, TBT has been shown to cause deformities in oysters and sex changes in marine snails. In the 1980s imposex was being reported all over the world. Eventually entire snail populations disappeared in some regions as the females were unable to reproduce with their new male parts.

In 1992 female snails growing penises were discovered in the coastal harbors of British Columbia and in some species, their ovaries also turned into testicles. TBT was being suspected as the cause.

TBT has a life of six days in seawater, but it can last for years once settled into marine sediment. It could take decades for heavily contaminated harbours to release all the TBT stored in its sediment. Based on the current rates of recovery, scientists in Australia, for example, estimate that their snails won't be free of imposex until 2040.

In other news, welcome to 2014 everyone and our Corporate Profile issue. We here at CFCM hope your New Year is going well so far.

*Sincerely*
*Sandra L. Anderson, Editor*
*Sandra.anderson@cfcm.ca*

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# In the News

*Continued from page 1*

Dale Constantinoff, CPCA Chairman, presents the Industry Statesman Award to Valerie Tunstall.

retired or retiring and have made a significant contribution to the Association. Both Valerie and Mike have been very strong representatives as members of the Health, Safety and Environment Committee and the Paint and Coatings Working Group. They have provided invaluable input on the many regulations developed for industry and their work has helped ensure minimal impact on companies doing business in the coatings industry.

### CPCA Bulletin: Proposed Changes to Alberta Regulatory Framework for Recycling Designated Materials

As reported in recent Canadian Paint and Coatings Association (CPCA) communications, the Alberta Ministry of Environment and Sustainable Resource Development proposes to include the current 8 separate stewardship regulations (including the Paint and Paint Containers Designation regulation) along with two additional designations for packaging and printed paper and household hazardous waste (HHW) under a new overarching Designated Material Recycling Regulation.

Statistics Canada 2010 data show that Alberta produces the most waste in Canada on a per capita basis and the Alberta government believes the proposed changes and their 2007 waste management strategy, Too Good To Waste, will increase diversion and recycling in that province.

The new regulation will assign Extended Producer Responsibility (EPR) management to the proposed HHW and Packaging and Printed Paper programs, to be run directly by producers or their collectives. The Alberta Recycling Management Authority and its multi-stakeholder Board of Directors will retain oversight for current programs including paint. The discussion paper provides no reason why the paint program is not being targeted for EPR management. Members, when participating in the workbook, should make their management preferences clear in the comments section.

The new Designated Material Recycling Regulation will not include recycling fee amounts. The current arrangement requires new or amended regulations whenever a fee is changed. The new proposed verbiage will allow for a more flexible way to alter fees. The discussion paper alludes only to a better method of increasing fees, however decreased fees would be more easily adopted as well. The proposed Household Hazardous Waste program will replace the current voluntary program with a mandated producer funded one which includes flammable liquids, including solvents and aerosols, pesticides, toxics, corrosives, physically hazardous cylinders (non-refillable fuel gas cylinders), compact fluorescent lights, and fluorescent tubes. Additionally, a new Packaging and Printed Paper program is also envisioned under the new regulation. The suggested timing schedule for both these programs is 12 months for the submission of a plan and a further 12 months for full implementation.

This Alberta "workbook consultative steward exercise" is the first step in the legislative process and it is expected that more stakeholder engagement will follow to consult on the specific details and timing of these proposed programs. CPCA will continue to consult with members and the Alberta Management Recycling Authority on the proposed Designated Materials Recycling Regulation.

Members are encouraged to use the Alberta contacts listed below if they have not already received the Workbook invitation. As well, please provide your views and concerns directly to CPCA, as we will also make a formal submission on behalf of industry. Please email your comments directly to: gleroux@canpaint.com.

To participate in the Alberta Consultation Workbook email the Ministry at esrd.recyclingregulation@gov.ab.ca or call (780) 644-5091.

### RadTech News

RadTech is pleased to announce two new hires to assist membership and extend UV/EB outreach efforts.

Dr. Doreen Monteleone has joined RadTech as Director of Sustainability and EHS Initiatives. Doreen has been helping businesses with regulatory compliance and sustainability issues for more than 20 years. In the early 1990s, she worked with many industry groups as the first Clean Air Act Small Business Ombudsman for New York State.

### RadTech Hires Education Consultant

RadTech's Education Committee introduced Krystin Holmes, during RadTech's fall meeting in Syracuse, N.Y. Krystin is working as an advisor for RadTech's Student Competition that will be part of the RadTech Expo and Technology Conference coming up in May 2014 in Chicago, Ill. Krystin is a polymer science teacher at Petal High School in Petal, Miss., where she teaches polymer chemistry, processing, composites and an introduction to materials. She is also a certified online instructor (IC3-certified) and has been highly involved in curriculum development. She earned her doctor-

## CORPORATE PROFILE: EXEL NORTH AMERICA, INC.

We are a World Leader in "Making Manufacturers More Competitive" with expertise in Finishing and Dispensing Systems.

If it's painted or sealed, we've probably done it before - by hand and/or with a robot. We supply turn-key manual, automatic, and robotic paint and dispense systems for automotive and general industrial markets

**Our Mission…**
Experts in Finishing and Dispensing Solutions

**Our Vision…**
Leader…of high value-added custom and standard solutions for controlled applications of fluids and powder on manufactured surfaces

**Innovation…**
Commitment in research & development that is focused on creating a constant flow of innovative products that deliver fast ROI to our target customers

EXEL North America, Inc. - Manufacturer of Kremlin Rexson, SAMES, & Johnstone brand products. We offer Automatic and Manual Paint Spray Guns, Rotary Electrostatic Bell Atomizers, Fluid Dispense & Mixing Systems, Turnkey Automotive Robotic Systems, and Turnkey General Industrial Systems. We have a large Systems team that has 30+ years of experience applying every kind of material, to any kind of part you could think of.

We also have three Application Labs located in our corporate office in Plymouth, Michigan: General Industrial Paint, Automotive Paint, and a Sealant/Dispense Lab

EXEL North America has 100+ Distributors located throughout North America. Our Regional Sales Managers have 20+ years of experience. It's a great place to work and a great company to do business with.

Listed below are some very important links to our company and how we can help you excel in the finishing industry.

**Product Range:**
http://www.KremlinRexson-sames.com/en/usa/products/

**Markets:**
http://www.KremlinRexson-sames.com/en/usa/products/marches/

**Automotive:**
http://www.KremlinRexson-sames.com/en/usa/infos/24-automotive.html

**Systems Team:**
http://www.KremlinRexson-sames.com/en/usa/infos/136-systems.html

**Success Stories from our Customers**
Our customers say it best!
http://www.KremlinRexson-sames.com/en/usa/infos/103-success_stories.html

**EXEL North America Blog**
Success Stories, tips and tricks, announcements and business ideas… Candidly, written to highlight our wins, updates, and our philosophies.
http://exelna.wordpress.com

To learn more about EXEL North America and all the products and services offered, please email us at exel.solutions@exel-na.com or call us at 1.800.573.5554 (US) and 416.431.5017 (Canada).

We look forward to providing you with the best equipment and solutions for your needs!

Call us today!

ate from The University of Southern Mississippi where she spends her summers working as a lab assistant and is preparing to become a master teacher of materials science.

### UV/EB Online Courses

The State University of New York College of Environmental Science and Forestry and RadTech have launched new online courses to prepare industry professionals, as well as upper-level undergrad and grad students in the science and technology of UV/EB. Courses include: Introduction to Polymer Coatings; Radiation Curing of Polymer Technologies; Radiation Curing Equipment, Instrumentation and Safety.

www.esf.edu/outreach/radcuring.

### Canadian Automotive Refinishing Sector Leaders in VOC Reduction Achieves 61 Per Cent VOC Reduction from 2002 Levels

A recent report by Environment Canada on the Volatile Organic Compound (VOC) Concentration Limits for Automotive Refinishing Products Regulations reveals that CPCA members in the automotive refinishing sector achieved a 61 per cent reduction in VOC levels compared to 2002 baseline levels. It further conveys to governments, stakeholders and the public that the Canadian coatings industry takes its commitment to environmental sustainability very seriously.

The study was conducted by Prairie Research Associates and focused on the six categories of automotive refinishing products that are responsible for 94 per cent of all VOC emissions in the sector. The CPCA Automotive Refinish (AR) members participated in ground survey data and survey design. Five of the seven paint manufacturing companies and suppliers in this AR market completed the survey.

"These members are to be congratulated for their commitment to environmental responsibility and their ongoing efforts in producing more sustainable products for their customers," says Gary LeRoux, President of CPCA.

In 2002, Environment Canada estimated that over 5 kilotonnes of VOCs were emitted from the automotive refinishing sector. The objective of the new regulation was to achieve average annual VOC reductions of approximately 40 per cent per year. CPCA is pleased to see that industry exceeded that goal by 21 per cent, with a 61 per cent reduction of VOC emissions achieved from automotive refinishing products used in 2011.

CPCA is proud of its Automotive Refinish members' achievements and congratulates and encourages all members of this sector to continue their exemplary sustainable compliance efforts, while delivering the highest quality of products in the world.

### ECOAT14 Ready for Orlando

ECOAT14 is the electro-coat industry's premier event for everyone involved in the ecoat business and for people interested in learning about this eco-friendly technology. Scheduled for April 22-24, 2014 at the Rosen Centre Hotel in Orlando, FL, ECOAT14 is presented by The Electrocoat Association and Products Finishing magazine.

The event will feature: Thought-provoking Keynote Addresses; Technical Presentations; Open-Forum Discussions; Networking – Exhibit Room Style; Industry Awards Luncheon.

Registered attendees receive the Conference notebook and a CD-ROM of the Conference Proceedings. Presentations will be available online prior to and after the Conference for paid attendees. Continental breakfasts, refreshment breaks and Day 2 lunch are also included.

www.conference.electrocoat.org

### Bowling for Arthritis

The Ontario Coatings Industry met on the lanes again, Saturday March 1, 2014 in Mississauga to knock out Arthritis. Several teams from several coatings companies participated and sponsored prizes for the event. All had a fun time raising money and bowling for this great cause. Coverage in the next issue of CFCM.

## Industry News

### Concordia University Receives Funding for Temperature-Resistant coatings

The Government of Canada has funded two Concordia University professors' quest to create a greener aerospace industry and help cure fungal infections.

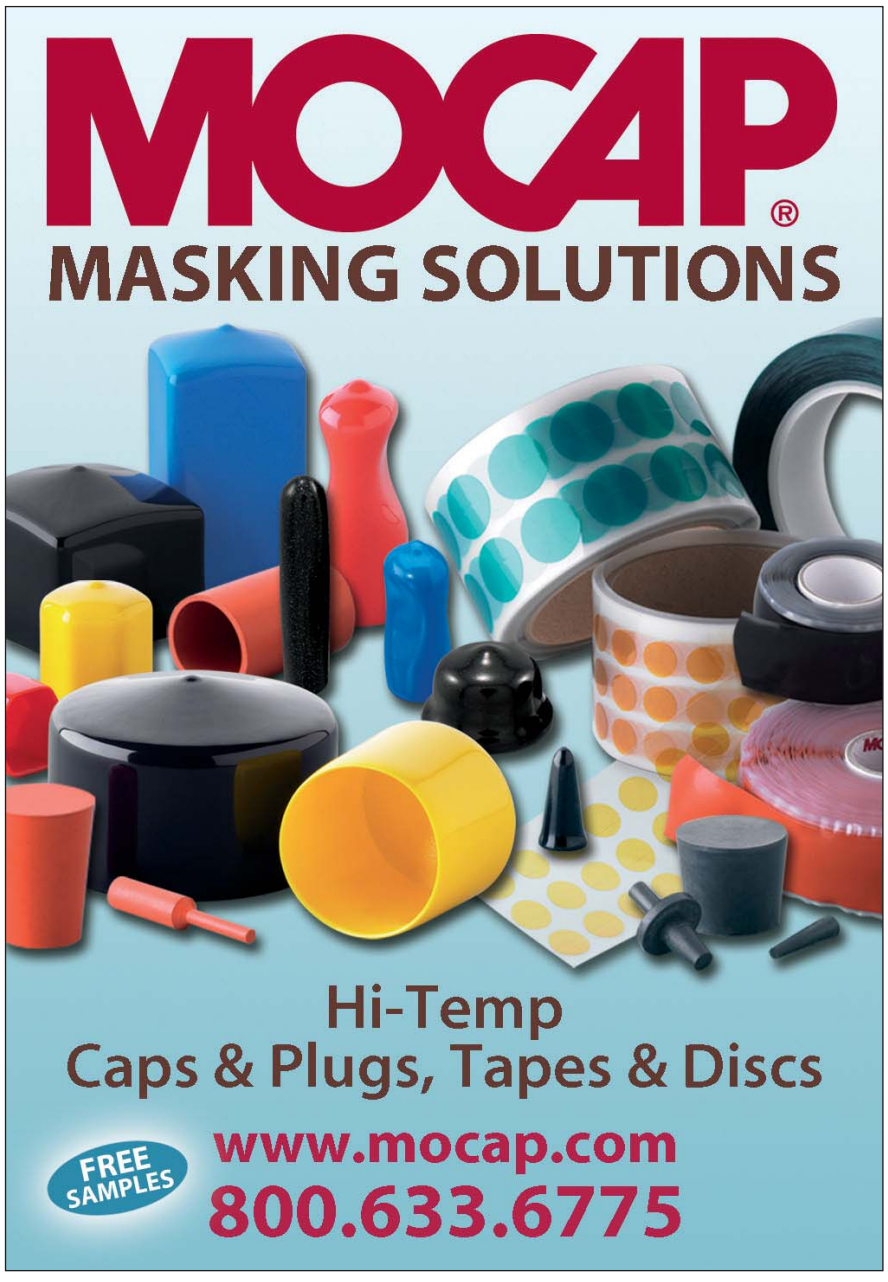
Christian Moreau and Malcolm Whiteway have both been awarded Tier 1 Canada Research Chairs (CRC) on the recommendation of an international committee of researchers. In total, this represents $2.8 million in funding for research at Concordia; for each chair, the university receives $200,000 annually for seven years.

For Moreau, professor in Concordia's Department of Mechanical and Industrial Engineering, the Chair will fund research on new coating and functional surface solutions that would improve energy efficiency in aerospace, automotive and other industrial applications.

For Whiteway, professor in Concordia's Department of Biology, the CRC will help in his use of genomic tools to study Candida albicans, a medically important fungal pathogen.

The Canada Research Chairs program is part of a national strategy to make Canada one of the world's top countries in research and development.

## CORPORATE PROFILE: MOCAP




MOCAP is a leading manufacturer of standard and custom plastic and rubber injection molded, dip molded and extruded products. We offer a full line of caps, plugs, grips and tapes for product protection, masking and finishing purposes sold to virtually every industry for countless applications.

In business since 1982, MOCAP's philosophy has always focused on the finding the right solution for our customers whether that be through our standard or custom products. We serve our customers requirements globally, with locations in North America, Europe and China.

We currently offer a full line of masking products in various materials designed to meet the requirements of nearly any coating/finishing application. Materials range from one-time use high temperature vinyl to ultra high-temp reusable silicone rubber, while our extensive product line include standard cap and plug configurations as well as pull plugs, washer plugs, tapes, discs and tubing. The products can be used for your high temperature painting, plating, anodizing and coating operations and in some cases, like EPDM and Silicone products, can be used repeatedly for optimum savings.

Some of our Masking Products include:

**High Temperature Vinyl Caps and Plugs** – Designed for one-time use, our caps and plugs are available in various sizes and styles to meet your requirements. The High-Temp Vinyl material will withstand approximately 450° F for 30 minutes.

**EPDM Caps and Plugs** – Designed for repeated use, our line of EPDM caps and plugs are perfect for temperatures up to 475° F and are a more economical solution than silicone. They also offer better chemical resistance.

**Silicone Rubber Caps and Plugs** – The ultimate in masking materials, silicone rubber offer ultra-high temperature resistance, up to 600° F, and reusability all in one.

**Polyester/Polyimide Tapes and Discs** – We offer both materials in both styles for masking of flat surfaces. Polyester material will resist up to 425° F for up to one hour while the Polyimide material will resist over 500° F for up to one hour. These tapes and discs can be removed easily and will not leave behind any residue.

**Silicone Rubber Tape** – Our self-fusing tape will conform to any standard or irregular shape and works excellent as a custom mask. The tape will stretch up to 300% and has no adhesive, so the tape is safe for temperatures over 500° F.

**Silicone Tubing** – The silicone tubing is sold in coils and works with any high temperature environment. Resists temperatures up to 500° F, the tubing can be cut easily at your facility to the length required for your application.

**Contact Information:** Please visit our website at www.mocap.com or do not hesitate to contact our sales staff for free samples, pricing or to learn more about or products/processes. Email us at sales@mocap.com or call us at 1-800-633-6775

# In the News

### Natural Mineral-based Nano Insect Killing Coating

Nano Labs Corp. announced the development of a nano-coating specifically designed as an anti-insect paint that repels insects and other arthropods, hinders their feeding and reproduction, and reduces their presence and proliferation.

The innovative coating presents an alternative to the use of chemical pesticides and insecticides to control and eliminate insects or other arthropods.

The nano paint coating uses natural minerals as a mechanical exterminator that hinders, repels, and kills insects physically. At the micro- and nano-particle level, the natural minerals effect on insects is enhanced and effectively acts as an abrasive and desiccant, which kills insects by removing the protective layer that covers their bodies, essentially making them dry up and die.

The new nano coating is effective on ants, aphids, cockroaches, mosquitos, spiders, termites, ticks and certain other types of pests and vermin, but does not affect the health of people, pets or livestock, nor harming the environment.

The paint coating embraces high-quality traditional paint characteristics that include high brightness, high covering capacity, good light scattering performance, good suspension capacity, good covering, high durability and easy dispersing performance.

### GM Canada News

News from GM's Oshawa , ON, offices says, Chevrolet, Buick, GMC and Cadillac dealers delivered 17,482 vehicles in November 2013, an increase of nearly one per cent from November 2012. Oshawa, Ontario - Chevrolet, Buick, GMC and Cadillac dealers delivered 17,036 vehicles in December 2013, an increase of nearly 17 per cent from December 2012. For 2013, sales were up nearly 4 per cent in Canada with Chevrolet, Buick, GMC and Cadillac dealers delivering 234,944 vehicles.

Buick delivered 1,032,056 vehicles in China, the United States, Canada and Mexico in 2013, the most Buicks sold in a single year in the brand's 110-year history. The previous record was 1,003,345 sold in 1984.

### Design Students Compete to Brighten Chrysler Brand

**NASF Bright Design Challenge Launched with College for Creative Studies**

The National Association for Surface Finishing (NASF) announced the launch of its 13th Annual Bright Design Challenge with Master of Fine Arts Transportation Design students from the College for Creative Studies (CCS) in Detroit, Michigan.

This competition will require CCS design students to explore innovative ways to incorporate bright finishes as a premium design element related to SUV's and the Chrysler brand image, a brand that gave new meaning to Urban Luxury with its Chrysler 300 luxury sedan.

"CCS greatly values our long-standing partnership with NASF and Chrysler. Over the years, both industry leaders have provided opportunities for undergraduate students to apply their talents to exciting design projects," says Alexander Klatt, MFA Chair of Transportation Design. "This semester, however, they have combined efforts to engage with the MFA Transportation Design faculty in CCS Graduate Studies where they will challenge the MFA students to create a new 'luxury SUV brand concept' for Chrysler through the application of premium materials. The classroom will simulate the immersive experience of working in a professional studio with feedback and evaluation from NASF and Chrysler."

Design students will study ways to re-establish the Chrysler 300 as a luxury-SUV, differentiated from its American counterparts as well as European and Asian luxury brand. Participants will be required to work within strict, realistic guidelines. Time management skills will play a role due to critical deadlines placed throughout the intense, 12 week competition. Final designs will be chosen by a select panel of industry leaders in late April of this year. Contest awards will then be applied directly to the winning students' tuition.

"The future of surface finishing depends on the innovative ideas of our youth", states NASF Board President, Rick Delawder. "The NASF strongly believes that it is the responsibility of those currently serving this industry to foster and nourish these ideas" states, Delawder. This program is produced as part of the association's Surface Technology Initiative to proactively promote the surface finishing industry.

Located in Washington DC, the National Association for Surface Finishing represents the interest of businesses, technologists, and professionals in the surface coatings industry, an industry that represents over 250,000 employees nation-wide. Its highly regarded programs and activities are powered by NASF's mission to advance an environmentally and economically sustainable future for the finishing industry and promote the vital role of surface technology in the global manufacturing value chain.

Located in the heart of Detroit, the College for Creative Studies (CCS) educates artists and designers to be leaders in creative professions. A private, fully accredited college, CCS enrolls more than 1,400 students pursuing Bachelor of Fine Arts (BFA) and Master of Fine Arts (MFA) degrees.

Students in the BFA program can major in Advertising Design, Advertising: Copywriting, Crafts, Entertainment Arts, Fine Arts, Graphic Design, Illustration, Interior Design, Photography, Product Design and Transportation Design, in

## CORPORATE PROFILE: ERIE POWDER COATINGS



Erie Powder Coatings (EPC) has been offering custom and stock powder coatings for nearly 20 years. Manufacturing powder coatings in Niagara since 1994, Erie has built up a strong customer base on both sides of the border, and across North America. The company is very flexible, able to manufacture products from 10,000kg or more down to a single box. The addition of the US facility near Erie PA has added a great advantage for Erie's customers, many of which also have operations on both sides of the border, to purchase from both facilities.

The addition 5 years ago of the US facility has allowed the company great flexibility in dealing with customers. While the Canadian facility acts as a manufacturing base and corporate headquarters, the US facility allows local production of coatings to the US market, as well as warehousing and sales functions.

Erie manufactures a wide variety of standard thermoset coatings, including polyester TGIC, TGIC-Free and polyester urethanes, epoxy, hybrid and acrylic hybrid coatings. But custom manufactured powders are Erie's specialty.

Erie offers a strong line of custom manufactured products, built to customers specifications. The company offers a unique ability to offer small volume custom built orders, while still being competitive on larger volumes, and also offering advanced chemistry's and coatings.

EPC has had a strong offering in some very specialized markets such as anti-graffiti coatings, SEFA grade coatings and fast cure coatings.

The company offers a very strong and varied line of anti-graffiti products. As with any anti-graffiti product, the key to their use is not that graffiti can't be put onto them. Of course, unwanted graffiti from spray cans or permanent markers can be put just about anywhere on any surface. The key to these AG coatings is whether the graffiti can be cleaned from them without doing damage to the product surface.

Four separate chemistries are available for AG applications from Erie, but the newest and most popular product is the hybrid anti-graffiti product. This product is substantially different from others on the market. Other AG products are expensive, difficult and often contain a number of hazardous ingredients. Erie's hybrid AG products have the distinct advantage of being fast cure but oven stable, and free of TGIC and isocyanate often used in these products.

Erie Powder offers two lines of SEFA grade products. SEFA (Scientific Equipment and Furniture Association) sets standards for laboratory furniture and cabinets. Erie / EPC has been active in this market and has qualified both epoxy and urethane products that meet or exceed these specifications. While this is a select and niche market, Erie has found this market to be a strong one.

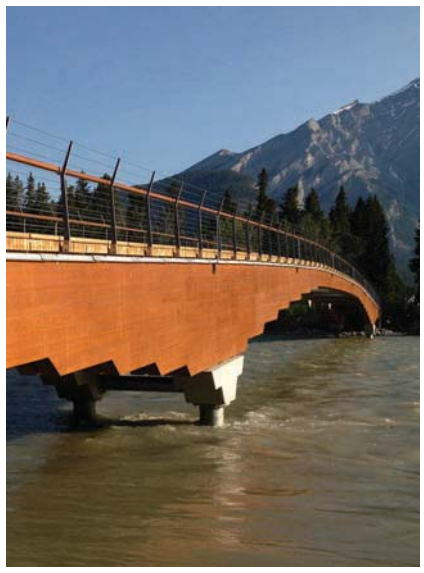
Fast cure product lines are also a specialty that Erie excels in. One of the primary reasons for this is the type of equipment that Erie uses – specialty Swiss made plastics extruders that are better at producing low-cure temperature coatings than other types of extruders.

Erie Powder Coatings is proud to be ISO 9000 compliant.

addition to a dual major Art Education program. Students in the MFA program can major in Interdisciplinary Design and Transportation Design. The college also offers non-credit courses in the visual arts through its Continuing Education programs and opportunities for youth through its Community Arts Partnerships programs.

## Company News

### Sansin Wood Finishes Help Protect One of the World's Longest Span Wooden Bridges over the Bow River in Banff, Alberta, Canada



Set over the Bow River in the town of Banff, the Bow River Pedestrian Bridge, with a clear span of 80 meters, is considered the longest timber bridge of its kind. Two specially selected Sansin Enviro Stains were chosen to protect the bridge's wood structures.

The bridge was formed by two 40 meter tapered haunch girders, cantilevering from either side to support a central 34 meter suspended span. A replaceable, modular timber deck sits atop twinned, arched Glulam wooden beams that form part of the span across the Bow River.
Because vibration is a key consideration when constructing long span footbridge structures, the designer developed a unique "tuned mass damper" system that enabled the use of wood for the low-profile structure.

Wood decking was selected to allow drainage and reduce build-up of snow and ice in the winter. The 113 timber deck panels are removable for easy access to newly installed pipes running underneath them.

In an area known for snow and ice, StructureCraft Builders, the general contractor and project designer, wanted a durable wood finish that could protect the timber features and highlight the beauty of the wood.

"The Bow River Pedestrian Bridge is a sight to behold and is a testament to the design acumen of StructureCraft Builders," said Sjoerd Bos, Sansin Vice President. "Once again wood proves itself to be a durable, environmentally-friendly and stunning choice in construction."

**Sansin Products Featured on the Bow River Pedestrian Bridge:**

First coat: Sansin KP11-S - a ready-to-use, penetrating, low-VOC coating that provides a long-term protective undercoat for millwork and wood products that are subject to wet conditions. Sansin KP11-S is designed to reduce swelling, wood rot and moisture absorption. Second and third coats: Sansin SDF Top Coat - a high solids version of its flagship SDF product, which can be used as an impenetrable maintenance coat, offering maximum protection from discolouration, UV degradation and water staining, The town of Banff opened the pedestrian bridge to the public on July 2, 2013, looking to encourage active living through walking and cycling, and enhance the resident and visitor experience.

Headquartered in Ontario, Canada, Sansin has dealer locations across Canada, the U.S and parts of Europe.
www.sansin.com.

## CORPORATE PROFILE: ANEST IWATA USA



ANEST IWATA USA, Inc. is the North American subsidiary of ANEST IWATA Corporation in Japan. As a part of the world-class operation, ANEST IWATA continues to produce spray equipment for every size and style of application purpose, from fluid handling to electrostatic equipment, flat line and robotic automatic equipment to hand spray gravity and pressure guns all the way down to airbrushes and marking guns for circuit boards.

### ANEST IWATA Engineered Atomization

We developed our patented "LV (Low Volume) Technology" to solve a long standing problem for most finishing professionals, better transfer efficiency. The main benefit of utilizing "LV Technology" include better appearance, better through dry and better transfer of the material to the surface. Solutions that do not escape the film before drying or curing cause many common paint defects. Our "LV Technology" pre-atomization theory minimizes these problems because the in-flight loss of solution is greater than other technologies. Painters who have made the switch to "LV Technology" notice significant reductions in product consumption and better appearance. This technology is available in HVLP and compliant high transfer efficient spray equipment.

ANEST IWATA USA, Inc. strives to exceed needs of North American industries with innovative technologies and services. We stand on our core purpose "WE ARE THE FINISHING SOLUTION" in all aspects of our operations while upholding our Brand Promise "YOUR IDEAS FINISHED TO PERFECTION" which has been our motto since the day ANEST IWATA was establishment over eighty-five years ago.

**To see all ANEST IWATA has to offer visit www.anestiwata.com**

**As always thank you for your continued support of ANEST IWATA products.**

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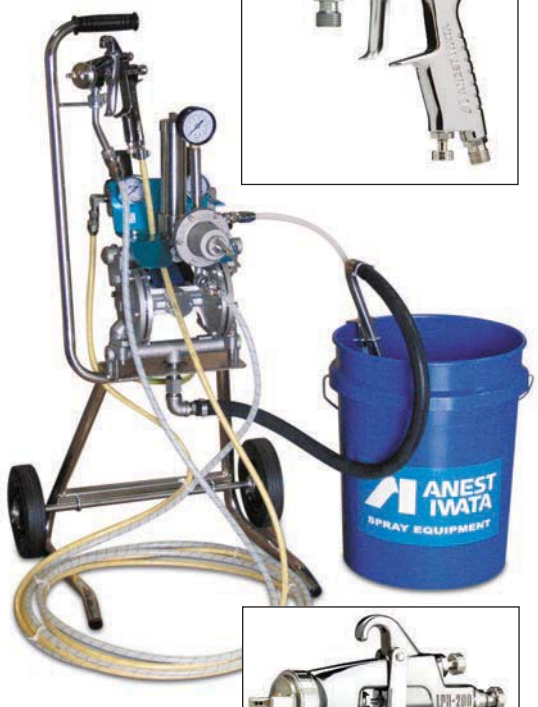


# In the News

### Protech Closes Seibert Acquisition

The Protech Oxyplast Group of Montreal, QC, successfully closed the acquisition of NPA's powder coatings business known as Seibert Powder Coatings.

Protech will continue to operate the manufacturing facility in Cleveland while seeking to benefit from synergies with their other manufacturing sites in North America.

www.protechpowder.com.

### DuPont post strong Q4 results, but $TiO_2$ still lags

DuPont produced more titanium dioxide ($TiO_2$) in 2013, but saw lower selling prices, the company said in its Q4 2013 results.

The results showed that higher raw material costs in both $TiO_2$ and the company's refrigerant businesses (which is a major consumer of fluorspar), "more than offset volume increases and improved plant utilization".

$TiO_2$ volumes increased by 18 per cent when compared to the same quarter in the previous year.

The fourth quarter was a strong one when compared to the previous year, however. DuPont saw increased sales in its Performance Chemicals sector, from $1.53m, to $1.57m, and a rise in profit to $279,000, from $270,000 in Q4 2012.

But over the year, sales in performance chemicals and profit showed decreases.

Separately, DuPont announced a $5bn share repurchase program, with $2bn expected to occur in 2014.

For the whole company, DuPont saw a sales increase of 6 per cent, to $7.7bn, with 9 per cent volume growth in Q4.

### Newest Axalta Nap-Gard Achieves New Depths for Oil Pipelines with Operating Temperatures in Excess of 155°C

Axalta Coating Systems is rolling out its latest generation Nap-Gard product which can withstand continuous operating temperatures of 155°C (311°F). Nap-Gard High Tg 7-2555 is a thermosetting epoxy powder designed for use as a corrosion barrier coating for underground and sub-sea pipelines that operate in high temperature service. It can be used as a corrosion coating in a stand-alone or dual-powder coating system or as a corrosion coating under multi-layer insulation systems. When used in conjunction with Axalta's most recent dual layer system Nap-Gard 7-2675, the operating system increases to 180°C (356°F). The second layer ensures reduced water permeability and improved chemical resistance.

Nap-Gard 7-2555 is currently approved by operating companies in Mexico, Colombia and Venezuela. It is presently being applied on a 50km project in Mexico. Nap-Gard 7-2555 builds on the previous generation Nap-Gard 8-2535 which was designed for operating temperatures up to 135°C (275°F).

### Graco Acquires EcoQuip Inc.

Graco Inc., a leading manufacturer of fluid handling equipment, has acquired abrasive-blasting equipment manufacturer EcoQuip Inc., of Chesapeake, Va. Founded in 2005, EcoQuip designs and produces eco-friendly abrasive blasting systems for coating removal and surface preparation. EcoQuip products will become part of the product portfolio of Graco's Applied Fluid Technologies Division (AFTD).

### Parker Ionics and MS Oberfachentechnik AG Announce North American Strategic Alliance

Parkwood Engineering Development Corporation, Parent Company of Parker Ionics NA and MS OBERFLÄCHENTECHNIK AG of Balgach, Switzerland have reached agreement on a Strategic Alliance to sell and service the technologically advanced line of Very Fast Colour Change (VFCC) Booths designed and manufactured by MS Oberflächentechnik AG. This agreement covers the FCO, FCV, and MDF series of VFCC Booths.

John Cole, President of Parkwood Engineering and Parker Ionics, in making the announcement said, "We are very excited to be working with Henry and Michael Marcon and their team at MS. Their technology and knowledge in the field of electrostatic powder coating is superior to anything we've seen to date. We are looking forward to the introduction and support of this equipment in the North American market."

The FCO Line of equipment features an open cabin design for operator comfort and convenience along with an automatic section designed for colour change in 4-6 minutes and is designed to be used in all markets. The FCV line is designed for coating extrusions up to 40 feet vertically in a fast colour change environment. And the MDF line facilitates powder coating in a quick colour change environment.

### EVOQUE Pre-Composite Polymer Wins 2013 U.S. EPA Presidential Green Chemistry Challenge Award

The Dow Chemical Company has been named a winner of the 2013 U.S. EPA Presidential Green Chemistry Challenge Award for its development of EVOQUE Pre-Composite Polymer Technology. This Dow innovation helps coatings formulators improve paint performance properties while using less titanium dioxide (TiO2), a white pigment that is energy intensive to manufacture but ubiquitous in architectural paint for its ability to provide quality hiding. This win marks the ninth time that Dow and its affiliates have won the U.S. EPA Presidential Green Chemistry Challenge Award, more than double any other company in Award history.

## CORPORATE PROFILE: BEX SPRAY NOZZLES

### BEX Has Solutions!

#### Our Business

In 1963 Norm Bowen was approached by a customer to manufacture a spray nozzle. Being a recent Engineering graduate, Norm took on the assignment with zeal and soon produced his first spray nozzle. Today, Derek Bowen continues this tradition of the designing and manufacturing of quality products at BEX's state of the art facility in Mississauga, Ontario.

Now with over 50 years of experience in the design and development of spray nozzles and tank mixing eductors, BEX responds to the user's technical concerns with the experience required and the willingness to provide effective answers.

BEX is a leader in industrial spray nozzle and tank mixing eductor technology. BEX is also a leader in providing unique and patented technology to improve spray application quality and reduce maintenance costs. For over 50 years the BEX has provided answers to tough application questions in a variety of industries. The BEX customer base includes a wide array of industries including automotive, food and beverage, the steel industry, pulp and paper, printed circuit boards and waste water facilities. Typical applications include part cleaning, food processing, cooling, misting, dust control, phosphating, rinsing, and chemical processes.

"At BEX we are constantly improving our product line, from standard set up to custom made our commitment to innovation has made us an industry leader in spray nozzle and tank mixing eductor technology." – Derek Bowen

#### Our Products

- Injection-molded nozzles in a variety of plastics
- Flat Spray "V", Solid Stream, Hollow Cone, Flooding and Self-Cleaning nozzles
- Zip-TipÒ quick-change nozzles in stainless or plastic with the new easy-on easy-off TabzÒ design
- Color-coded K-ballÒ clip-on spray nozzles of all types in a variety of materials
- Air Atomizing Spray Nozzles - JPL Series
- Hydraulic Atomizing Nozzles
- BEX Twisterä Nozzle – One-piece, anti-clogging nozzle offers larger flow rates with spiral design in both full and hollow cone patterns
- Tank Mixing Eductors in various materials
- Tank Washing/Rotating Nozzles
- Air Wisk™ blow-off

#### Our Processes

BEX utilizes World Class Manufacturing systems to ensure exceptional product quality and accelerated lead times. Continuous improvement methodologies and lean manufacturing principles are always front and centre as we strive to provide world class quality and service. BEX employs state of the art testing methods to ensure our Customers' quality expectations are met. BEX is an ISO 9001:2000 registered company.

#### Our Innovation

BEX is constantly expanding on its product lines – whether this means adding new spray nozzles to the line of products or adding features to current product lines. BEX is committed to providing new technology and products to suit the ever-changing needs of our Customers.

#### Our Competitive Edge

BEX leads the way in on-time delivery and exceptional customer service.

The company prides itself on its proficient and friendly inside sales team supported by a very knowledgeable and experienced sales force. We have the solutions for your technical problems.

We will get you what you need, when you need it!

### PPG PMC Celebrates 20th Anniversary of Polysiloxane Coatings

PPG Industries' protective and marine coatings (PMC) business is celebrating the 20th anniversary of polysiloxane coatings, for which PPG was granted the first patent on Jan. 4, 1994. Tim Knavish, PPG vice president, protective and marine coatings, said polysiloxane coatings have revolutionized the protective and marine coatings industry, expanding into applications such as civil infrastructure, original equipment manufacturers (OEMs), government, water and wastewater, petrochemical, offshore, rail, power generation and wind energy. PPG polysiloxane products, specifically the PSX brand of coatings, have been used to coat more than 1 billion square feet of surface area. In the 20 years since being introduced, PSX coatings have been refined continually to meet specific customer needs. Recent innovations include a semi-gloss version for the government marine industry, a single-component formulation for easier maintenance, and a new ultra-low-VOC (volatile organic compound) PSX coating.

## Pricing Updates

### Arkema Coating Resins Announces Price Increase for Latex Products Sold in North America

Effective January 28, 2014, or as contracts allow, Arkema Coating Resins will increase pricing on all latex products sold in North America.

Encor and SNAP acrylic, styrene-acrylic and styrene-butadiene latexes and Neocar Acrylic latexes will increase by $0.05 to $0.10 per wet pound. Celocor opaque polymer will increase by $0.04 per wet pound. Encor vinyl-acrylic, vinyl acetate-ethylene, vinyl acetate homopolymer and Neocar latexes will increase by $0.02 to $0.03 per wet pound. Encor styrene-acrylic hard resins will increase by $0.05 to $0.10 per pound.

This action is necessary due to escalation in the cost of raw materials and transportation for these products.

Customers should contact their Arkema Coating Resins account representative for additional details.

### WACKER POLYMERS to Raise Prices for Dispersions in the Americas

WACKER POLYMERS is raising its prices for VINNAPAS vinyl acetate-ethylene and VINNOL ethylene-vinyl chloride-based copolymer dispersions in the Americas.

Effective February 15, 2014, WACKER will implement a price increase of up to five percent per wet pound, or as customer contracts allow.

The company says the escalating costs in raw materials is the reason for the increase.

### Flat 2014 expected for Bromine prices

US specialty chemicals producer Albemarle Corp. said that it expects prices for elemental bromine to be flat in 2014, following the stabilization of the market towards the end of 2013.

The chemicals firm had seen prices weaken during 2013, but that this trend has now levelled out. They expect prices in 2014 to remain flat and base this prediction largely on prices set for Chinese bromine, which are typically 5-10 per cent lower than bromine produced in other parts of the world.

Meanwhile, a report released by Market Reports Online predicted that global demand for bromine will increase in the future, despite the fact that a handful of bromine chemicals have been banned in some European countries, due to health and environmental concerns.

Bromine is used as a flame retardant in the manufacture of paint and coatings.

### Pricing Increases at Momentive Specialty Chemicals Inc.

Momentive Specialty Chemicals Inc. has increased the prices for its CARDURA glycidyl ester, ACE hydroxyl acrylate monomer, VEOVA monomers and VERSATIC acids by $100 (USD) per metric ton on a global basis effective March 1, 2014, or as contract terms allow. The company says the pricing adjustment is driven by the continuing increase in the cost of key raw materials.

## People

### New at Uni-Spray


Christine Jordan

Uni-Spray Systems is pleased to announce the appointment of Christine Jordan to our engineering group. Christine comes to Uni-Spray out of the engineering department of A. O. Smith. In her new role she will provide engineering support to Uni-Spray's Pretreatment sales force. Uni-spray looks forward to having her on its team.

### New Axalta Global Technology Director


Fred Allen

Fred Allen has joined Axalta Coating Systems as Global Technology Director for its powder coatings business. In this newly

## CORPORATE PROFILE: GEMA

### Gema – The Global Leader in Powder Coating Technology

Gema is a pioneer in powder coating equipment technology, offering customers the confidence and expertise that comes with being the industry's global leader.

Equipment from Gema is durable, flexible and engineered to last, providing increased performance, greater efficiency, and a better return on investment. Gema sets the industry standard, developing the finest powder coating equipment available.

Gema is leading the way in colour change solutions, offering the latest product innovations designed to maximize productivity and colour change flexibility.

The OptiCenter™, with its quick and dust-free powder management, enables excellent coating results. Short suction tubes, new injectors, and optimized pneumatic connections ensure a higher powder flow rate with less air consumption, resulting in reduced wear and tear. The overall design allows extremely quick color change. The compact design forms an ideal basis to integrate gun, axis and booth control.

Gema's OptiColor™ performs colour changes in a matter of seconds, while managing multiple colours at one time and eliminating the risk of contamination. Designed to work in XTreme Colour Change Environments™, this easy to use and cost effective solution allows you to save time and money when changing from one colour to another. OptiColor is designed for manual spray operations using multiple hoppers set up to spray various colors.

Gema's MagicCylinder® quick colour change booth is designed to handle a large variety of colours. The round booth with a patented central suction system guarantees extremely quick and clean colour changes. All of this without any mechanical cleaning tools or entering the booth. . . you can work in a clean, quick and economical way!

With Gema's OptiFlex® Series, you've got all you need to power up your productivity! Gema's Automatic and Manual powder coating guns integrate the most advanced powder charging technology available. Every component is designed for total reliability, convenience, and performance. Using 100,000 volts of FirstPass Power™, you can coat it right the first time – every time!

Gema manufactures spray application equipment and recovery systems used to apply powder coatings in a variety of markets including pipe coating, automotive, appliance, office furniture, lawn and garden, and other general industrial market segments. Gema's product offerings include manual & automatic spray guns and booths, fast colour change equipment, cartridge & cyclone recovery systems, gun movers, control systems and other ancillary equipment.

Gema North America utilizes a modern application laboratory at its Indianapolis headquarters. Equipped with fully automatic powder coating lines, designed for both manual and automatic coating, the ability to demonstrate a wide spectrum of powder coating needs is easily accomplished.

The Gema North America office offers direct sales and distribution support in Canada, the United States and Mexico. To learn more about product offerings or obtain assistance in determining which equipment is best for your operation, visit www.gemapowdercoating.us or call 800-628-0601.

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Phone: (800) 628-0601
Email: powdersales@gema.us.com
Website: www.gemapowdercoating.us

# In the News

created role, Dr. Allen will focus on developing and implementing global strategies for powder technology to meet customer needs worldwide. Dr. Allen holds 17 patents and has published over 20 technical publications about materials and coatings. He has received industry recognition for his work on advanced catalytic materials, functional coatings and electrochemical systems. He comes to Axalta from NEI Corporation where he led the Corrosion Technologies group.

### New at Piab

Tim Rohr has accepted the newly formed position at Piab USA of Technical Sales Manager, Material Handling. Tim brings a proven record of Sales Channel management, specifically through Distributors, Reps, OEM's and End-user direct. Tim earned a BS in Electrical Engineering and MBA in Marketing. His strong technical background coupled with his high level of energy and experience to grow new business is a key addition to the vacuum conveying group.


Tim Rohr

### New Vice President of Sales Joins Resinate Materials Group

Resinate Materials Group, Inc., a provider of high quality, low VOC polyurethane dispersion (PUD) technology to the coatings industry, is pleased to announce Mark Vasconcellos as its new Vice President of Sales. Vasconcellos will be responsible for overseeing Resinate's sales activities, which includes commercial strategy, and managing key accounts and distributor relationships. Vasconcellos will report directly to Mr. Brian Chermside, COO and will lead the Resinate sales team.


Mark Vasconcellos

Prior to joining Resinate, Vasconcellos worked with BASF where he was responsible for managing key strategic accounts. Throughout his career, Mr. Vasconcellos has demonstrated success for growing start-up companies and new business units, and has made a strong positive impact on companies like Picassian Polymers (Stahl), Alberdingk Boley and Brenntag (Eastech). Vasconcellos' 30-plus years of experience in the coatings industry includes in-depth knowledge of resin technologies for diverse commercial applications.

### Jeff Henderson Joins AEC Staff

The Aluminum Extruders Council (AEC) is pleased to announce that Jeff Henderson has joined its executive team effective January 1, 2014 as Director of Member Services. Henderson brings with him 20 years of executive-level experience at major companies within the aluminum industry. In his new capacity at AEC, Henderson will continue to support the Aluminum Extrusion Fair Trade Committee and Industry Promotion programs at the AEC.


Jeff Henderson

### Resinate Materials Group Selects New Chief Operating Officer

Resinate Materials Group, Inc., a provider of high quality, low VOC polyurethane dispersion (PUD) technology to the coatings industry, is pleased to announce that Brian J. Chermside has joined the company as Chief Operating Officer. Chermside will be responsible for overseeing the company's daily operations and strategic activities while ensuring the company operates in a fiscally responsible manner.

Prior to joining Resinate, Chermside had a distinguished career at Dow Corning, which began in 1985 and included a variety of senior level positions including Corporate Vice President, Chief Commercial Officer and Chief Marketing Officer. While at Dow Corning, Chermside was instrumental in spearheading high-level business-to-business market strategies for new and existing brands including the successful XIAMETER brand. The body of his work has been recognized internally and by the industry as a whole for its innovation and success.


Brian Chermside

### New COO For Buckman

Kathy Buckman Gibson has been named President and Chief Operating Officer for Buckman International. In assuming her new position, Buckman Gibson will step away from her role as Chairman of the Board of Buckman, a position she has held since 2000. Assuming the Chairman's role will be Buckman board member Otto Heissenberger, Jr.

Buckman Gibson first joined Buckman Laboratories International, Inc. in 1993 as Vice-President, Legal and Corporate Secretary. In assuming the Chairmanship of the parent company in 2000, she succeeded her father, Robert Buckman, as Chairman of the company her grandfather, Stanley J. Buckman, created in 1945. Buckman Gibson holds an undergraduate degree from Duke University and an MBA and JD from Emory University. Prior to joining Buckman, she worked as an analyst for Citicorp and at Smith, Gambrell & Russell as an associate in mergers & acquisitions.

Buckman Gibson replaces the recently retired Edson Peredo, a 40-year employee of Buckman, in the President of Buckman International position.

## CORPORATE PROFILE: CAPS'N PLUGS

Caps'n Plugs is a leading Canadian distributor and custom manufacturer of plastic and rubber injection mouldings, vinyl dip mouldings and compression mouldings. We have an extensive product line of caps, plugs, grommets and handle grips for shipping protection, paint/plate masking and product finishing for virtually any application.

Our sales team is focused on finding solutions for our customers. If a suitable part does not exist in our standard product line, we can design, prototype and produce the correct part. Caps'n Plugs strives to find the best and most economical solution for our customers. Our team is committed to achieving complete customer satisfaction with our service and products.

### Masking Solutions

Caps'n Plugs has the largest stock of standard masking products in Canada of tapered plugs, pull plugs, flange pull plugs, several styles of caps, various types of tape, cord, round tubing and more – that can be used for all high temperature painting, coating and plating. All our silicone or EDPM rubber parts can withstand repeated painting and bake cycles.

Our several plug styles can be pushed or pulled into round holes, used for threaded or unthreaded round holes, beveled or unbeveled round holes and sometimes contort to fit off-round holes.

Our flexible caps can mask off external round threaded studs, round pins, and they can even stretch to fit odd sizes or irregular shapes.

Our flexible silicone foam easily compresses to seal off grooves or holes, and it can seal irregular shaped holes. We also stock silicone tubing ideal for a variety of applications.

We stock a variety of polyester, polyimide, hi-temp crepe and other paint masking tape in logs that we are now able to slit to whatever roll width you require, if it is not already on our shelves.

Most of the popular cut widths of green polyester tape are in stock ready for immediate delivery. Our three types of sandblasting tape are much more efficient at masking off parts during sandblasting (with no residue) than the commonly used duct tape. Our high temperature masking discs are ideal for masking off holes or grounding areas around holes. These high temperature masking discs remove cleanly from surfaces without leaving any residue behind.

Again, the popular diameter discs are stocked on our shelves. We are now able (in-house) to cut virtually any tape masking in any shape required in-house as per our customer requirements at a very reasonable cost.

If you need to mask off studs, pins, threaded holes or any part of an item that you are painting, powder coating, e-coating, plating or blasting, Caps'n Plugs can help! If you have requirements for a non-standard mask, our custom prototype prices, piece prices and production tooling costs are the lowest available in Canada.

## Tom Frantzke
### Syncoat Chemicals Limited


Tom Frantzke

The industry is saddened to learn of the sudden death of Tom Frantzke of Syncoat Chemicals Limited, Mississauga, ON, on November 27, 2013. He was 53.

He fought his year long battle with sarcoma with quiet courage and endless grace, never losing his sense of humour, despite such a savage adversary. He will always be the soulmate of Stefania Orlandi and the loving father of Lukas and Derek. He was the worthy successor to proud father, Papa Ed and Marilyn Coulter and predeceased by his mother Irene. He was adored by his sisters Evelyn (Robert) and Bev (Bart) and was the treasured leader of his Syncoat family.

Tom was born in Toronto in 1960 as the middle child of three children and the only son. Tom's father, Ed Frantzke, founded Syncoat Chemicals in 1967 when his children were still very young. All three children spent many weekends and holidays playing and working at Syncoat while Ed developed and manufactured custom pretreatments and coatings. Despite Ed's best hope that Tom would work in the business once he finished high school, Tom spent a somewhat rebellious youth with cars and girls before settling down and joining Syncoat in 1988. Tom easily learned all aspects of the business from equipment maintenance and batch making to negotiating with customers and suppliers.

In 1994, Ed was forced to retire due to ill health, and Tom quickly stepped in to successfully lead the company into the 21st century. Over the years, Tom directed the development of leading edge water-based technologies and set up a very effective network of sales agents and distributors. The company quickly tripled in size, and Tom brought his sister, Evelyn, in to help him manage the business in 2001.

When the Great Recession arrived, Syncoat Chemicals was initially negatively impacted like many businesses. Tom met the challenge with Evelyn's assistance, and Syncoat has now expanded its line of innovative water-borne coatings.

In November 2012, Tom was diagnosed with cancer. He fought with grace and courage, never losing his wry sense of humour. During Tom's year-long treatments, Evelyn and the Syncoat employees operated the business for him. Tom unexpectedly lost his battle on November 27, 2013. Evelyn has assumed the responsibilities of President and, with the Syncoat team, is committed to continuing Tom's legacy.

Randy Coates, Technical Manager at Syncoat, remembers this about Tom: "Tom's mode of operation was laid back, casual and very personal. Under Tom's leadership, Syncoat developed a wide variety of coating products. Syncoat is one of the few companies that can claim to be totally vertically integrated in the market from metal cleaners and treatments to primers and topcoats. Tom was a great boss to work for. He believed in me, supported and encouraged me, but, best of all, he gave me free rein to run the technical side of the business. For me, it was a chance to finally exercise my full potential. Tom was the real deal."

Gary O'Brien, Sales Agent, says of Tom: "He was humble, unassuming and wanted to progress, surely but cautiously. Tom steered his firm to develop and manufacture technologies that are revolutionary."

A service for Tom took place in December at St Johns Dixie Cemetery, Mississauga. The family thanks everyone who made donations in memory of Tom to Dorothy Ley Hospice, Etobicoke. Messages of condolence may be left at http://www.legacy.com/obituaries/thestar/obituary.aspx?pid=168242868

## Ross Mitchell,
### Madison Chemical Industries

It is with great sorrow that we report the death of Allin Ross Mitchell, president of STI/SPFA Affiliate Member, Madison Chemical Industries, Milton, ON. Ross passed away suddenly but peacefully on December 5, 2013, after years of fighting a courageous battle with cancer. He was 71.

Ross was a brilliant and accomplished man, a visionary. He graduated from University of Toronto Faculty of Law, and went on to become a successful entrepreneur, a leader in his church community, and most important he was a family man - a loving husband and father who modeled excellence, and a 'teachable spirit'.

The cherished son of Allin and Gladys (both predeceased), wife Davis (McCarthy), daughters Stephanie and Marissa and son Evan, brothers Brian and Bruce, step mother Sally, extended family and friends mourn Ross's death. We will miss his enthusiasm for life and his positive nature, his indomitable spirit, his generous heart and his drive to challenge himself and others

Ross established Madison Chemical 40 years ago. The business was one of the innovators of polyurethane coatings. These new coatings made production of STI P3 tanks much faster, allowing tens of thousands of tanks to be built when underground storage tank regulations were promulgated in the 1980's. Ross became well known at STI meetings as the leader of Madison Chemical. Although he was a lawyer by profession, he took some chemistry courses and has been very involved in the technology side of the business, he was creative and innovative. In 2006, a subsidiary Gemthane Wood Sidings based in Muskoka was created, where prefinished woods were manufactured and encapsulated with polymer based technology for used on sidings and decks.

Ross had been a true pioneer in the field of polyurethane chemistry. The products that were designed and developed under Ross's watch have changed the way many industries continue to operate today.

On behalf of the entire membership, STI/SPFA extends its condolences to Ross' family, friends and employees.

Services were held in December at Trinity Anglican Church in Mississauga, ON. If desired donations were made to either Trinity Church, World Vision for Philppine relief or Credit Valley Hospital Foundation.

## CORPORATE PROFILE: CONN AND COMPANY



### Meeting Mixing And Blending Needs for more than Half a Century

Conn and Company headquartered in Warren, PA, USA, has been designing and manufacturing industrial mixing equipment for over 60 years. Conn builds equipment to meet the customer's requirements with air or electric drive specifications to suit operating conditions; horsepower to suit service conditions; dimensional design to suit operating conditions or existing tanks. The company firmly believes in keeping it simple, durable and functional.

Conn provides low shear blending blades or high shear dispersion blades or complete drive assemblies for processing fluid materials such as paints, adhesives, inks, cements, urethane foams, chemicals, slurries, grouts and more.

### The Conn Blades

Conn and Company recognized the need for blending blades and dispersion blades that provided true pumping action instead of plowing action. The company has brought four patented blades to the market under the trade name Conn Blade.

The ITT style blade has a combination of louvers and teeth. It is a high pumping high shear dispersion blade and is the most efficient and aggressive dispersion blade available.

The IT style has the louvers providing superior pumping action, but without the teeth. It is a high pumping, low shear, blending blade and is excellent for mixing micro spheres or flakes or other fillers that need to be well mixed, but not destroyed.

The ITC CONN Blade is an 8-vane open style blade providing excellent material flow, with more shear than the IT, but is not as aggressive as the ITT.

The patented P-ITT CONN Blade is of UHMW Polyethylene and is excellent for highly corrosive or highly abrasive mixing. The P-ITT CONN Blade is the most efficient and aggressive poly blade available.

The Conn blades are available from 2" diameter to 48" diameter with mounting holes or mounting hubs to retrofit and upgrade a customer's existing equipment. Split construction is available for entry through manways. Conn also manufactures complete units and drive assemblies to mount on your tanks. Conn supplies air or electric utility/laboratory mixers, spool-type top entry for flange mounting to the customer's tank, and drive assemblies for mounting on bridge support for open top tanks. Conn and Company just needs the customer's requirements and will be happy to be of assistance.

Conn handles all worldwide sales from the home office in Warren, PA.
Contact Richard C. Freeman at
rcfreeman@connblade.com,
call 814-723-7980 or fax 814-723-8502.
Web site: www.connblade.com

# Positive Economic Predictions for 2014

A new year is upon us and there continues to be positive economic predictions for the coming year, with the U.S. economy rebounding and Canada's GDP to hit a two per cent growth rate. While that will not precipitate dancing in the streets, it is nevertheless welcomed given ongoing struggles around the globe. The CPCA has several important issues on its plate in 2014 as we continue to march forward on the three-year strategic plan set in place two years ago. Much of that work revolves around ongoing regulations for the paint and coatings sector at both the federal and provincial levels of government. In addition to this there are several international regulatory issues that require our attention, especially with respect to the harmonization of regulations with our friends in the United States. Details on those issues have been widely conveyed to members in various communications. Members continue their involvement via CPCA's various technical committees to ensure our messages are clear. A number of those outstanding issues are expected to be fully resolved in 2014, but not without extensive effort on the part of the association. In the coming weeks members will be kept informed of those ongoing developments.

This past December, CPCA participated in a federal government Lobby Day on Parliament Hill as part of the Canadian Manufacturers Coalition, a collection of 50 trade associations. This involved meetings with federal Ministers, Parliamentary Secretaries and Members of Parliament. The intent of this effort was to ensure that Members of Parliament fully understand the challenges faced by manufacturers in Canada. This is especially critical for members of the government as they contemplate the 2014 federal budget and the initiatives that are critically important for our manufacturing members. The way those issues are addressed will impact everyone doing business in the paint and coatings industry including suppliers, distributors and affiliates.

The federal government's Chemicals Management Plan (CMP) continues moving forward with respect to assessing chemicals in commerce in Canada including many in the paint and coatings industry. Phase 2 of the CMP will conclude in 2015 and discussions have already begun on Phase 3, which will commence in 2015. The next phase of the CMP will focus on several product assessments in the coatings industry. CPCA has already had discussions with both Environment Canada and Health Canada on the approaches to be taken in Phase 3. Environment Canada recently published the first CMP Progress Report, which is now available on the CPCA website and some of the highlights are noted herein. It is an excellent way to communicate the ongoing work of both industry and government with respect to the Chemicals Management Plan, and government is to be commended for doing so.

It is obvious that paint and coatings producers take their environmental stewardship responsibilities very seriously. This is evidenced by the fact that there is now a paint stewardship program in every province and brand owners continue to meet annual recycling targets for leftover paint across the country. CPCA expects a new program operator will be approved for post-consumer paint recycling in Ontario in 2014. This will lead to improved governance, greater transparency and more recycling. Alberta is also reviewing its extended producer responsibility programs and the association will make its views known with respect to the best way forward in terms of post-consumer paint strategies in that province.

Membership in the association has steadily increased over the past two years. We look forward to having companies in the industry who benefit directly from the work of the association join us in 2014. New members will help strengthen the organization and provide industry with a stronger voice on matters that impact their company's bottom line.

I wish you health, happiness and prosperity in the new year.

*Gary LeRoux is the President of the Canadian Paint and Coating Association based in Ottawa, ON.*

## CORPORATE PROFILE: CPCA

### Strong Economic Impact on the Economy

Since 1913 the Canadian Paint and Coatings Association (CPCA) has represented Canada's major paint and coatings manufacturers, and their industry suppliers and distributors, in three primary product categories: architectural paints, industrial and automotive coatings. The industry has more than 261 paint manufacturing establishments in Canada, which translates into annual retail sales valued at more than $10 billion and employs directly and indirectly 31,800 employees.

There are more than 6500 retail outlets in Canada selling paint and coatings products, half of which are stores operated by our members, the paint and coatings manufacturers. The other half includes the big box stores and building supplies stores stocked with recognized brands from CPCA member companies. In addition there are more than 5,500 auto body paint and repair shops across the country supplied by members of CPCA. Finally, CPCA members supply directly the coatings required for original equipment manufacturers (OEM) in the automotive, aerospace, marine and industrial sectors. The industry is relevant in every sector of the Canadian economy and a robust and highly visible part of the chemical processing industry.

### Supporting Industry in Delivering High Performing Products

CPCA works to ensure that members are fully conversant and compliant with all federal and provincial legislative and regulatory requirements in Canada. This ensures that the industry can continue to deliver value-added, quality products to consumers: DIY, industrial and commercial. The coatings industry operates in a highly regulated sector of the economy. A recent study by the Canadian Federation of Independent Business revealed that the cost of regulation is a drag on the economy. It found that the annual compliance costs for the average business in Canada is $1,200-1,500 per employee. The cost of ongoing compliance with existing regulations for health, safety and environment cannot be ignored at a time when governments and the public demand a greater focus on sustainability.

The Association does all it can to ensure industry is in full compliance with the law. More importantly it advocates for appropriate regulations for the future or where possible, non-regulatory measures such as the current, and less costly, proposed Codes of Practice for MEKO and DEGME (Note: These Codes will apply to all in the industry and non-members can obtain information by contacting CPCA). CPCA does all it can to ensure future government actions do not stifle the growth and prosperity of this vital industry in Canada.

CPCA advocates for the health and prosperity of the entire paint and coatings industry on issues such as the following: 1) the ongoing work by the federal government assessing all chemicals in commerce with a view to either banning or regulating them (the second phase will end in 2015 and a third phase will begin for another several years); 2) the current legislation for the Globally Harmonized System for Chemicals in the Workplace, to replace WHMIS, that must be harmonized with similar legislation in the US and if not it could cost the paint and coatings industry up to $100 million over the next two years; 3) successful VOC regulations in 2009 for the architectural and automotive sector have greatly reduced VOC emissions in products, but Environment Canada is now considering further reductions in VOCs which will be very difficult for industry to achieve while maintaining product performance expected by customers; and 4) ongoing pressures for higher levels of sustainability for left-over paint and proposals for tougher laws, such as the proposed Waste Reduction Act in Ontario, will require CPCA to be vigilant to ensure that industry regulations are met, while keeping the associated costs reasonable and fair.

### Value in Membership

Companies in the paint and coatings industry in Canada can benefit greatly from membership in the Canadian Paint and Coatings Association. It ensures that companies are fully informed about their industry in terms of what governments and many other stakeholders demand of industry, and allows companies to be ahead of the curve on critical issues impacting their business. More importantly, it provides an opportunity for companies to influence the shape of the industry in which they do business, whether as a manufacturer, supplier, distributor or an affiliated business. If companies doing business in the Canadian paint and coatings industry do not stand up for the sector, who will? Check out the value of membership at: www.canpaint.com


Therma-Tron-X, a family owned and operated company, was founded in 1971 as a manufacturer of custom-built industrial ovens. Today we are a leading, internationally renowned supplier of complete finishing systems. From pretreatment to cure, TTX will automate every step and integrate the finishing system with the facility.

TTX Environmental has been working to develop wastewater treatment systems that minimize operational costs and environmental impact of industrial processes. TTX uses wastewater minimization technologies and process bath reclamation, bringing facilities into compliance with federal, state and local discharge standards. TTX specializes in chemical precipitation, metal sorption, ion exchange and membrane separation.

At TTX, innovation is the driving force for continued improvement. An experienced, committed team is qualified to meet specialized needs. The TTX staff is made up of talented individuals that consistently bring fresh ideas and well honed skills to the table. The TTX engineering department employs a diverse group of people, each uniquely suited for the projects at hand. At TTX, dedication and pride ensure quality, reliability and energy efficiency.

### Facilities:

Cutting edge technology and modern facilities allow TTX to fabricate 90 percent of the equipment needed for a system in house. Both design and manufacturing facilities are located on-site to ensure seamless communication through all project phases. In addition, TTX Air, LLC, a subsidiary of TTX holdings, has multiple aircraft, spacious offices, and a hanger nearby, making it easy for employees and clients to travel to and from our northeastern Wisconsin location.

### Products andServices:

TTX builds E-coat, powder. autodeposition and liquid paint systems for hundreds of dedicated product manufactures and contract shop coaters. TTX's product line includes many proprietary technologies like the patented SlideRail Square Transfer®, which have revolutionized the industry.

When customers purchase a TTX system, they get complete engineering support, evaluation, testing, design, fabrication, installation, start-up and field service with the continued support from the TTX in-house service group.

### Evaluation

TTX's sales engineers are always looking for new and innovative ways to apply advanced surface treatments and finishes to metal products. They search for solutions to make the finishing process more productive and cost effective while reducing labor costs and environmental impact. They consider the paint process, space requirements, part size and production goals when putting together a plan.

### Design

In the design phase, TTX engineers draft each component of the system. Per specification, the system is systematically laid out, accounting for every detail. TTX draftsmen are experts and they work closely with the facilities team.

### Fabrication

TTX's modern facilities allow for a seamless connection between the design phase and fabrication phase. TTX fabricators are skilled craftsmen that pride themselves on creating products that stand out in the finishing industry and are known for reliability, durability and efficiency. TTX is equipped with the latest fabrication tools, enabling precise and superior workmanship.

### Project Management and Installation

An experienced project engineer oversees a job from design to installation. These engineers work closely with the designers, fabricators and the dedicated installation crew that brings a system to completion. TTX brings the expertise needed to every step of the operation and the customer can be assured that they will meet start-up requirements.

### Start up and testing

TTX believes in developing partnerships with its customers. After a system is installed, TTX ensures it is running smoothly, making adjustments to ensure that all system components will perform with peak efficiency. TTX also trains personnel, giving them the ability to better troubleshoot and maintain equipment. TTX staff is available by phone or email, and if necessary, will visit a plant to service the system.

### Field Service

TTX ensures the highest productivity rates for their customers. The TTX service department is quick to help with any problems that come up. Rapid response from highly trained in-house staff gives clients the security and support they need. Spare parts are available to be shipped at a moments notice.

# CORPORATE PROFILE: AKZO NOBEL WOOD COATINGS LTD.

Let our history improve your future. With more than 200 years of expertise with wood finishes, AkzoNobel has earned a reputation as the world's foremost expert in wood products and services. And, as part of the AkzoNobel worldwide network, we are able to combine our high level of service and technology with an even greater amount of expertise that can be drawn from our teams of chemists and color experts from around the world. Throughout our history, we have pioneered the latest technologies and delivered them with unrivaled service, always treating our customers as partners.

Choose from our complete line of stains, lacquers, catalyzed coatings, urethanes, polyesters, and UV-cured wood coatings through the channel that best suits your needs directly from our factory, or through extensively trained distributors who offer local service and delivery.

Your production line has unique requirements? Our field technicians and chemists will work together to customize our top-quality formulations for your existing finishing equipment, meeting or surpassing final product specifications while reducing your costs by improving efficiency.

## Explore our Website

www.akzonobel.com/wood to learn more about how AkzoNobel can solve your finishing challenges and help your business thrive. Don't hesitate to contact us with questions or requests. As your partner, our success depends upon yours.

## Environmental Concerns

AkzoNobel welcomes our role in helping to preserve our planet and currently are ranked #1 on the Dow Jones Sustainability Index. Beyond merely following the regulations governing manufacturing and our products, we strive to exceed the most stringent environmental standards without compromising the look, durability, or ease of use that distinguish our coatings.

We continue to drive and be the leader in "green" technology with a large percentage of our R & D time being spent coming up with new solutions to this growing requirement.

With the emergence of L.E.E.D. and GREENGUARD® driving the move to lower VOC and removal of formaldehyde we have complete systems to meet these finishing requirements with both conventional and UV cured technology. AkzoNobel has introduced the Airguard® line of products which are GREENGUARD® certified coatings. The Airguard® line of products includes both pre-catalyzed and post-catalyzed technologies.

We developed a full line of 275 VOC g/l coatings in anticipation of regulatory changes. Our carefully tested, fully compliant coatings will enable our customers to keep producing without delays when the stricter standards take effect. AkzoNobel offers creative, customized system changes to reduce your VOC tonnage.

Tell us about your environmental concerns. We've probably already solved them. If your dilemma is new to us, we will eagerly seek out the creative, economical solution that's best for you. We owe our success to such partnerships. Your challenges are our opportunities.

## Safety First

AkzoNobel takes the safety of our personnel as our top priority. We have successfully implemented several new safety programs in our facilities, which are monitored by the personnel on the shop floor as well as management at all facilities. AkzoNobel has re-engineered several pieces of equipment with the goal of a safe work environment for all AkzoNobel employees. AkzoNobel globally recognizes Safety Day's throughout the year with all of our employees continuing to take the following pledge "No one will be injured on my watch, in my work area, on my team, or in my location." This is "Every Employee's Responsibility"

## Distribution

The Chemcraft® Distribution brand continues to be the brand of choice throughout our strong distribution network. Chemcraft® distributors have factory trained staff to help you with all your finishing requirements and applications. This network allows our technology and local expertise to be available to all businesses. To find a distributor near you along with information and tools regarding the Chemcraft® brand products please use our distribution website.

**www.chemcraft.com**

## Facilities

We have manufacturing facilities across Canada to serve each geographical area.

**Akzo Nobel Wood Coatings Ltd.**
**Ontario**
155 Rose Glen Rd., N
Port Hope, ON
L1A 3Z3
Ph. 1-800-263-7951

**Quebec**
274, rue St-Louis #6
Warwick, PQ
J0A 1M0
Ph. 819-358-7500

**Winnipeg**
1450 Willson Place,
Winnipeg, MB
R3T 3N9
Ph. 204-452-7943

**www.akzonobel.com**

Chemcraft®
A Great Finish is Only the Beginning

## Pentco Industries Inc. speaks out about great products and great relationships

We traveled to Surrey, just outside of Vancouver, BC, Canada to talk with Pentco about why they like working with Chemcraft products and with their Chemcraft distributor, Omega Coatings.

Pentco Industries Inc. was founded in 1979 and is one of Western Canada's largest manufacturers and distributors of cabinet doors. They produce industry leading products for single/multi residential developments, and commercial and institutional projects.

"We do a lot of multi-family high rises," said John McNulty, one of Pentco's two owners, "You can't have inconsistent colors rolling through hundreds of units. That's when we started using Chemcraft."


"Every company has a good, better, best product. Chemcraft has the greatest - Chemlife 24."

**Chemlife® 24 Conversion Varnish**

"Chemlife 24 has great fill, you can use it as a self-seal and it has higher solids than most products out there." continued McNulty.

"It's a go-to product. Very user friendly and cost effective. Using this product, you can cut waste by up to 30%. Consistent. Sprays the same every time." said McNulty.

"Pentco is known for quality products. We have to feel confident that every cabinet door lives up to what we say it will. That's why we have to use good coatings - and that's why we have to have good support. We can't wait a 'couple of days' for someone to show up."

"Our Chemcraft distributor representative is in here all the time." McNulty said, "Having someone like Frank (Brams) to bounce problems off of and bring you solutions is key."

**Front, L to R:** Dallas McNulty - Manager, Pentco Industries. John McNulty - Owner, Pentco Industries. Sandra Filosof-Schipper - President, Omega Coatings. **Back, L to R:** Frank Brams - Sales Representative, Omega Coatings. Ian Jackson - Owner, Pentco Industries.

"We have sales reps in here constantly trying to get us to switch," said Dallas McNulty, Pentco's Manager. "So I asked one rep, how many changes of clothes do you have in your car? And he said to me, 'what are you talking about?' I said, 'Exactly!' Frank will stick his head in a machine and get dirty to insure our products are 100%, so he keeps a couple of changes of clothes in his car."

"That's the difference Omega and Chemcraft bring; you're buying insurance when you buy good coatings and work with good people."

Visit chemcraft.com to locate your nearest distributor.

AkzoNobel

## Company News

### A New Canadian Presence for TCI Powder Coatings

TCI Powder Coatings, Ellaville, Georgia, a division of RPM, one of the largest coating providers in the world, recently relocated and expanded its Canadian manufacturing plant to Burlington, ON.

"The new facility offers more space, brings us closer to the market, and allows us to bring distribution in-house to better serve our customers," says Dave Leek, Operations Director at TCI Canada. "The Burlington area is very central to our customer base and easy to get to from almost anywhere in the GTA (Greater Toronto Area)."

TCI Canada's new Burlington, ON, plant.

The new Canada Office and Manufacturing Plant is located at 1435 Norjohn Court Units 8 & 9, Burlington, ON, L7L 0E6; Phone: 905-464-2710; Fax: 905-464-9236.

For more than 25 years, TCI has been a premier powder coating supplier with a strong commitment to people, products, and service. TCI says it dedicates itself to developing superior powder coatings and providing unparalleled service, as recognized by many of their satisfied customers and full ISO 9001 certification.

The company says it is dedicated to the Canadian powder coating market and this investment is simply another illustration of that commitment. They say Canada is a great place to do business and bringing the same approach to the Canadian market place as they have in the USA has already proven beneficial to growing customer loyalty.

"We pride ourselves on high quality products, quick turnaround and unmatched technical support in the powder coating world. This approach has worked well for more than 25 years and we expect it to be the foundation for our growth in Canada," says Steve Houston, VP of Sales, Marketing and Business Expansion.

Beyond the expansion, TCI has also launched several new programs including the TruCoater Network for custom coater customers, a new chip program, rapid response program, a Customer


Paul Lissau racks 'em up.

Event which is scheduled for June 19-21 in Miami, Florida, a new and improved website with an online colour selector, and much more. Additionally, TCI recently introduced new specialty products and their new line of architectural powder coatings and touch-up aerosol paint.

In January 2014, TCI relocated and expanded its Technical Center in Jacksonville, Florida. This new facility will allow TCI to increase its capabilities for new product development, testing, as well as provide a training area when hosting powder coating seminars. TCI plans to host their own hands-on training seminar in Jacksonville during April 2014 as well as at the new Canada facility in August 2014.


Dan Felhouser with Xeon Test Chamber.

Founded in Ellaville, GA with a modest plant and a portable building that served as the lab and office, TCI has come a long way to become an international company with a staff of several hundred employees.

"We look forward to continue our efforts to keep TCI at the forefront of powder coating manufacturers," says Doug Greene, President TCI Powder Coatings.

www.tcipowder.com

Filtering System at TCI Canada.

Photos by Pete Wilkinson

## CORPORATE PROFILE: DORMER FINISHING SYSTEMS

Dormer Finishing Systems Ltd., celebrating its 30th anniversary in 2014 is a leader in the area of industrial and automotive finishing systems in Western Canada. Dormer Finishing Systems is a highly motivated team dedicated to providing the best products and services available in the industry.

### The Products

Dormer Finishing Systems provides quality products from the top manufacturers in the finishing systems industry. Whether it is spray booths, paint booths, systems for automotive or industrial finishing and much more. Dormer Finishing Systems supplier partners offer solutions for every Finisher's need.

### Booths

Dormer Finishing Systems supplies technically superior and high quality automotive and industrial finishing spray booths, prep stations and paint mixing room equipment. Manufactured by Global Finishing Solutions, specifically designed and priced for automotive and industrial finishing facilities of all sizes. Customers are offered many options, including an extensive equipment selection, computerized shop layout and planning, equipment installation, factory certified start-up, cost effective replacement filters, factory recommended semi-annual quality tune-ups and more.

### Spray Finishing Equipment

Dormer Finishing Systems provides finishing solutions for all types of wood, metal and plastic applications. These systems improve productivity, reduce paint usage costs, lower emissions and provide consistently better finishes.

### Powder Equipment

Gema is a pioneer in Powder Coating Technology and Color Change Solutions. We offer our customers the confidence and expertise that comes with being the industry's global leader. Equipment from Gema is durable, flexible and engineered to last. It provides increased performance, greater efficiency, and a better return on investment. Gema sets the industry standard for powder coating technology, developing the finest powder coating equipment available.

### Ovens

In today's marketplace, resources are limited, contracts are hard to come by and floor space is at a premium. That makes versatility a prime consideration when buying any equipment. Global Finishing Solutions is a leader in heat transfer technology and manufactures Batch Process Ovens that provide an economical solution for variety of industrial processes.

### Filters

Dormer Finishing Systems believes that by using quality filters and performing regular filter changes, you will not only cut down on your booth down time, but your quality of finish will increase. With this in mind, we are proud to offer a variety of filter installation programs. These ensure that your filters are being installed on a timely, regular basis, freeing you and your finishing staff from the responsibility of maintaining this important part of your spray operation. Additional advantages of our filter installation programs are that they allow you to budget your booth maintenance costs on an annual basis at additional savings, and by having a trained technician in your booth so they can spot trouble before it starts.

### Stack Cleaning

While most cleaning companies simply vacuum as far as they can reach into ducts, Dormer Finishing Systems specialists use manual entry to effectively reach and clean those hard to get areas. Where necessary, we may even cut access panels into hard-to-reach areas to assure you of the most thorough cleaning job possible. Our vacuum cleaners feature a double filtering system to maximize dirt removal. High efficiency HEPA vacuums may also be used where air quality is especially critical, such as in hospital environments.

### Service

At Dormer Finishing Systems Ltd., we feel that the sales process begins after the sale is made. With 30 years of customer service experience, we pride ourselves in being there for you long after your new equipment is installed and for future growth. It's our people working as a team that truly makes the difference. Our staff is constantly challenged to find solutions for the ever-changing needs of you, the customer. Our factory-trained technical staff uses the latest in technology to assist you in all areas of your daily operations from equipment to production issues. Our service package includes a one year warranty on all equipment and installation. Our employees are certified by Global Finishing Solutions, Graco, DeVilbiss, Binks, Gema, Fluid Management and Hero Products.

In the News

# OPCA Christmas

The Ontario Painting Contractors Association (OPCA) held its Annual Christmas holiday luncheon on December 4, 2013, at Paramount Conference and Event Venue in Woodbridge, ON.
CFCM magazine was there.

Photos by Pete Wilkinson

## CORPORATE PROFILE: ALBERDINGK BOLEY INC.

Alberdingk Boley is a global manufacturer of waterborne emulsions, polyurethane dispersions, water based UV dispersions, castor and linseed oil as well as modified polyols.

For over 180 years Alberdingk Boley has been providing innovative, sustainable and environment-friendly solutions to the coating industry.

The US manufacturing facility in Greensboro, NC, produces a variety of products including acrylics, styrene acrylic, epoxy acrylic hybrid emulsions, polyurethane dispersions and water based UV dispersions.

Alberdingk Boley's vision is to make a significant contribution to environmentally sustainable technological progress. We believe in being an innovative partner to our customers worldwide. We pride ourselves in being flexible, responsive and creative.

In addition to the company's core competency of the development of water-based products, Alberdingk Boley has invested in the development of eco-friendly characteristics of its products including zero and low VOC formulation capability, solvent and NMP free as well as renewable source PUDs.

Alberdingk Boley, Inc. offers a full line of waterborne emulsions and dispersions including:

- Acrylics and Styrene Acrylic Emulsions
- Polyurethane Dispersions
- UV Curable Dispersions
- Acrylic Polyurethane Hydrids
- Acrylic Epoxy Hybrids
- Castor oil polyols

Our water-based emulsions and dispersions are designed for coatings over a variety of substrates:

- Wood
- Concrete
- Plastic
- Metal
- Textiles
- Leather
- Paper

Visit www.AlberdingkUSA.com for further information.

**Product Showcase:**

**AC 3630** is a self-crosslinking emulsion suitable for high performance wood coatings. It has excellent in can clarity and wood warming characteristics. Other features include excellent scratch resistance, outstanding block resistance, fast drying and high chemical and stain resistance. It has good compatibility with polyurethanes and can be easily formulated for industrial furniture (clear and pigmented) coatings.

**U 9900** is a solvent free, self-crosslinking polyester based polyurethane dispersion that offers high quality performance for wood applications. It has high surface hardness and very good chemical resistance, also for pigmented formulations. It is also recommended for two pack wood floor coatings (cross linked with aziridine) with excellent performance that meets MFMA specifications.

**U 7800** is a solvent free, self-crosslinking polyester based polyurethane dispersion. It is recommended for low VOC (100 g/L) two pack flooring applications. Its features include very good chemical resistance, outstanding abrasion resistance and good wood warming properties.

**LUX 220** is a versatile solvent free, UV curable polyurethane dispersion recommended for high quality wood and PVC coatings, clears and pigmented. It has outstanding chemical and scratch resistance and a very high film hardness prior to UV cure. Its excellent cure response produces films with high crosslinking densities.









## CORPORATE PROFILE: ANDICOR SPECIALTY CHEMICALS

**Andicor was founded in 2002** on the strengths of its original supplier partners for the Coatings and Ink market in Canada, and has built on that strong foundation by adding complementary product lines that meet the needs of an increasingly demanding marketplace. Now entering its 12th year of operation, formulators can continue to count on Andicor for cost-effective products from world-leading suppliers that improve performance, meet regulatory or environmental challenges, and are available for immediate delivery from local warehouses across Canada.

Andicor is **BWAY Corporation's** only distributor in Canada able to offer their complete range of steel pails, plastic pails, and tin containers - from ¼ pint general line paint cans up to 15-gallon plastic open-head drums - from local inventory. Buy all your packaging needs from one location and save!

Bway's plastic hybrid cans are made with 70% post-consumer recycled resin and offer an alternative to tin containers for water-based paints, providing an attractive package while eliminating the potential for dents and rust.

**BYK CBA**, a leading manufacturer of both solvent and water-based rheological additives, offers a full range of OPTIFLO® VOC-free associative thickeners, including the recently launched APEO-free OPTIFLO H7500-VF for VAE binder systems.

**Huntsman Advanced Materials** is a world-leading producer of thermoset resins for the structural composite, adhesive, electronic, coating and construction markets. Huntsman offers Araldite® waterborne epoxy resins that can be used with a variety of Aradur® waterborne epoxy curing agents to formulate coatings with low VOC content and a wide range of end properties.

**OPC Polymers**, one of North America's leading producers of conventional alkyds and oil-modified urethanes, also offers a broad range of High Solids, Eco-Alkyd™ Exempt Solvent, and Water Reducible/Emulsion resins to meet VOC regulations.

**WPC Technologies Inc.** offers the innovative Wayncor® line of non-toxic corrosion inhibitive pigments, and the VOC-free Waynflash 111 for in-can rust protection and flash rust inhibition.

**RÜTGERS Group** specialty NOVARES® resins can be used as co-binders to increase solid content and reduce solvent content. NOVARES® modifiers can be used as a substitute for nonylphenol and benzyl alcohol, and RUETASOLV® DI, with its low viscosity and high boiling point can be used to substitute conventional solvents in epoxy and PUR systems.

**Cardinal Color** offers a complete line of earth-friendly colour dispersions that are VOC-free, APEO-free, phthalate-free, formaldehyde-free, and silicone-free. Perfect for any aqueous application, the ZVOC-line comes in 23 standard colours/concentrations (custom colour-matching is also available).

Please contact your local Andicor sales representative to learn more about these products and to order samples, or email us at info@andicor.com.

Andicor complies with CACD Responsible Distribution: 2008 Code and is also a member of CPCA (Canadian Paint & Coatings Association).

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**www.andicor.com**

*Continued from front cover*



Gema OptiFlex2 Box Unit

improve their process efficiency. For those choosing to invest in new powder coating equipment, the benefits can be very dramatic." He says, "It is important to know that many solutions are available. Whether the need is automatic powder guns incorporating better control of the powder spray, gun reciprocators enabling more consistent powder application, manual powder guns increasing penetration into Faraday regions, or increased production flexibility through faster color change, each of these options can produce a significant return on investment and improve a company's bottom-line performance."

**KCI America Co., Ltd.**, is a leading producer of electrostatic powder application systems with over 30 years of coating systems development. The K1 is the next generation of KCI systems providing up to100 kV of power, capable of spraying all powder and parts with ease. The complete series of K1 manual systems offer a variety of advanced coating features and options, including K-Pulse, a coating option that penetrates the toughest Faraday cages, reducing time and material consumption. The company says, K1 systems provide an unbeatable value, offering the right features for the right price.

KCI systems.

**Nordson** offers The Encore HD Powder Spray Gun, the next generation in HDLV (High Density Low Velocity) powder coating technology. Nordson are innovators who brought forth the first complete gun, pump and control system for dense-phase application. Improving at every turn, this fourth generation system features on-gun controls, allows easy adjustment of the powder concentration and spray velocity. This gives superior process control—going from a highly dense phase spray to a more diluted mixture, and everywhere in between. The new Encore HD manual gun offers superior transfer efficiency, spraying all powder materials with unsurpassed application speed.

Parker Ionics.

John Cole at **Parker Ionics** says, "Parker Ionics Mission Statement is to be a one stop resource for all powder application and recovery booth needs of our customers and prospects."

Parker Ionics has its roots as Onoda powder coating equipment first introduced in the USA is the late 1980's.

The Parker Ionics team of experts in

## CORPORATE PROFILE: NORTHSPEC CHEMICALS

In a highly competitive market where setting yourself apart from your competition can be a challenge, Northspec Chemicals Corp. continues to provide innovative, high performance, specialty chemical solutions to the Canadian Coatings, Graphic Arts, Floor Care, Composites, Adhesives, Plastics and Construction industries.

Northspec Chemicals Corp. represents many globally renowned, industry leading suppliers in these areas, including: Avebe, Arkema, Brilliant, Chromaflo Technologies, Dow Construction Chemicals, Dupont Canada, Eternal Chemicals, Evonik, IHT, JECO, Kukdo Chemicals, Momentive, Novant, Lapinus, Sachtleben and Wanhua as well as other complimentary manufacturers of additives, monomers, resins, pigments and other specialty products.

Northspec Chemicals Corp., known as one of the industry's strongest leaders in technical sales and commercialization capability, offers value-added solutions for both the current and future needs of their customers and supplier-partners alike.

With coast-to-coast logistics and sales coverage, Northspec Chemicals Corp. has a strong focus on providing the highest quality products available to meet and exceed the demands of the Canadian marketplace.

A company with the right attitude, Northspec Chemicals Corp. is a member of CACD, TRFA, and CSSA and adheres to the codes of Responsible Distribution, providing strong product stewardship and reliability.

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the US have extensive experience in the powder coating industry both in the knowledge of application equipment and booths. "This is backed up by a team of scientists in Japan who have extensive and broad knowledge of electrostatic powder application theory," says Cole.

The company recently added North American support operations for the MS international line of Very Fast Color Change (VFCC) booths. "The addition of this technology completes our product offerings in the booth arena and positions us as an industry leader in booth technology," says Cole.

"Once a powder coater experiences the advantage of our Pulse Power Advanced Powder Charging Technology they are 'hooked'," says Cole. "One simple setting provides optimal powder coating under all conditions."

**Wagner Industrial Solutions** offers its new ColorSelectX designed for the quickest powder color change while providing the least potential for cross contamination and powder loss. Wagner ColorSelect X incorporates a simple, robust pneumatic control system of up to 10 powder feed

WAGNER PEM-X1 and Manual Unit


systems including hopper fluidizing air, powder injector feed air, and dosage air. The operator control panel includes an intuitive selection dial and quick connect ports for up to 10 colors. The primary features and advantages of the new ColorSelect X include:

- Super-quick color changes, as fast as 20 seconds
- EPG-Sprint recipe control
- Quick connect ports for up to 10 colors
- Least potential for powder loss and cross-contamination
- Easy to maintain, and requires 5 simple steps to operate
- Lowest cost of ownership

The new PEM-X1 Manual Powder Gun from Wagner Industrial Solutions combines the latest in advanced

Encore HD manual combined gun+controller.


ergonomics with superior powder spray technology for improved operator comfort and efficiency.

- The primary features and advantages of our new PEM-X1 include:
- Lightweight design provides improved ergonomics with fingertip controls, excellent balance and low trigger force
- Simple trigger double-click allows for easy switching of spray recipes
- Quickly change powder amount with an on-the-gun remote control
- Get smooth, consistent coatings with one of the highest transfer efficiencies in the industry
- Make clean, fast and easy changes with quick-release couplings, nozzles and other accessories

PEM-X1 CG powder cup laboratory set available for small quantity production use.

Manufacturers of powder coating spray equipment offer a variety of products to suit every application from automatic powder guns, gun reciprocators and manual powder guns.

*Editor's Note: Manufacturers mentioned in this article can be reached at:*
*www.exel-na.com*
*www.kcispray.com*
*www.gema.us.com*
*www.nordson.com*
*www.parkerionics.com*
*www.wagnersystemsinc.com*

## CORPORATE PROFILE: PARKER IONICS



**"Parker Ionics provides the most technologically advanced powder coating equipment available on the world market"**

At the start of this brand new year, Parker Ionics of Westland, MI is proud to offer a complete line of powder coating equipment to manufacturers worldwide. Our comprehensive selection of products can satisfy the needs of any powder coating job requirements, and our service team has the knowledge to find a solution to any powder coating question. Our goal for 2014 is to be your company's total package of powder coating products and services.

Here is what we have to offer:

### Powder Coating products

**Customized spray booths:** Our booths are built to order, and designed to fit the specific requirements of each project. They are optimized for ease of use, and have several features that make adjustments and cleanup a breeze. From the simplest of small manual batch booths to the sophistication of our Very Fast Color Change Booths from MS International, we have a booth to fit every powder coating application and need.

**Handheld spray guns:** All of our spray guns come standard with our Pulse Power® technology, which increases transfer efficiency and delivers a consistent coat with every use.

**Complete powder coating units:** These units are designed to handle adjustments with ease, and make coating a variety of parts simpler than ever before.

**Powder hoppers:** Easy to use and very efficient.

**An assortment of nozzles:** Get the exact desired coating every time by finding the proper nozzle for each job.

We offer all of these extraordinary products for use in any manufacturing field, and we also provide services for every need when using our equipment.

### Services

**Audits and testing:** Our service team will test every aspect of a powder coating system and look for any minor adjustments that could improve the efficiency of the system.

**Training:** Individual and team training sessions are available for first-time system users or knowledgeable operators who wish to improve their skills and learn new techniques.

**Maintenance:** Of course, we are available to perform any necessary maintenance on a powder coating system.

**Parts and repair:** Any necessary part replacements or repairs can be performed by our service team.

The company's patented Pulse Power powder coating spray guns provide superior Faraday cage penetration, transfer efficiency, and finish quality with a single gun setting.

Manual Powder Coating Guns (GX131) Our lightweight manual powder coating gun's features include:

- Achieve high-quality coating through the use of Pulse Power, a High voltage/Low current charging method that minimizes free ions.
- Handling is easier due to their lightweight design and easy-to-hold gun grip.
- Negative charge is standard, but positive charge is available

**Standard Automatic Powder Coating Gun Allows Quick Color Changes**
One-touch air purge allows faster, easier clean up during powder coating color changes.

**Parker Ionics' guns apply powder better than any powder coating gun on the market.**
Their powder coating spray booths and application equipment provide superior air flow balancing and lighting; as well as provide superior filter life and noise profile. We have one of the quietest powder coating spray booths on the market.

The company's powder coating products help companies:

- Improve powder coating system operations
- Improve powder coat finishing quality
- Improve work environment
- Reduce maintenance labor and costs

Parker Ionics seeks to provide each client with the best possible powder coating experience. Call Parker Ionics today with any questions, or to get started on designing the perfect powder coating system for your needs!

## In the News

# The Canadian Paint and Coatings Association
# 100th Anniversary Conference

The first meeting of the Board of the Canadian Paint, Oil and Varnish Association was held at 3:00 p.m. on Friday, February 21, 1913 in the Chambers of the Canadian Manufacturers' Association in Toronto with 23 members joining before the next meeting of the Board.

Today the Canadian Paint and Coating Association (CPCA) represents paint manufacturers, suppliers and distributors with production and administrative staff in 261 establishments across Canada. This represents direct and indirect sales of approximately $6 billion annually and directly and indirectly employs approximately 32,800 people in Canada. There are more than 6000 retail outlets in Canada selling paint and coatings products, half of which are stores operated by our members, the paint and coatings manufacturers, (eg. Benjamin Moore, PPG, Sherwin-Williams, Beauti-Tone, Valspar). The other half are the big box stores and others stocked with recognized brands from CPCA member companies. In addition, there are more than 5,500 auto body paint and repair shops across the country. CPCA members directly supply the coatings required for original equipment manufacturers (OEM) in the automotive, aerospace, marine and industrial sectors. It is evident that the industry is relevant in every sector of the Canadian economy and a very visible industry.

CPCA addresses issues that would have been unheard of when the Association was

*continued on page 26*

Rideau Hall, Governor General's Residence.

Ed Thompson and Mike Morden in Gatineau Park.

Doug and Mary Parsons.

## CORPORATE PROFILE: YORKE TOWNE

A dedicated commitment to the relationship with both customers and suppliers, combined with long-term knowledgeable staff, has been the basis of an unrivaled four-decade success story for Yorke Towne Supplies Ltd.

On June 6, Yorke Towne achieves its 40th anniversary, a growth trajectory that Michael Harrison started in 1974 with a 2,000-square-foot location in Toronto and two employees. Today, Yorke Towne has 30 dedicated staff members and an impressive 37,000-square-foot facility in Richmond Hill.

Yorke Towne is a leader in the supply of coatings, finishing equipment and filtration solutions, working innovatively with customers and suppliers to meet the needs of industry.

The company distinguishes itself from other distributors who simply pick, pack and ship products. Staff members work diligently for the customer and with the support of manufacturers, providing extensive product knowledge and unique solutions to achieve customer needs. Whether the customer requires two-component paint finishing equipment, custom-size filters or a special lacquer to match an existing kitchen, Yorke Towne has the facilities and staff to get the job done.

When Michael opened Yorke Towne in 1974 he had a vision and determination that quickly outgrew that location and necessitated a move to a much larger facility in Scarborough. The company continued to grow dramatically, requiring expansion to a second facility to serve the needs of the industry. And in 2012, Yorke Towne moved into its state-of-the-art building, three times the size of the previous locations. Considerable opportunities for more efficient production and business expansion has been the result.

Michael explains that the additional space has allowed for growth of the company's custom colour tinting facility, which has five experienced full-time employees combining 125 years of unique knowledge and experience available to assist customers.

"The state-of-the-art tinting room is climate controlled and light corrected to provide an optimum colour matching facility," Michael explains.

"Stains are one of the most difficult products to match, and we have very experienced tinters, who are knowledgeable in directing customers on the proper application techniques to achieve the results they need."

"Solid-colour paint is matched by computers at our facility. All lacquers, stains and opaque coatings are custom matched by our tinters. Once the custom match has been achieved, we are able to reproduce these results by means of computerized dispensers, which give exact, reliable results." This reproduction is both computer and spectrometer analysed for accuracy.

Yorke Towne sells and services paint application equipment, designed to spray, meter, mix, filter, transfer and dispense fluids. Creation of Yorke Towne's new facility has resulted in expansion of the equipment service department, which is staffed by factory-trained personnel.

Yorke Towne provides industry with an extensive line of air and liquid filtration products, including spray booth filters and bag filters. When customers require a custom-sized filter to meet a specific need, the in-house filter manufacturing facility can custom-fabricate the filter to the exact specifications.

In addition to knowledgeable in-house customer service staff, Yorke Towne has 10 experienced outside sales representatives, who work closely with the customers to improve their process operations and provide expert guidance when requested. "When our customers are successful, we are proud to have helped them achieve their goals."

With a pledge to providing quality products and services, Yorke Towne implemented its Quality Program in 2004 and recently recertified its ISO 9001:2008 program.

Yorke Towne is committed to working with its suppliers to bring innovative products to the marketplace. The company's portfolio includes well-known brands such as Chemcraft, Rust-Oleum, Benjamin Moore, Graco, Binks, DeVilbiss, Iwata, Hosco, and Columbus Industries.

## SATA GmbH & Co. KG. and its Canadian Distributor Eurotech Spray Products Ltd.

With more than one hundred years of professional expertise, SATA has a rich history thriving through some of Europe's most detrimental economic eras. From its origin in 1907, as a small light-engineering firm, SATA has evolved into a modern and innovative manufacturing company.

In the beginning, SATA (then named "Sanitaria") manufactured medical equipment. Top quality engineering led to a continuously growing demand for the products and enabled the company to expand its operations. From the outset, quality and precision were the main driving factors behind the company's philosophy.

A chance meeting between the owner of the paint manufacturer "Lechler", and a director of Sanitaria, seeded the idea of the company we know today. They spoke about Henry Ford's mass production of cars in America and the use of air atomizing spray guns for the application of paint materials. After discussing the new "sprayable" paint, the two gentlemen concluded that all that was missing was equipment to apply this new material. The ideas from this original discussion quickly became reality, in 1925 the "Lechler" spray gun was launched, manufactured by SATA and distributed by Lechler. This was the first step on the route to success, SATA registered their first patent in 1926 and by 1931 the first range of spray guns were made available.

In 1954, SATA reached another milestone with the introduction of the SATA GR, with its ability to provide a wide fan pattern and consequently coat larger objects more quickly than ever before. The economic growth of the post-war years and the upturn in production of consumer goods, housing and motor vehicles, brought about an increased demand for paint spraying equipment in every industry along with an unprecedented upturn in quality requirements – which led to new paint technologies which could be perfectly applied with newly developed paint spray guns.

In 1981, the company then revolutionized the industry with the introduction of the first "SATAjet" technology: the now legendary high performance spray gun the SATAjet B. This specially designed gun met the requirements of the new materials being introduced to the market, and made the company a technological leader in the industry.

In 1984, SATA completed the SATAjet family with the launch of the SATAminijet. The SATAminijet offered a new aspect of the spray painting industry, with a gun that met a larger market niche, and the best finish results for small difficult to reach areas.

The continuous development process saw SATA lead the way in HVLP and RP technologies. The new atomization technologies have conquered the hearts of the painters who wished to work with increased profitability, but at the same time wanted to retain their favoured working methods. According to the motto "Two ways – one aim," our worldwide customers may now choose between two high-performance atomization systems, depending on their preferences.

Today, SATA builds what many regard as the finest Paint Spray Equipment globally. For nearly 90 years SATA has been developing paint spray guns, and thereafter, compressed air filters and supplied air respirators, all while meeting market demands the world over. Currently SATA is sold in over 100 countries, Canada included.

SATA works closely with major paint companies around the globe to produce paint spray equipment to meet the present and future needs of painters. Their products have been carefully researched and developed in close co-operation with these paint companies, so that the solutions to today's problems and tomorrow's challenges are already being met by SATA.

Currently, SATA produces over 3,300 parts and products, and employs more than 250 staff, five percent of which, are in research and development. As a result, SATA is one of the world leaders in the manufacturing of spray paint equipment, filtration technology and worker health protection systems. SATA maintains top class quality standards, state-of-the-art production facilities, continuous innovation and close co-operation with the paint industry, crafts and trades.

In 1958 Hans Lengsfeld emigrated from Germany to Alberta and started to work in the automotive industry. Starting out small and expanding, not only into car refinishing, but paint sales as well, Lengsfeld went in search of the very best in paint spray technology. In 1983 he returned to Germany and visited the SATA factory. Seeing the production processes and quality controls in place at SATA he quickly decided to become a Canadian importer of SATA spray equipment. At this time, the SATA trade name was relatively unknown to bodyshops in Canada. However, Lengsfeld was determined that such good quality products should not go un-noticed, so he contacted sales agencies in different provinces to start distributing the equipment through jobbers and warehouses. At the same time, efforts were made to contact all the paint companies and their affiliates. Programs were set up to make SATA spray equipment visible in all paint companies training facilities, while encouraging all instructors to learn and train with SATA products.

Distribution progressed at a rapid pace, so that in 1991, Eurotech Spray Products Ltd. was incorporated and from 1994 it became the exclusive importer and distributor for SATA Spray Equipment in Canada.

In 2002, Eurotech decided to move away from regionalized sales forces in favour of a national unified team. To accomplish this, Eurotech sought out the services of Caruk & Associates Ltd, an agency well known throughout all Canadian provinces, as sales representation in the PBE aftermarket. They were appointed as the exclusive sales agency with the assurance to provide uniform and consistently high quality service and sales support to all existing and potential customers throughout Canada.

Eurotech was founded with the sole purpose of providing the Canadian market with the very best in paint spray technology. As the exclusive Canadian importer and distributor of SATA equipment, Eurotech works closely with a mass of warehouses and distribution centres across Canada to encourage sales, and ensure our end-users are receiving the very best equipment, with the best support available.

In house – Eurotech's expert staff handle all facets of SATA training, technical, repair and warranty issues to provide the highest customer service and satisfaction. With numerous, large customers ranging from warehouses supplying the automotive industry sectors to well known manufacturers such as Toyota and Ford, Eurotech has easily found a prominent home in the Canadian Automotive Industry.

However, now, with a steadily growing product range from SATA, and higher market demands for a broader spectrum of coating needs, Eurotech is becoming an expert in the industrial markets. With a huge array of customizable pumps, from dual diaphragm, to air assist airless, pressure tanks, varying in size and power, and material delivery equipment from SATA, the Canadian industrial markets are becoming more and more reliant on Eurotech to supply their needs.

Partnered with SATA's extensive range of robotic and automatic spray equipment to gravity and pressure fed spray guns offering flawless finishes, Eurotech is able to supply nearly every imaginable market in the coatings, craft, fleet, and wood industry.

Eurotech has continuously cultivated and nurtured an effective liaison between SATA, the paint manufacturers, the sales agencies and the marketplace. Eurotech Spray Products Ltd. takes pride in distributing the best paint spray equipment available, along with its commitment to customer satisfaction and service. Canadian customers have come to rely on SATA equipment for consistent, high-quality, German Engineered, professional results, and Eurotech meets these needs on every level.

SATA

Eurotech Spray Products Ltd.

# In the News

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originally formed in 1913. From health and safety in the workplace to the management of waste such as leftover household paint; environment and sustainability issues now take center stage in everything the Association does. Paint manufacturers operating in Canada now lead the world in post-consumer paint recycling with a program in every Province that is a successful model of extended producer responsibility with end-of-life waste reduction for their products.

Sustainability in the industry has been achieved by working collaboratively with governments, especially Environment Canada and Health Canada, primarily through work on the Chemical Management Plan. This joint industry-government effort ensures chemicals are used by industry in a way that minimizes impacts on the consumer. In 2009 the paint and coatings industry collaborated with Environment Canada on new VOC regulations for architectural and automotive refinishing products. These regulations have led to drastic reductions in VOC emissions from paint and coatings products, with some at 100 percent. CPCA is pleased to say that it continues to work closely with federal officials on important sustainability initiatives.

A major initiative of which both government and industry are proud is the creation of the first industry-government working group to address issues under the Chemical Management Plan called the Paint and Coatings Working Group. This group continues to meet regularly and has become a model for other industry sectors.

The Association and the industry it represents have stepped up to meet the challenges. The industry continues to produce benefits for the consumer: reducing life cycle costs on major commercial projects; enhancing interior and exterior design; preserving the past for future generations; protecting valuable assets for all, while doing so in a sustainable manner.

Steve Wolinsky And Micheline Foucher.

Paul and Debbie Macko.

One thing has not changed in 100 years – the industry needs a strong voice to represent its interests and that voice is stronger when industry is together. That has truly been CPCA's legacy.

The Association met for its annual conference at the historic Fairmont Chateau Laurier in Ottawa. The conference took place over three days, from Oct. 20-22 and involved seceral activities for attendees including a tour of the Gatineau Hills and Governor General's residence, special presentations by federal government representatives and industry experts, presentation of industry achievement awards and a birthday celebration for the Association at the annual Chair's dinner and gala.

The conference also saw the election of new board members for the Association. The full board slate for 2013-14 are: Sharon Kelly (KelCoatings), Darrin Nobel (Home Hardware Beauti-Tone), Ed Thompson (LV Lomas Ltd.), Fred Veghelyi (OPC Polymers Canada), Andrew Buisson (Laurentide), Mike Klein (Dominion Colour Corporation), Harry Danjal (BASF Canada), Richard Tremblay (Benjamin Moore), Paul Macko (AkzoNobel), Ron Nakamura (PPG Canada), Tim Vogel (Cloverdale Paint), Any Doyle (American Coatings Accociation) Doug Crabb (Duha Group) and Brent Jamieson (Axalta Coatgs). Dale Constantinoff was re-appointed as Chair of the Association.

"The CPCA would like thank its Board members, past and present, all conference attendees, and its sponsors for contributing to the success of its 100th Anniversary.

"We are nothing without our members," CPCA President and CEO Gary LeRoux remarks, "While we work tirelessly to advocate for the industry, we are accomplishing more than ever due to the support and strength of our member base."

Doug Wright, Alberta Recycling Authority.

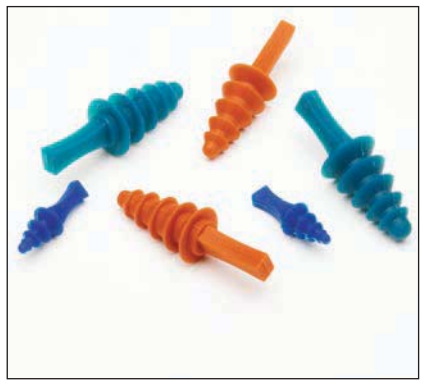
Gary Leroux, CPCA.

Mark Kurschner, Product Care.

## CORPORATE PROFILE: DAEMAR INC.

Daemar manages the sourcing and delivery of millions of essential components including the complete line of Caplugs masking and protective products to Canadian manufacturing and finishing industries. Our Caplugs inventory includes over 12,000 lines of standard parts - featuring caps and plugs developed specifically for masking applications and available in materials including: Silicone, EPDM, Flex 500 and Vinyl. Our tapes and standard die-cut discs are available in polyester, polyimide, glasscloth, crepe, aluminum and more. Do you require a unique shape, size, colour, material or processing requirement? Daemar's technical team along with Caplugs' in-house design engineers can develop custom moulded parts, custom die cuts and custom kits for specific applications. For hanging parts our line of hooks and modular racks is available.

For over 40 years Daemar has provided solutions for industry applications from high volume production lines requiring design assistance and supply chain management, down to a simple one off application requiring a single cap. Daemar's regional warehouse network with stocking facilities in Toronto, Montreal and Edmonton provide fast and efficient delivery of parts to customers throughout the country. Trust Daemar and our extended team's expertise to solve your masking challenges.



Brian Edwards, Terry Nason, and Terry Butryn.

Bob Fierheller, Steve Balmer, and Ron Nakamura.

Mercedita Biado and Judith Stevens.

Darrin Noble presents Dale Constantinoff CPCA Chair with the Roy Kennedy Outstanding Achievement Award.

Dick Glassford, Janice Trenholme, Mark Kurschner, and Andy Doyle.

Sharon Kelly, Jean-Marc Pigeon and Errol Bonnaventura.

Eric Bos, Tim and Julie Vogel.

Ian Lee, Sprott School of Business.

Martin Lavoie, Canadian Manufacturers and Exporters.

Jeff Heynen, Treasury Board of Canada.

Michael Girard, Standards Council of Canada.

Barry McLoughlin, Mcloughlin Media.

Greg Carreau, Environment Canada.

Astrid Telasco, Environment Canada.

## CORPORATE PROFILE: ElektroPhysik

### advancing with technology

ElektroPhysik is a leading manufacturer of coating thickness measuring instruments used for advancing surface technology, research and quality control.

ElektroPhysik maintains a branch office in the U.S.A. and is represented by distributors and agents globally in almost every country and market in the world. It is this network and partnerships that enable ElektroPhysik to service its customers and provide the support required in today's competitive global marketplace.

In addition, ElektroPhysik USA Inc. is the exclusive North American Agent for Sheen Instruments of England an Elektron Technology Ltd company.

Sheen Instruments Ltd. is a well respected manufacturer of viscosity testing products and devices, film application products, gloss and opacity testing devices and physical testing devices according to ASTM and International Standards.

To better serve the North American markets, ElektroPhysik maintains a North American website which is: www.ElektroPhysikUSA.com.

ElektroPhysik is well known for the MikroTest coating thickness gauges utilizing the magnetic attraction principle. This gauge has been called the 'banana gauge" because of its shape and is strictly for non-magnetic coatings applied over steel. The MikroTest is perhaps agreeably the most widely utilized coating thickness testing gauge in the world.

Other brands include the MiniTest, eXacto, and GalvanoTest which are electronic platforms for measuring coatings over both ferrous and non-ferrous substrates.

ElektroPhysik prides itself on its "sensor" technology, ElektroPhysik continually strives at advancing products in this area and recently developed SIDSP® digital sensor technology.

SIDSP® is an ElektroPhysik exclusive which took years of research and development. SIDSP® stands for Sensor Integrated Digital Signal Processing and the way that works is that entire coating thickness measurement is processed in the sensor at the point of measurement. SIDSP® is unlike previous conventional techniques where an analog signal is generated by the sensor and then sent to a host gauge to processing. The vulnerability with that technique has always been that the analog signal susceptible to environmental influences such as strong electro-magnetic fields and other signal disturbances that could affect the analog signal and therefore the reading.

SIDSP® is available in the MiniTest 700 Series as well as the new MiniTest 70 Series.

The future for ElektroPhysik holds many challenges driven by globalization and increasing demands in the marketplace by customers to achieve even higher levels of quality. There is no doubt ElektroPhysik will be able to stand up to these challenges as it always has. Driven by the passion for the pursuit of new technologies and implementing them where ever possible is why it is often said;

ElektroPhysik....advancing with technology.



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# Betting on Canada's Manufacturing Sector:

## FABTECH Canada 2014 Announces Expanded Show as North America's Most Reputable Industry Event Returns to Toronto

**DECISION BY NORTH AMERICA'S LARGEST METAL FORMING, FABRICATING, WELDING AND FINISHING EVENT TO INVEST IN CANADA A REFLECTION OF COUNTRY'S GROWTH FORECAST.**

The manufacturing industry was abuzz with anticipation following the announcement by FABTECH Canada that the show will be returning to Toronto in 2014, and now it is here.

"The decision to expand the show is based on the success of the 2012 premiere event, which was the first time the world-renowned FABTECH brand launched a show in Canada," said Janine Saperson, Show Manager with SME, which is hosting FABTECH Canada 2014 with other industry leaders FMA (The Fabricators & Manufacturers Association, Int'l), AWS (The American Welding Society), PMA (Precision Metalforming Association) and CCAI (Chemical Coaters Association International).

The only event of its kind in this country, FABTECH Canada – to take place from March 18 to 20, 2014, at the newly-renovated Toronto Congress Centre – is a one-stop, all-encompassing venue for the latest technologies and trends in fabricating, welding, metal forming, stamping, coating and finishing. With an unmatched reputation in the industry, FABTECH is the largest event in this sector in North America.

Included in the 2014 Canadian expansion is the addition of key industry partners PMA and CCAI, a larger conference and welding area, and brand new finishing and stamping pavilions, featuring a wide-range of exhibiting companies making a debut at the show along with extensive, interactive educational and networking opportunities.

"In Canada, there is growing demand for the technical expertise and industry insight provided by an event like FABTECH, which is evident by the fact that the exhibitor floor is already 80 percent sold," Saperson says. "In Ontario alone, there are 1.7 million manufacturing professionals – the largest amount of manufacturing employees of any jurisdiction in both Canada and the US – and the show is geared towards the needs of these employees, from industries such as automotive and energy to transportation and construction, as well as businesses that either produce or rely on equipment and machinery in their day-to-day operations."

"Canada is a key market in the metal forming, fabricating and welding industry and the introduction of a major finishing and coatings component to the Canadian show is a testament to the growth of this sector and the increased need for the latest finishing and coatings solutions and technologies that will benefit businesses in both this country and beyond," says Anne Goyer, Executive Director of CCAI.

Don't miss FABTECH Canada 2014 in Toronto at the Toronto Congress Centre March 18 - 20, 2014. Canada's Exclusive Metal Forming, Fabricating, Welding and Finishing Event launched in 2012 with overwhelming success, and returns in 2014 providing a unique platform for hundreds of suppliers and thousands of customers to come together under one roof and learn about new products and solutions, attend education sessions and network with industry peers.

New this year, FABTECH Canada will feature FINISHING technologies on the show floor as well as CCAI's popular FINISHING sessions as a part of the Education Program. See the descriptions below and go to www.fabtechcanada.com for more information and to register.

## CORPORATE PROFILE: CANLAK

### Over 30 years of evolution.

Since its inception in 1982, CanLak has grown to become one of the largest Canadian owned/based industrial coatings company in Canada.

Through their "Evolutionary Systems for the enhancement of woodworking", they have become an important partner to the woodworking industry. These systems confirm that CanLak is listening attentively to the needs of its customers. The development and start-up of a new product can be quite challenging. CanLak can help you reduce the risks and accelerate the process with its Evolutionary Partnership program, a unique approach in the woodworking industry.

The company headquarters in Daveluyville, Quebec, house the offices, factory, R&D lab and application lab. CanLak also has a significant presence in Ontario and Western Canada, with an office and distribution center in Mississauga, and strategically located distributors covering all of the Canadian provinces. The company sells and promotes its products with the help of a seasoned team of Technicians and Technical Reps and with its Distributors. The company employs over 100 people.

Its major markets are cabinet making, hardwood floorings, wood furniture and architectural woodworking.

### Expertise in Product Quality

Over the years, CanLak has developed a wide range of products that meet the industry's highest standards, and they are very proud of this.

With constant efforts in research and development, CanLak provides industrial finishing products including solvent-based, water-based and UV coatings that are low in VOC, as well as polyester and polyurethane products to meet your needs.

If you are facing some challenges, there is no need to worry; CanLak will specially develop the formula that corresponds precisely to your requirements.

The company invested 1.5 million in a new application lab and uses it to simulate the clients' line with the use of robot automation and spraying of UV, water based and solvent based products. This way, the use of products on customer lines can be fine-tuned before going on site reducing costly down times for their customers. CanLak also has a complete line of customized lab ovens that can reproduce any type of drying process. The parameters are programmed into the computer simulating exactly what happens at customers' plant. CanLak is also equipped with automated UV hardwood flooring machinery.

CanLak products are designed using the latest available technologies and customers are continually updated on new upcoming developments. CanLak prides itself at offering quality products and service that are second to none.

**Visit CanLak at www.canlak.com or contact us directly at 1-888-806-2366.**

**CanLak and Verinlegno of Italy have entered into a joint venture to provide the latest technologies to the Canadian Market.**

## CCAI 2014 FABTECH CANADA PROGRAM

**TUESDAY, MARCH 18**
**10:15 AM – 12:15 PM**

**Finishing Essentials: System Design Basics**
**Designing a New Finishing System: Where Do I Begin?**
Kevin Coursin, KMI Systems Inc.

Like anything else today, the amount of information at your fingertips can be overwhelming when you are starting a project like designing a new finishing system. This presentation will provide an outline of steps you can take to get the process started without feeling like you have information overload.

**Paint Booth Selection**
Rich Goelz, EISENMANN Corp.

A key decision in specifying a new paint system is the selection of the type of paint booth. Historically, the two options for the booth design were a dry filter or water wash scrubber. Generally, the decision on what technology was selected was based upon the volume of paint being applied and the transfer efficiency of the painting process. Once the paint overspray volume was beyond a certain threshold, water wash booths become more cost effective to operate. Recently, two other solutions have been introduced to the market. Both are dry separation technologies, one utilizes a limestone media and the second utilizes a new type of high capacity dry filters. The presentation will detail each of the technology options and highlight advantages and disadvantages for each.

**TUESDAY, MARCH 18**
**1:15 – 3:15 PM**

**Introduction to Electrocoating**
**Robert Ablamowicz, Axalta Coating Systems**

Chad Andreae, Therma-Tron-X, Inc.

Electrocoat is the process of using an electrical field to migrate charged colloidal particles onto an oppositely charged conductive electrode. It is highly efficient, and it has the ability to give uniform film thickness and to coat complex objects. Electrocoat systems are easy to automate and control, and the systems have operational robustness. We will review the two types of electrocoating processes, anodic and cathodic. We will also review both epoxy and acrylic based paints and their usage. Two coat systems can be used which offer protection from both paint systems. Variations of pigments and resins are used every day to coat many different items, improving their and durability.

**WEDNESDAY, MARCH 19**
**10:15 AM – 12:15 PM**

**Building Blocks of Powder Coating**
Larry Fenik, Nordson Corp., Robert Ablamowicz, Axalta Coating Systems; and John Sudges, Midwest Finishing Systems

Whether you are planning on converting from an existing liquid paint system, or getting into powder coating from scratch, there are essential elements, or building blocks, required to ensure your best chance of success. This presentation will discuss the building blocks of a well-designed, high-performing powder coating system, from pretreatment to powder application and recovery, to curing. This session will help you make the right choices for a system to best meet your needs.

**1:15 – 3:15 PM**
**Pretreatment Essentials**

**Why "Clean" is Important**
Suresh Patel, Chemetall US, Inc.

To increase the effectiveness of the finish, parts must be cleaned prior to coating. If the cleaner does not fulfill its purpose of removing unwanted soils from the substrate, subsequent processing steps will not produce a uniform conversion coating, and therefore inadequately protect the metal surface from corrosion. This paper will focus on different cleaning technologies (mechanical & chemical primarily) and issues specific to the parts cleaning industry. It will provide a foundation of critical terminology used to enable intelligent decisions in the selection, design, installation, and upgrade of a cleaning system. It will highlight topics including soils, substrates, cleaners, rinsing and drying, and the means to verify the cleaning and rinsing effectiveness.

**The Green Washer**
Dave Schimpff – DuBois Chemicals

Conventional cleaning and pretreatment systems have relied on materials, which have a questionable environmental impact and require a large carbon footprint. The industry has focused our improvement efforts on temperature and phosphate reduction. This isn't enough. Surfactants are in-use today, which can be formulated to emulate phosphates and reduce our dependence on highly alkaline base materials. Zirconium technology performs at near ambient temperatures without phosphates or regulated heavy metals. New sealer technologies enhance system performance like their predecessors, but without heavy metals of the past. Green washers are a reality today!

**Advanced Non-Phosphate Pretreatments**
Suresh Patel, Chemetall US, Inc.

Phosphorous and heavy metal discharge restrictions are becoming more widespread throughout North America. Non-phosphorous pretreatments produce no sludge, are simple to operate and waste treat, and save money. The latest generation has performance approaching or matching zinc phosphate. A brief overview of the various chemistries will be presented, followed by practical aspects and case studies of transitioning to advanced pretreatments in the manufacturing setting.

**1:15 – 3:15 PM**

**Efficient Curing with Infrared for the Finishing Industry**
Wayne Pettyjohn, Georgia Power; Mike Chapman, Vulcan Catalytic; John Podach, Fostoria Industries

This session will review the basics of IR including what it is, how it is produced and its characteristics. It will also review all equipment sources of infrared followed by a discussion of the wide variety of IR applications, which showcase the many ways in which IR can be utilized in today's industrial environment.

## FINISHING Exhibitors at FABTECH Canada (as of January 30, 2014)

| Exhibitor | Booth # |
|---|---|
| BEX Spray Nozzles | 2507 |
| Blastman Coatings | 1737 |
| Caps N Plugs | 2016 |
| Canadian Finishing and Coatings Magazine | |
| Colourific Coatings | 641, 1539 |
| Decora Powder Coatings | 1736 |
| Duroair Technologies | 1637 |
| Dynabrade | 1522 |
| Exel N.A. | 1816 |
| Fischer Technologies | 1443 |
| Gema | 155 |
| Global Finishing Solutions | 1227 |
| I.S.T. International Surface Technologies | 139 |
| Colourific Coatings | 1641 |
| Nilfisk | 2018 |
| Nordson | 1836, 1739 |
| Osborn | 2513 |
| Prism Powder Coatings | 1840 |
| Therma-Tron-X | 1830 |
| Tiger Vac International Inc. | 130 |
| Uni-Spray | 1843 |
| Vibrafinish | 2535 |
| Vulcan Catalytic Infrared Systems | 1439 |

Visit www.fabtechcanada.com for the most up-to-date list of exhibitors and more information.
**March 18-20, 2014**
**Toronto Congress Centre**
**650 Dixon Road Toronto, ON M9W 1J1**
**March 18: 10:00 AM – 6:00 PM**
**March 19: 10:00 AM – 6:00 PM**
**March 20: 10:00 AM – 4:00 PM**

# ENVIRONMENTAL Stripping Safety

All paint and coating stripping methods have an environmental impact.

Burn-Off Ovens have emissions. Chemical stripping has its potential volatile organic compounds (VOCs). There are also the abrasive methods such as media blasting, carbon dioxide/dry ice, ice crystal, high-pressure water and others. The latter are methods that could be deemed better for the environment, but they usually have slower stripping times and may require more elaborate equipment and therefore more labour time.

All stripped materials need to be recycled.

## CHEMICALS

With chemical paint stripping, customers want speed, simplicity, effectiveness and low cost according to manufacturers. Chlorinated solvents are heavily regulated for volatile organic compounds (VOCs) and hazardous air pollutants (HAPs). So more manufacturers have responded by going green with their stripping offerings.

The chemical products used must match the substrate. Selection of the appropriate process and product for stripping cured paints will be determined by:

1. What paint or coating must be removed?
2. From what substrate (metal) must the paint(s) be removed?
3. What equipment (tanks, availability of heat and agitation, ventilation, etc.) is available for the operation?
4. What special environmental or industrial hygiene restrictions are in place?

A chemical stripping mixture must remove paint and other finishes and also clean the underlying surface. The principal active ingredient is usually dichloromethane. Formulations with orange oil (or other terpene solvents), N-methylpyrrolidone, esters such as dibasic esters (often dimethyl esters of shorter dicarboxylic acids, sometimes aminated, for example, adipic acid or glutamic acid), aromatic hydrocarbons, dimethylformamide, and other solvents are used. The formula differs according to the type of paint and the character of the underlying surface. Nitromethane is another commonly used stripper. Dimethyl sulfoxide is a less toxic alternative used in some formulations. Various co-solvents are added to the primary active ingredient to help with penetration into the paint and its removal. Ethanol is suitable for shellac, methyl ethyl ketone is used for cellulose nitrate, and phenol and cresols are employed in some industrial formulas. Benzyl alcohol is used, as well.

Activators are used to increase the penetration rate; for dichloromethane, water is suitable; other choices are amines, strong acids or strong alkalines. The activator's role is to disrupt the molecular and intermolecular bonds in the paint film and assist with weakening it. Mineral acids are used for epoxy resins to hydrolyze their ether bonds. Alkaline activators are usually based on sodium hydroxide. Some cosolvents double as activators. Amine activators, alkalines weaker than inorganic hydroxides, are preferred when the substrate could be corroded by strong acids or bases.

Surfactants assist with wetting the surface, increasing the area of where the solvent can penetrate the paint layer. Anionic surfactants (e.g., dodecyl benzene sulfonate or sodium xylene sulfonate) are used for acidic formulas, cationic or non-ionic are suitable for alkaline formulas. Paint strippers containing surfactants are excellent brush cleaners.

Thickeners are used for thixotropic formulas to help the mixture form gel that adheres to vertical surfaces and to reduce the evaporation of the solvents, thus prolonging the time the solvent can penetrate the paint. Cellulose-based agents, such as hydroxypropyl cellulose, are commonly used for mixtures that are not extremely acidic because with acidity cellulose undergoes hydrolysis and loses effectiveness, so fumed silica is used for these instead. Another possibility is using waxes (usually paraffin wax or polyethylene or polypropylene derivates), or polyacrylate gels.

Corrosion inhibitors are added to the stripping formula to protect the underlying substrate and the storage container from corrosion. Sequestrants and chelating agents are used to 'disarm' metal ions present in the solution, which could otherwise reduce the efficiency of other components, and assist with cleaning stains, which often contain metal compounds. The most common sequestrants used in paint strippers are EDTA, tributyl phosphate, and sodium phosphate.

Colourants are added in order to make the substance look different from the competitors', and to make it easier to see where the stripper has been applied.

Customers are strongly encouraged to contact their chemical supplier for an on-site survey to determine the best approach for their needs. Usually some laboratory work is necessary to verify the chemical product selection and stripping parameters to achieve the expectations.

Colourants are added in order to make the substance look different from the competitors', and to make it easier to see where the stripper has been applied.

## LIGHT STRIPPING

One paint stripping technique uses intense pulses of light to vaporize the paint, a microlayer at a time. The repetition rate of the flashlamp, the intensity level of the light pulsed from the lamp, the pulse duration or width, and the spectral content of the lamp's light output all contibute to how fast the paint or coating is removed. A hybrid technique to flashlamp stripping can involve a robot crane that carries a lamp head and CO2 pellet blast spray head along with sensors on its arm. The flashlamp process removes and paint and the pellet wash completes the surface stripping. This method provides no physical contact with the treated surface and no chemicals or abrasive materials.

## OVENS

Damaging the hooks and racks through over-heating or the risk of them catching fire is a common concern when using this method. But heat-cleaning ovens have no exposure to toxic chemicals, no disposal of chemicals or contaminated sand/salt. They are also less labour intensive compared to other stripping methods. Oven manufacturers have stepped up to the plate and provide products that stop fires before they happen with things like top down heating and a grill system.

Temperature uniformity prevents warping and damage to larger hooks and racks. There is an ash to be removed after this type of stripping. Power spray, wiping or blasting can accomplish this.

Most oven manufacturers have engineers who work closely with the customer to ensure the oven meets all governmental emission guidelines. Ovens that control the afterburner temperature at the half-second point can meet the most stringent environmental requirements.

Design of the heat stripping system is important to curb operating costs. Labour and utilities, for example, can be minimized by racking the hangers so they can be stripped without unloading and reloading. The design should also minimize hot air going directly up the chimney.

All ovens must meet the inspections standards TSSA-CSA for gas, but many other safety features are important to allow controlled operation.

## METHODS

Hot caustic stripping is rather costly to operate and there are safety precautions needed due to very high temperatures. Replacement of the caustic is considered hazardous waste and has to be dealt with accordingly. Environmental approval is needed and will most likely require stack emission testing.

Induction heat is a process where the induction heat is used to soften the paint and brushes to strip the surface without emissions. This system would be most suitable were there is one style of rack. This is a simpler system than the caustic and does not require Ministry of the Environment or Gas approval, just electric. Operating cost is fairly high but should save money over time.

Although environmental concerns are a prominent trend when it comes to most stripping methods in industrial finishing, green stripping is still possible as manufacturers meet the challenges with high energy efficient ovens, environmentally friendlier, less toxic solvents and more.

# CANADA'S LEADING SUPPLIER OF COATINGS INSPECTION and TEST EQUIPMENT

Stone Tucker Instruments is celebrating its 10th anniversary of meeting the Canadian coatings industry's need for cutting-edge inspection and testing technology backed by world-class customer service and the expertise of NACE-certified staff.

Stone Tucker Instruments recognizes the importance of timely delivery in the fast-paced coatings industry. As DeFelsko's primary Canadian distributor, all standard product lines, and a wide variety of other items are in stock at all times. DeFelsko's full range of products, including the new PosiTector RTR Replica Tape Reader Gauge, and the new Positest Air Leak Tester can be found online at www.stone-tucker.com.

Stone Tucker Instruments is committed to researching cutting-edge industry technology to provide the best equipment available. With our dedication to this objective, Stone Tucker distributes the TQC line of field and laboratory instruments, including TQC Curve-X2 Oven Logger, the TQC Gloss Meter, and the Hull Roughness Meter. Stone Tucker also stocks Tinker & Rasor Holiday Testers and Spectroline UV Lights.

Stone Tucker distributes many of the world's finest inspection and testing equipment from key suppliers: DeFelsko, Dakota Ultrasonics, Testex, Chlor-Rid, Western Instruments, PCWI, Spectronics, Tinker Rasor, PCWI, Montipower, TQC, Micro- Metrics Rhopoint, MTP, Lascar and Gal Gage.

Coatings professionals will tell you that the key to good coatings application is proper surface preparation. Stone Tucker Instruments is the Canadian distributor for the MBX Bristle Blaster. Designed to clean rust and scale from industrial surfaces — including the ones that conventional sandblasting just can't touch — the Bristle Blaster leaves a surface condition comparable to an SSPC SP-10 near-white blast while generating an anchor profile between 2.5 and 3.3mil. The MBX Bristle Blaster is just one of the products recommended to ensure a quality coatings application every time.


Stone Tucker Instruments is committed to providing their customers with outstanding service, including instrument repair and calibration. Staff includes a NACE-certified coatings inspector with over 20 years' industry experience, and a NACE – trained technical sales representative with multi-disciplinary NDE field experience. All sales personnel have factory training on many products. The technical knowledge combined with the practical application experience ensures exceptional customer service and support for all of our instrument lines.

Stone Tucker Instruments has become Canada's premier supplier of quality control instruments and equipment because of their absolute commitment to their clients. To find out what Stone Tucker Instruments can do for you, call (905) 892-6142 or email info@stone-tucker.com. You can also view their full line of inspection and test products at www.stone-tucker.com.

# Ovens and Curing, The Final Step

The final step in the paint process is curing. It is important to have an overall understanding of oven system requirements.

The cure oven raises the product mass and coated material to a specified temperature and holds this temperature – typically, 25 to 35 minutes to achieve a minimum curing temperature for 20 minutes.

Some product configurations trap liquids and may require zoned ovens. The oven exhaust, if insufficient to handle volatile materials released during curing, can negatively impact the cure and final part appearance. The amount of volatile material also depends on the product being used.

The amount of exhaust and the type of heat source can affect product colour. Poor exhaust and gas-fired ovens typically cause coating colour to darken and/or yellow. The amount of colour drift varies with product type.

Prior to entering the cure oven, the product is cleaned, rinsed, dried, and coated.

Time spent in the oven is determined by the coating specifications. The coating suppliers specify the required time at a given temperature needed to thoroughly cure the coated product. However, line speed, product window size, hanging spacing and product weight/conveyor weight must be defined prior to designing a cure oven.

A convection oven has five major components:

- Oven enclosure (shell)
- Heater unit
- Supply air system
- Recirculated air system
- Exhaust air system

Oven Enclosure (shell) contains the environment necessary for the curing process, including a support structure; insulated panels (enclosure); and product openings/air seals. The oven support system should be designed to carry the enclosure weight and the product conveying system. Structural steel must be connected with slotted hole connections to allow for expansion.

Insulated Panels (enclosure) contains the heat of the process. Panels 30 to 33 inches wide with fiber insulation (one inch of four-lb. density insulation for every 100F) sandwiched between aluminized metal skins are used. The assembled panels are tongue-and-groove for easy installation. The outer skins are connected with formed metal channels. These channels form a through-metal condition, allowing significant heat loss at the joint. This panel joint can become too hot to touch, so the channel is slotted to reduce the area available for heat migration. This technique reduces joint temperature to less than 100 degrees F in a 450 degrees F oven, without losing the structural integrity of the channel.

Corners present another problem with panel construction. At the edges of the oven, panels do not fit tightly together and leakage can occurs. Void areas can be filled with loose insulation and the areas are jacketed with sheet metal flashing. This is not sufficient to stop the escape of cure products that condense and stain oven walls. Continuous gaskets must be used to create a proper seal along horizontal seams.

Personnel access must be provided. The door and hardware must seal the opening without using a positive latching device. Any panic hardware with positive latching features must allow the door to be opened from the inside. Locate access doors so that an exit is never more than 25 ft. away. Oven doors with windows are easier to locate.

Enclosure openings where products

## CORPORATE PROFILE: ESSENTRA

Essentra Components is a global business that manufactures and distributes millions of small but essential components. In January 2014 Essentra Components America was formed when three companies; Alliance, Reid Supply and Richco Inc. joined together.

Essentra, an abstract name, was specifically chosen to capture what our business manufactures and supplies. We provide components, which often play a critical enabling role in the products of customers. Our international network extends to 29 countries and includes 42 principal manufacturing facilities, 64 sales and distribution operations and 5 research/development centers.

Under the Alliance brand, Essentra Components Americas has been manufacturing and distributing high-temperature masking products for over 40 years. We stock more than 1,300 masking parts at locations in Toronto, Ontario and Edmonton, Alberta as well as regional distribution sites in the United States, Mexico, and Brazil.

Essentra Components Americas distribution centers have over one billion parts in stock and offer fast delivery via same day shipping. We also suggest customers "try before they buy" with free samples on most of our standard products.

### Essentra High Temperature Masking

Our complete high temperature product range includes masking caps and plugs, tubing, tapes, discs, and metal hooks. Multiple material options mean we have the exact product to fit your budget and product requirements.

Straight masking caps provide excellent sealing for studs and tube ends and can also be used as a plug when inverted. Plugs with first thread protection have an ergonomically-friendly pull tab and provide masking to the first thread of standard female threads. Masking caps and plugs are available in premium silicone (600°F), cost-effective EPDM (475°F), or recyclable paper (400°F).


We manufacture high temperature soft PVC vinyl caps and plugs (425°F) in over 375 different sizes. Vinyl pull caps are an economical solution for one-time uses and are also available with an ergonomic finger pull tab for easy removal.

Masking tapes and discs are available in several materials to withstand temperatures from 325°F to 500°F. Essentra green polyester tapes and discs are the industry standard for excellent heat and solvent resistance with no shrinkage and are available in width/diameter up to 6".

Essentra silicone tubing (600°F) is an excellent solution when parts are too long to be fully covered by standard caps. This versatile tubing is flexible to fit several size ranges, conforms to irregularities, masks through holes, and can be cut to length or cut long for an easy pull tab.

Cold drawn spring steel hooks come in 6 styles including 3 styles of square bar stock hooks. Our range of hooks holds up to 220 lbs. with designs to accommodate parts with varying thicknesses, maximum load bearing, and repeated usage.

For lower temperature curing or shipping protection Essentra Components supplies thousands of standard caps and plugs in nylon, polypropylene, and polyethylene. Shop all Essentra products online or request a free Master Catalog featuring over 1,000 pages of protection and finishing components.

Visit www.essentracomponents.com to place an order, request free samples or literature, and download free CAD drawings.

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> "Many heater units have filtration systems to continuously clean the oven environment."

enter and exit are designed using minimal clearance for the product and can cause concern. Bottom entry/exit designs make use of the natural sealing features of hot air and present no real problems. Openings in the sides of ovens require mechanical air seals to contain the environment.

To seal an opening, it is best to draw hot air from the oven and force it back into the opening. For this to work, a significant velocity must be developed at the center of the opening. Additionally, the oven must run negative relative to the production environment. These two requirements draw factory air into the oven. This pressurization is relieved by exhausting the enclosure, resulting in a considerable source of heat loss.

An alternative to traditional construction methods is an oven module. When the design allows for shipping, 20-ft-long completely assembled sections of the oven can be fabricated. This construction includes all-welded interiors that eliminate areas for dirt to collect; steel buried in the panels to reduce interior surface area; fewer joints with through metal for less heat loss; and speed and ease of assembly at the customer's factory. Despite the many positive features, these ovens are rarely practical because of their configuration.

Heater units. The second system at work in an oven is the heater unit. The heater generates the energy for curing and begins the distribution of energy. The most significant components of the heater are the burner, supply fan and filters. To properly size heater equipment, a detailed heat load must be calculated. Energy losses for the ware load, conveyor load, enclosure and exhaust requirements must be considered. These losses, expressed in Btu's/hr., are used for selecting the burn-



## CORPORATE PROFILE: JBC



JBC Limited is an international company, with 25 years of experience in the engineering and design of electroplating systems. During this time, we have provided cost effective and innovative equipment for surface finishers in the fields of anodizing (Type I, II and III), non-destructive testing, acid etching, metals passivation, hard chrome plating, electroless nickel, phosphating, e-coating, aqueous cleaning, ultrasonic cleaning, coinage, metals refining and decorative chrome. JBC offers turnkey solutions for a broad spectrum of processes involved in metal finishing of metals including waste water treatment, incoming water purification, water storage and distribution, ventilation systems, floor coating systems complete process operating systems and more.

A JBC process system is designed with an engineering approach utilizing over 30 years of electrochemistry experience. Our engineering team is comprised of individuals who have worked in the industries we service. This in-depth experience allows our team to anticipate customer concerns to ensure that systems come together and operate in a user-friendly fashion. A dedicated project manager will coordinate the engineering team efforts to ensure all customer equipment and process specifications are understood and addressed.

**Engineering services offered include:**

- Materials handling devices
- 3-D CAD drawings
- Piping schematics
- Copper buss bar drawings
- Fabrication drawings
- Factory plan layouts
- Factory floor flow drawings
- Control Panel layouts
- HMI screen operator display styles
- CAD electroplating simulation and feasibility studies
- Ventilation system drawings
- Water usage studies
- Energy usage studies
- Ergonomic work station design
- Pre-start safety reviews (PSR)

Our expertise in fabrication includes ability to work with most types of steels, titanium and plastics. We also offer sandblasting and coating services in either epoxy or powder type coatings. Installation services are provided for all aspects of electroplating equipment installations and process flow remodeling.

All of our turnkey systems are supplied with a comprehensive pre-start safety review and onsite training program to ensure the customers' personnel are fully trained in all aspects of equipment functions at point of line commissioning.

The customers need for DC power sources for many electroplating operations is provided through our rectifier division, North American Rectifier (NAR). Here we are able to design and fabricate DC rectifier units, both conventional and switchmode style that will meet the customers processing requirements. Our rectifier units have a proven history of stable trouble-free operation, regardless of duty cycle and their operating environment. Rectifier units are available for all electrofinishing needs, including units for electrowinning refining, waste sludge dewatering, electrodialysis, pH control, anodizing and hard chrome plating.

**The NAR team provides customer support in areas of:**

- Preventative maintenance
- Emergency service
- System upgrades
- Spare parts
- Conversions to other electroplating processes

For installations of rectifier systems, we offer engineering and installation of copper bussing and cabling. Where customers are looking to have operational control of rectifier units from central or multiple locations, we are able engineer and provide a PLC system with user- friendly HMI screens.

The JBC Limited team approach ensures that products sourced through us will be built with pride to the highest quality standard. Our mission is, "to provide our customers a cost effective well engineered processing system which meets all design and products requirements in an environmental sound manner."

er and corresponding electrical devices necessary for burner control. The burner is most often a direct-flame device that provides the energy for curing.

The heat load calculation also provides information for selecting an oven supply fan. The heat required to maintain good oven temperature is delivered by heating the supply air to no more than 100 degrees F above the oven operating temperature and distributing this air to the oven. The fan volume must be expanded for the elevated temperatures. The supply fan should turn over the oven volume about two times a minute. Because the fan is a constant volume device, the fan motor is sized for cold starts to avoid overloading. This provides an oven temperature profile better than plus or minus 10 degrees F throughout the enclosure.

Many heater units have filtration systems to continuously clean the oven environment. Filter efficiency varies with the application, but the types modified for the elevated temperatures used to filter final makeup are most effective. Filters require much lower velocities than in normal heater units. When filters are used, heater unit size must be increased. Oven filters continuously clean the air and, as a result, load very slowly. It is not necessary to prefilter high efficiency filters.

Sometimes the products of combustion are not compatible with the coating. In these cases, indirect-fired heater units are an option. These use air-to-air heat exchangers and may require one third more energy to operate.

Supply Air System. Another problem occurring when the products of the cure and combustion combine and come in contact with a direct flame is the production of NOx. When this becomes a problem, it is overcome by introducing large amounts of fresh air into the heater. This lowers the temperature of the flame-heated air to a point where NOx is not produced. This, like the indirect oven, is applied at a significant cost of energy.

Recirculated air systems. The recirculating system returns oven air to the heater unit so that energy is continually added to the oven. This is accomplished using the duct with the supply fan to create a negative pressure condition within the enclosure. The oven air naturally migrates to the areas of low pressure, where it is captured in the duct system and returned to the heater.

Recirculating duct is fabricated in much the same manner as the supply duct. The duct is designed for slightly lower velocities. The velocity in the duct is held at 2,000 fpm and openings are 20-25 per cent greater than the supply.

It is poor design to use the recirculating duct to provide control over the oven environment. The influence of suction pressure is negligible, even at short distances from the source. While air naturally moves to the areas of lower pressure, this movement cannot be easily controlled. It is better to place a small amount of recirculation in the hottest part of the oven and let the supply air do the work. This assures that the design requirements will be maintained.

Exhaust air system. Every oven must be exhausted. Exhausts create a negative environment so that air seals operate properly and remove VOCs and other cure products from the oven. Additionally, the exhaust purges the oven prior to start-up. The requirement for purge is to change the enclosure atmosphere four times in approximately 20 minutes prior to ignition.

The flexibility of convection curing keeps it popular with today's finishers, despite pressures to increase quality and reduce the space required for paint shops. A properly designed and installed convection oven requires little attention relative to pretreatment and application processes. It runs effectively with simple controls. It can be combined with other curing methods. Filtration or indirect firing can be added to improve quality. Because the exhaust can be controlled so well, abating oven gases is reasonably achieved. To conserve on factory space, ovens can be elevated, located outside or on building roofs.

The understanding of oven system requirements will lead to a successful implementation when the end user, coating and equipment suppliers work as partners in developing the oven curing system right for you.

## CORPORATE PROFILE: CHEMETALL

Chemetall has been developing, manufacturing and supplying state-of-the-art specialty chemical products since 1909. The ISO 9001 company offers a wide spectrum of products ranging from metalworking fluids, drawing & stamping compounds to cleaners, rust preventatives and surface treatment chemistries. Chemetall's integrated products, chemical management systems, process equipment, and technical service programs deliver efficient and cost effective solutions for industrial manufacturing needs. Expect more with Chemetall.

Chemetall is a world-class specialty chemical company and a global provider of chemical technologies based in Frankfurt/Main, Germany. In addition to the North American headquarters in New Providence, New Jersey, other locations in the Americas include Jackson, Michigan, La Mirada, California; Bramalea, Ontario; Jundiai, Sao Paulo, Brazil and Querétaro, México. Chemetall is a division of Rockwood Holdings Inc., a global specialty chemical and advanced material company trader on the New York Stock Exchange (ROC).

### Products

Chemetall's integrated products, chemical management systems, process equipment (dispensing, controlling, and monitoring), and service programs facilitate many processing needs. Our products are used in more than 30 industries, including aerospace, appliance, architectural, automotive, coil coating, cold forming, general industries and specialty markets including food, pharmaceuticals and pulp and paper to name a few. From time tested cleaners, iron, zinc and manganese phosphates to the latest in low temperature, chrome-free, and phosphate free technologies, Chemetall has the solution for your every need.

### "Green Technology"

As a World-Class supplier, Chemetall is concerned about the environment, our customers' process quality, and productivity. To this end we can provide "green" technologies in the following application areas:

- Low Temperature Cleaners and Conversion Coatings
- Non-Petroleum/No Oil Metalworking Fluids
- Advanced Pretreatments for Iron and Zinc Phosphate Replacements
- Low VOC Rust Preventives
- Non-Chrome Final Seals
- Non-Chrome Pretreatments for Hex Chromate Conversion Coating Replacements

Chemetall NAFTA is a member of the Chemetall GmbH Group, a renowned international corporation headquartered in Frankfurt/Main, Germany. Chemetall is a world-class specialty chemical company, with representation throughout the world.

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# CPCA Christmas

Always a fun tradition, the former members of the Toronto Society of Coatings Technology (TOSCOT) group, now part of the Canadian Paint and Coatings Association (CPCA) held its annual Christmas Luncheon on December 3, 2013.
It took place at the Il Porcellino Italian Restaurant in Mississauga, ON. Donations of new toys were accepted for the Chum Christmas Wish Foundation. Corporate Sponsors made sure guests had a nice take home gift. The event was well attended.

Photos by Pete Wilkinson














## CORPORATE PROFILE: ECHO ENGINEERING

### PROVIDING PEACE OF MIND

Since 1966, Echo has been providing world class companies with both standard and custom masking, hanging, OEM components and assemblies, as well as protection products. We have an extensive selection of materials available that meet various performance requirements. Our operations include multiple stocking locations, in-house converting, and extensive molding capabilities. These specialized operations – coupled with our team's design expertise, engineering ingenuity, and product development experience – guarantees that you receive fast, innovative, cost effective solutions that make sense for your business.

At Echo, we take the time to get to know our customers – to understand their processes and integrate ourselves into their business practices. We build true relationships and are able to provide value-added solutions to our customers time and time again. We are passionate about providing peace of mind to our partners, and in return they have rewarded us with a 97% retention rate.

### MASKING SOLUTIONS

For over 40 years Echo has specialized in high-temperature standard and custom masking solutions consisting of caps, plugs, pressure sensitive tapes, and die cuts. We've built a reputation for developing reliable, durable masking solutions that are easy to install and remove, color coded for easy identification, and designed for reusability.

### HANGING SOLUTIONS

Echo offers hundreds of standard hooks and specializes in hook and rack design. Our custom hanging solutions ensure you have the durability you need for every type of capacity and finishing operation. Custom hooks and racks increase productivity, reduce racking labor and provide better angles for coating.

### CUSTOM ENGINEERED SOLUTIONS

We have designed, engineered and manufactured thousands of value-added rubber and plastic components and assemblies within countless industries. Partnering with our customers has allowed us to provide OEM solutions that improve product reliability, shorten time-to-market cycles, reduce warranty costs, and provide better all-around products.

### PRODUCT PROTECTION SOLUTIONS

At Echo, we recognize the importance of protecting products during shipping, manufacturing, while in storage, and in transit to your customers. That's why we have developed thousands of standard plugs, threaded plugs, caps, and netting to protect products from damage debris, and moisture within a variety of industries.

### THE ECHO WAY

We want to change your expectations – we are problem solvers, team players and outside-of-the-box thinkers. That's why we take the time to understand your business and make recommendations to provide the best solutions. We care about your business as much as you do. You can expect that. . . because that's The Echo Way.

Whether you need a standard stock component or one that is custom designed, we are equipped and ready to provide what you need – fast. Echo does more than just provide parts to cover and opening or provide appropriate racking. Our high-quality solutions have helped companies increase line output, reduce labor costs, enhance efficiency and a number of other bottom line tangibles that provide real value and create peace of mind for our customers.

Call us today at 888-echo-365 or email us at info@echosupply.com to ask us about The Echo Way!

Echo Engineering and Production Supplies, Inc.
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# OPCA

## Annual Conference at the Falls

The Ontario Painting Contractors Association (OPCA) celebrated its 38th year of operation hosting Ontario's architectural painting and protective coating contractors and their families at the OPCA's annual conference held at Sheraton on the Falls Hotel from Friday, January 31, 2014 through Sunday February 2, 2014. Contractor Members heard from compelling speakers as Rishi Sondhi, Ontario Construction S ecretariat, www.iciconstruction.com, Doug Paolini, Office of Employer Adviser, www.employeradviser.ca, Steve Ness, Surety Association of Canada, www.surety-canada.com, and Andrew Pigott, The Succession Bridge, www.TheSuccessionBridge.com. For over 35 years, the Ontario Painting Contractors Association has fostered collaboration to achieve success in advocacy, education, industry standards and labour relations. The OPCA welcomes interest and participation on all issues that impact the architectural and decorative paint and protective coating contractor. For further information, contact Andrew Sefton at (416) 498-1897 or (800) 461-3630 or by email at andrew.sefton @opcatrusted.ca.

Adrian Day, Rescom Coatings Inc., talks to Andrew Pigott, The Succession Bridge.

Steve Ness, Surety Association of Canada.

Dan Orrett, Harrison Muir Inc. and Tony Fantin, Paintology Inc.

Photos By Sandra L. Anderson

DeFelsko Corporation, a leading U.S. manufacturer of coating thickness gages and inspection instruments, offers a variety of instruments designed specifically to meet the coating industry's needs.

The PosiTector body accepts all coating thickness (6000/200), surface profile (RTR/SPG), environmental (DPM), and ultrasonic wall thickness (UTG) probes. This innovation allows quick and easy conversion from a coating thickness gage, surface profile gage, dew point meter or ultrasonic wall thickness probe with a simple probe change.

## Coating Thickness

The latest gages accept all PosiTector 6000 and PosiTector 200 coating thickness probes — ferrous, non-ferrous and combination for measuring on metals and even ultrasonic probes for measuring on non-metals.

The PosiTector 6000 coating thickness gage measures coating on all metals

The PosiTector 200 ultrasonic coating thickness gage measures coating thickness on non-metals including wood, concrete, plastic and more. New features include a polyurea probe for measuring thick-film coatings up to 300 mils.

## Surface Profile

Measure peak-to-valley surface profile height with the PosiTector SPG, digital surface profile gage, or our new PosiTector RTR Replica Tape Reader.

## Environmental

The PosiTector DPM Dew Point Meter measures and records climatic conditions including relative humidity, air temperature, surface temperature, dew point temperature and the difference between surface and dew point temperatures. Choose from built-in or separate probe styles.

## Ultrasonic Wall Thickness

The PosiTector UTG Ultrasonic Thickness Gage is ideal for measuring the wall thickness of materials such as steel, plastic and more. Choose from Corrosion probe or Multiple Echo thru-paint probe for measuring the metal thickness of a painted structure without having to remove the coating.

Each probe retains its own unique calibration information allowing for full probe interchangeability. Long form certificates of calibration are included with each probe.

Available as either Standard or Advanced, all models feature built-in memory, onscreen statistics and PosiSoft USB drive. Advanced models also include color LCD, onscreen graphing and more.

## PosiTector probe interchangeability just got better

New features include Hot Swap – the ability to change probes without powering down the instrument, probe settings retention - PosiTector bodies remember the stored settings of each probe that was attached making for easy probe swapping, and Additional memory capacity – standard models could previously store a total of 250 readings for a single probe. Now they store 250 measurements for each probe (one batch per probe) eliminating the need to download measurements between probe changes.

These features are included with all new PosiTector gages without a price increase or any additional charges. PosiTector bodies manufactured after April 2011 with serial numbers greater than 700,000 support the new features as well. Simply update your existing PosiTector body for free by following step by step instructions at www.defelsko.com/update .


The PosiTector RTR Replica Tape Reader, a new digital spring micrometer, measures peak-to-valley surface profile height using TestexTM Press-O-FilmTM Replica Tape.

The replica tape method for measuring surface profile is widely used and accepted. It is simple, rugged and has good repeatability with relatively low startup cost. However, conventional micrometer measurements of tape are least accurate at the outer ends of each tape's range and that is why two tape grade measurements are often averaged.

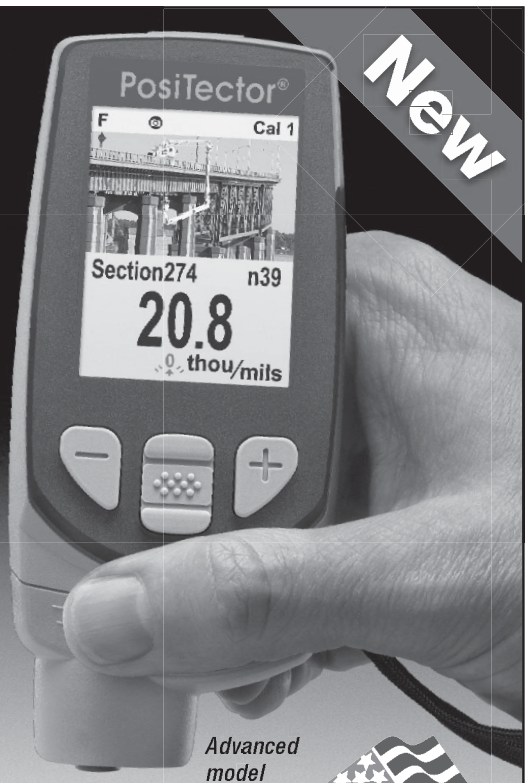
The PosiTector RTR measures with improved accuracy over conventional micrometers because it adjusts for tape non-linearity. Advantages include the retention of a digital record and a reduction in measurement uncertainty, inspector workload, the likelihood of error and the number of replicas needed to assure accuracy.

The PosiTector RTR conforms to all major international standards including ASTM D4417, SSPC-PA 17, NACE RP0287, ISO 8503-5 and others.









# Diversity in Specialty Powder Coating Solutions

**Powder coatings** are an environmentally friendly coating solution offering superior performance for applications that require maximum abrasion resistance and hardness. As with any industry, diversity in product and changing to meet customer demands is what is leading to new developments in specialty powder coatings.

A variety of specialty powder coatings are on the market that provide superior finish quality, a range of gloss and color options and excellent durability for many challenging applications.

Low cure coatings can help cut production costs. Special electrostatic discharge (ESD) coatings protect sensitive electronic components and antimicrobial coatings discourage the growth of microorganisms.

Other types of specialty powder coatings offered by manufacturers include textures, metallics, visual effects, two tones, fast curing, anti-graffiti and chemically resistant coatings. Customers are also demanding a wide range of colours.

## TEXTURES

Powder coatings with special textures are becoming increasingly popular, according to manufacturers, especially in the consumer electronics market. Soft scratch resistant coatings offered in stain resistant light colours are an example of this.

## METALLIC EFFECTS

Metal effects coatings are virtually indistinguishable from real metal, and can be used in several applications. They adhere to plastic substrates, and have the durability to stand up to the wear and tear.

Metallic effect powder coatings include mica and aluminum metallics, and unique special effect powder coatings. Customers are demanding Metallic powder coatings that exceed demanding specifications, and provide consistency.

## VISUAL

Visual effects can include the illusion of looking into a hologram. There the powder coating technology manipulates particles in the paint to achieve the effects. There are also laser etch coatings, where intricate designs can be etched into coatings applied to plastic substrates, so light can pass through them. Most often, they are used by the automotive industry on backlit dashboards, but they can also be used in consumer electronics and lifestyle applications. By varying the depth of the etching process, it is even possible to create a range of colors.

## ANTI-GRAFFITI

ERIE Powder Coatings offers its next generation Hybrid "HG" Anti-Graffiti product line, which joins their successful J-Series Urethane, epoxy and acrylic Anti-Graffiti product lines. Erie listens to their customers and have made significant improvements in the anti-graffiti properties, but also in application of the product. Erie's hybrid technology is clean and safe.

This line cures as fast as most fast-cure hybrid systems. It has no hazardous cure ingredients in the product, or emitted in the oven.

These anti-graffiti products allow the removal of spray paint, lipstick, or indelible marker.

PPG Industries' industrial coatings business has introduced DURANAR GR (graffiti-resistant) and CORAFLON GR coatings. Duranar GR and Coraflon GR coatings feature a clear, graffiti-resistant barrier over the pigmented color layer of the coating. If the coating is spray-painted or otherwise marred, it can be cleaned by applying DURAPREP Prep 400 graffiti remover by PPG. After the solution has been allowed to dwell on the stain for 10 to 60 seconds, it can be wiped with a clean cloth or scrubbed with a nylon brush. Most stains can be removed in 10 minutes or less. When applied on either Duranar GR or Coraflon GR clear coatings, Duraprep Prep 400 field-applied graffiti remover eradicates graffiti as well as paint overspray, pen and marker ink, lipstick, scuff marks, tape residue, bugs, tar and many other substances that mar the appearance of commercial buildings.

## CORPORATE PROFILE: ECE

ECE Canada Limited, one of Canada's pioneers in finishing equipment distribution was founded in 1982 to distribute Electrostatic Coating Equipment and Associated Products. Recently acquired by its own management team, ECE continues to expand their product offering and capabilities to include all aspects of the finishing process. ECE is a recognized leader in the industry that prides itself on providing top quality sales and service to the Automotive Industry, Tier One Suppliers and General Industrial sectors. Their Technical Application Specialists, located across Canada, have years of experience in many different facets of finishing including Metal, Wood, Plastic, Rubber and Fibreglass. Working close with Coating Manufactures ensures good synergy between application equipment and coatings.

ECE designs and installs a variety of Coating Application Systems including Electrostatic Guns and Bells, various Conventional Spray technologies, Robotic Applicator Cleaners, 1K and 2K Fluid Metering and Control, 1K and 2K Gear Pump Delivery Systems, Reciprocators and Gun Movers, Liquid and Powder Spray Booths, Air Make-Up Units, Paint Kitchens, Ground Checking Systems, Batch and Infra-Red Ovens.

The Manufacturers we represent are World Leaders in the Industry and lead the way in innovation and technology. From simple hand held Conventional and Electrostatic hand guns to Automatic and Robotic Applicators for both Liquid and Powder.

ECE is also a leader in Paint Supply Systems. From Pressure Tanks, Pneumatic and Electric Piston Pumps to fully Engineered Paint Circulation Systems we can get your paint to the point of application in various ways including the growing industry standard of Piggable Supply Systems.

Our Sales and Engineering Teams work with customers to develop a process that meets their specific requirements. Each project is staged through a process of client consultation that includes design and integration of standard product with customization as needed to fit the application.

Our objective is to supply innovative products that meet our customer's requirements. ECE strives to achieve the highest efficiency possible by saving application time, reducing coating consumption and producing the fastest ROI possible. Our systems are designed to perform for years with minimal maintenance costs.

We maintain an extensive inventory of Equipment and Spare Parts for all the manufacturers we represent. This allows for fast and efficient delivery that our customers can rely on. Our inventory control system tracks trending and adjusts inventory levels as needed to best suit our customer's needs.

ECE has a full service Repair Facility with Factory Trained and Certified Service Technicians that are capable of repairing/rebuilding and testing all of the equipment we market. We are also an Approved Warranty Centre for many of the companies we represent which eliminates equipment down time as we can perform the warranty repair without having to send product back to the manufacturer.

Our Application Lab, with overhead conveyor can simulate various production environments when performing equipment demonstrations for customers. Our Technical Application Specialists can also perform on-site trials with a host of portable demonstration equipment. This way the customer can see the performance within their own facility. For more elaborate applications we encourage utilization of our Manufacturer's Test Labs, fully equipped with the latest technology.

ECE is headquartered in Mississauga, ON with branches in Montreal, QC and Vancouver, BC. We are committed to providing our customers with outstanding Sales and Service

You can view our complete line of products and services at www.ececanada.com or e-mail us at info@ececanada.com

## CHEMICALLY RESISTANT

Epoxy powder coatings are an ideal choice for applications requiring corrosion resistance, excellent chemical and mechanical properties, exceptional adhesion and the ability to meet demanding specifications.

Polyurethane powder coatings combine outstanding thin-film appearance and toughness with excellent weather resistance. They demonstrate superior chip, mar and scuff resistance and they are highly resistant to humidity and salt spray.

Acrylic powder coatings provide high performance finishes with outstanding weather resistance, ranging from thin film clear coats to very smooth, high gloss colours, making them ideal for outdoor applications.

Erie Powder Coatings Inc., for example, manufactures thermoset powder coatings for the industrial decorative and functional markets including:

- Epoxy
- Epoxy-polyester Hybrids
- Polyester TGIC
- Polyester TGIC-Free
- Acrylic hybrids
- Urethanes

Axalta Coating Systems offers specialty powder coating solutions formulated to meet the modern decorative and performance demands. .

Available in a stunning variety of colours, shades, effects and textures, Alesta Coating solutions create design freedom without compromising strong functional properties such as weathering and impact resistance. Easy and efficient to apply, they are ecologically friendly and durable. Once thought impossible, today Axalta Coating Systems can even replicate anodic finishes.

The Alesta Colour Collection includes:
**The Fine Textured Collection:** 80 RAL colours (20 displayed) with fine textured finishes fulfilling all architecture requirements and providing premium levels of aesthetics and functional performance.
**The Classic Collection:** A collection of 12 sophisticated bonded metallic greys. Qualicoat and GSB approved.
**The Mineral Collection:** A collection of mineral finishes with a highly-designed colour portfolio. Qualicoat and GSB approved.
**The Best of Collection**: 22 designed colours with different textures and colours. Qualicoat and GSB approved.
**The Anodic Collection:** Seven finishes matching chemical anodisation. Qualicoat and GSB approved.
**The Industrial Collection:** A variety of colour and finishes with good outdoor durability specifically designed for industrial purposes.
**The Inside Collection:** A range of colours and textures grouped into four special categories: Rustic, Organic, Neo Lux and Fusion.
**The Crazy Colours Collection:** The Crazy Colours Collection provides outstanding colourful looks and functional performance in a range of 12 RAL colours in 4 different gloss grades/textures.
**The Architects Edition:** The selection of 16 Super Durable classy colours "The Architects Edition" has been selected in close cooperation with international Architects across Europe.
**The Black & White Collection:** A remarkable selection of 16 white and 19 black colours made of Alesta EP – epoxy polyester, Alesta IP – industrial polyester and Alesta AP – architectural polyester powder.

With their research and development manufacturers are exploring advanced coatings ideas such as ways to simplify applications, to cut energy costs, to use new materials and new application protocols, to make paints that are ever more durable, or that deliver functionality extending beyond aesthetics and protection. Powder Coatings that feel different, that clean themselves, or that repel water as well as Anti-glare and anti-streak and anti-fingerprint coatings. Self-healing coatings for automotive applications.

Customers have very specific requirements that cannot be satisfied with off-the-shelf solutions and are looking for special colors, special effects, and textures that will differentiate their products from the competition. Manufactures are following suit with product solutions for every need.

## CORPORATE PROFILE: BUCKMAN CANADA



Buckman Canada was established in 1948 as a sales and distribution company providing industrial microbicides for many applications. Buckman has continued to grow with a market-driven strategy that emphasizes meeting the customer's needs both with innovative products and application technology. This also meets today's demanding regulatory and environmental requirements. We focus on solving customer's problems by listening to their issues and responding with measurable, cost effective products and services. Our business units include pulp and paper, water treatment, leather and performance chemicals which, among many other industries, also includes paint and coatings.

### Fire Retardants

The Flamebloc GS series of fire retardants are clear, water-based and contain little or no VOC designed to meet industry needs for greener, safer fire retardant technology. We also market halogen and non-halogen products for smoke reduction and flame prevention. Our increased focus on fire retardants and smoke suppression have resulted in more diverse offerings in our product portfolio.

### Coatings and Plastics

Buckman's coatings and plastics program started in 1951 with Busan 11M1, a fungicide used to control mould on painted surfaces. Since that time our comprehensive product portfolio has grown to include both standard and engineered additives for extra protection of formulated products such as corrosion inhibitors, mould inhibitors, wood preservatives, flash rust inhibitors, UV light stabilizers, dispersants, flocculants, heavy metal precipitants, defoamers and specialty products.

### It's not just about being sustainable. It's about being accountable.

At Buckman we are serious about sustainability, and we know our customers are too. That's why we believe in sustainability reporting by meticulously measuring how our operations affect others and the planet as a whole. It's why we strive to be transparent about our sustainability goals and our progress toward meeting them.

Sustainability is measured in all kinds of ways. In the energy we save and the water we conserve, of course. But also in how we touch others. And in how financially responsible we are as an employer, manufacturer and service provider. So we set goals and assess our progress in six key areas: economics, the environment, labour, human rights, society and product responsibility.

For more information please visit the Performance Chemicals page of our website Buckman.com

# WMS in Toronto A Success

The 2013 Woodworking Machinery & Supply Expo completed its successful three-day run Saturday, Oct. 24, at the International Centre.

Canada's largest woodworking event brought together more than 5,200 industry professionals, including approximately 4,000 attendees. Buyer attendance was up more than 5 per cent from WMS 2011 and about 15 per cent from WMS 2009.

For three days, WMS 2013 transformed the International Centre into a professional woodworker's paradise. The show featured a wide array of woodworking machines, cutting tools, software, cabinet and furniture hardware, board products, etc. manufactured by more than 250 companies around the world. The number of exhibitors and exhibit space were each up about 20 per cent from WMS 2011.

The vast majority of exhibitors expressed pleasure with both the quantity and quality of buyers that came to their booths.

"We are pleased with the positive customer feedback and the amount of visitors," (who came to our booth), says Nadja Mann, recently appointed president of GRASS Canada Inc. "We would like to thank everyone who visited us."

"The show was very upbeat reflecting an improved wood products market," says Steve Reiss, vice president of Vance Communications Canada, owner of WMS. "We talked to numerous machinery exhibitors who said they racked up many good leads, including some who sold machines on the show floor. I think the show reflected continuing improvements in the North American economy and fresh willingness of wood products companies to invest in their plants."

WMS 2013 was preceded by the Wood Tech Summit Leadership Conference, held Oct. 23 at the Four Points By Sheraton by the Toronto International Airport. The conference, organized by the Centre for Advanced Wood Processing and Woodworking Network featured presentations by some of the best and brightest minds of the Canadian wood products industry. The full-day program featured discussions on green finishing, RFID inventory systems, robotic work cells, setting up a factory in China, participating in a wood cluster and more.

The next edition of the Woodworking Machinery & Supply Expo will take place in October 2015.

Glenn Widdifield and Brad Wilson, Servair.

Theresa Levesley, Mark Levesley, ICA, and Andrew Beyer, Andrew Beyer Carpentry.


Bob McKenna, Regan Murray, ST Rajan, Jean Murray , Michel Bresolin, Doug LeRoux.


Dan Martens, Adam Liboiron, Paul Sanderson, Jean-Marc Lavoie, Eric Vaillancourt, Eric Bertelsen, and Normand Guindon of CanLak.


Dino De Lillis, Ron Bryze and Lenny Nunno of ProGlo Paints.


Caroline Castrucci, Laurysen Kitchens and Andrew Scott, Venjakob.


Adam Stephen, Leopoldo Migoto, and Denny Stephen.


Nicholas Markus, John Miller, and Darren Armstrong, Sherwin Williams.


Jeff Hendrey, Gemini Coatings.

Ross Ganchev, George Tanev, Tim Costin, Jason Hanlon, Valspar and Shawn Bender, Roy-Lyn Cabinets.


Jeff Meloche, Martin Guarda, and Kevin Roach, Becker Acroma.

Bob Malone, Miltec UV and Chris Martin, Horizon Coatings.


Lance Trowhill and Mike Umbenhower, of ML Campbell.


Steve Bosley, Superfici and Malcolm McGrath, Malcolm McGrath Cabinets.

Roger LaRoche, Mohawk Finishes.

*Continued from page front cover*

continue to have the water, materials and resources to protect human health and the environment in the coming decades.

## EARLY FOCUS ON SUSTAINABILITY

Many years ago the coatings industry, like other industry sectors, complied with internal rules for health, safety and environmental protection of its workers, through programs like CoatingsCare. In Canada, manufacturers also voluntarily reduced VOC emissions in architectural products by 50 percent over a 20-year period. Recent regulations have pushed that percentage closer to 100 percent today They understood the important benefits of Material Safety Data Sheets (MSDs) and the Workers Health Management Information Systems (WHMIS) as essential tools in the use and marketing of safer products at both the wholesale and customer level. All of these things continue to be an important part of the business culture in the paint and coatings industry.

The coatings industry, primarily through CPCA, understood the necessity to be 'inside the tent' on important discussions that have impacted the industry. In recent years there have been significant strides made to ensure industry's products are safe for both consumer and industrial use. Every step of the way industry has been there to ensure that appropriate, science-based decisions form the basis of legislation and regulations impacting the sector. This has lead to tremendous successes for the paint and coatings industry, as follows:

1) The adoption of VOC regulations in 2009 for architectural and automotive coatings produced even greater reductions in VOC emissions, in some cases an additional 18% percent reduction in architectural coatings, based on 2002 levels, and more than a 60 percent reduction in the automotive refinishing sector;
2) The increased presence of industrial waterborne coatings products has also reduced VOC emissions significantly and led to additional health and safety benefits in the workplace;
3) Various pollution prevention initiatives under programs such as the Chemicals Management Plan and the Toxic Reductions Plan have further promoted safety in the workplace and safer products for the consumer;
4) Further risk management of chemicals in commerce that include regulations and pollution prevention initiatives such as codes of practice and compliance agreements clearly highlights the growing confidence by governments that the coatings industry is responsible, as for example, the current proposed Code of Practice for both MEKO and DEGME, in lieu of regulation;
5) Post-consumer paint recycling programs under Extended Producer Responsibility (EPR) programs now exist in every Province, which led to the recycling of 25 million kilograms of leftover paint in Canada last year;
6) Numerous efforts to establish acceptable and recognized standards for the 'green' coatings products under organizations like the Masters Painters Institute with strong performance standards and approved product lists now referenced by users in many sectors of the economy.

These efforts continue unabated. The Association continues to take a leadership role to ensure that ongoing initiatives are appropriate and that industry has direct input into their development. Once regulations and/or pollution prevention plans are in place, there is an extensive effort by CPCA to ensure that industry is fully aware of the many regulations and that member companies are in full compliance. Governments regularly consult the Association before moving forward on new initiatives that impact the coatings industry.

## SUSTAINABILITY DRIVERS: COMPETITION AND SOCIAL LICENSE

Arguably, adherence to these new rules has lead to increased competition among those doing business in the industry. Companies seek to have a competitive edge in many instances with respect to more environmentally friendly or 'green' product offerings. Low-VOC or no-VOC products are often displayed in commercials extoling the features of various coatings products. Companies are aggressively pursuing and deploying new technologies in product formulations to ensure they remain on the cutting edge and can, in some cases, stay ahead of the regulator and their competition. The ability to make an environmental or sustainable claim with respect to products has become part of a company's unique selling proposition. It has also allowed them to flourish in an increasingly complex sustainable business environment.

The question is how did this all come to pass and where will it end? Sustainable development ties together the concern for the capacity of natural systems to co-exist with the social and economic challenges faced by society. Dating back to the early 1970s sustainability was used to describe an economy that was "in equilibrium with the basic ecological support systems." In 1987 the Brundtland Commission issued a report entitled "Our Common Future," which sparked a new mantra by environmentalists everywhere related to the definition of sustainable development as, "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Since then governments and NGO's have continued its activism for a greater focus on environmental sustainability, culminating in the Canadian Environmental Protection Act (1999), the cornerstone of Canada's environmental efforts. It continues to be the prism through which environmental sustainability is viewed. It is an important part of Canada's broader legislative framework aimed at preventing pollution as well as protecting the environment and human health.

In effect, this led to what has become known as a 'social license' to operate. All of the things that are couched in terms of sustainability must be addressed if companies wish to continue operating or gain market access and market share. Intuitively we all know that if the market, the consumer, views industry as bad or in some way immoral by virtue of how it treats the environment, sales will diminish. The coatings industry has made great strides to ensure the industry is not perceived in this way.

As previously noted, there is often considerable complexity involved in gaining and maintaining a 'social license' to operate, but properly prepared and supported, the challenges created by such circumstance can usually be overcome. Difficulties arise most frequently when companies are unable or unwilling to make the nominal investment to make things work. The most common problems encountered include the following:

- The company sees gaining a social license in terms of a series of tasks or transactions (in effect making a deal), while the community grants the license on the basis of the 'quality' of that relationship.
- The company confuses acceptance for approval, co-operation or technical credibility with social credibility. Often a company may delay stakeholder engagement with respect to certain undertakings whether it is in the launch of a new product or a recycling initiative.
- One of the worse things that can be done is the failure to provide reliable information or, more commonly, failing to deliver on promises made whether it be in a new product launch or changes to existing formulations that erode performance.

It is safe to say that these mistakes are not made by the coatings industry. Our member companies, both directly and through the Association, have been working diligently to ensure they are fully informed with respect to sustainability regulations and initiatives.

Maintaining Sustainability and Product Performance

The ongoing challenge with respect to sustainability in the coatings sector is the need to account for how we measure sustainability vis-à-vis performance and the metrics used in that calculation. It is not always accurate to accept the fact that lower concentration of VOCs obtained from lowering concentrations of various chemicals - leading to lower emissions - is the complete answer. This is especially true if performance is diminished requiring greater quantities of the product and more applications. This will lead to an even higher carbon footprint than the original product formulation with higher concentration and more active ingredients. Keep in mind that carbon footprint is calculated based on raw materials consumed and energy spent during manufacture and application; and ultimately transferred to CO2 emissions.

This fact was recently explained with respect to carbon footprint and $TiO_2$ usage. It is generally accepted that $TiO_2$ production creates an average carbon footprint of 5.2 tons due to the significant quantity of energy required. On the surface this seems to be high, but it would be incorrect to make such an assumption because of the downstream properties of the chemical that produce other benefits, as Tony Mash, the former head of the British Coatings Federation recently argued. He noted that, "While $TiO_2$ has a high carbon footprint per ton, it does prove to be an essential material in many decorative paints. It has excellent properties in terms of opacity, which will significantly enhance how much paint it takes to coat a surface. The greater the opacity, the less is required to cover a given area with fewer coats needed. It also enhances life expectancy and scrub resistance (for interiors), a highly efficient reflector of infrared radiation from sun and heat." All of this produces great benefits from downstream use and not all are immediately recognized or accounted for in assessing carbon footprint.

For industrial powder coatings, there is also an opportunity to further reduce carbon footprint in the reduction of layer thickness, followed by epoxy/hybrid replacement, as well as the lowering of curing temperatures. Industry recognizes this and continues to work on initiatives to take advantage of such opportunities in the name of sustainability, while maintaining product performance.

We must continue to ensure the proper metrics are used in assessing the sustainability of a particular product and inform regulators and the public of these indisputable facts. One of our members, a world leading chemical supplier, BASF, maintains that for every ton of carbon dioxide emitted in manufacturing processes, the product saves the consumer three tons of CO2 emissions because of the way the product is used. Efforts must be made to ensure these positive elements are properly measured and conveyed to customers, governments and the public. When probably measured and recognized, the efforts for shifting to a low-carbon economy will drive forward a new era of technological innovation in the paint and coatings industry.

*Gary LeRoux is president of the Canadian Paint and Coatings Association (CPCA).*

# The $TiO_2$ Market Outlook

Even though Canada has its own Titanium dioxide production facilities, it is such a globally demanded product that it is impossible to write an article about it without taking a worldwide view.

## $TiO_2$ PRICES: 2013 REVIEW

Prices for $TiO_2$ slipped by between 10 and 20 per cent over 2013 because the European recession worsened and US growth stalled.

China's Gross Domestic Product growth has become slower than expected, and manufacturing dropped through 2013 – but both have since increased.

$TiO_2$ sales at Huntsman were $1.44 billion last year and $889 million at Princeton, New Jersey-based Rockwood. A global oversupply has caused prices to fall since mid-2012, eroding profitability. Huntsman was optimist though, expecting $TiO_2$ demand to continue to recover in the coming quarters.

Feedstock producers have accepted lower average prices for material and there has been divestment of $TiO_2$ businesses over the years with various sales and acquisitions.



## $TiO_2$ PRICES FORECAST FOR 2014

According to research from several sources, pigment mineral production is set to grow faster than consumption over next two years.

Prices for titanium dioxide ($TiO_2$) are predicted to remain flat to weak in 2014, according to a forecast by global investment bank, Goldman Sachs. The bank based its prediction on an anticipated increase in production of the pigment feedstock mineral, which will outpace consumption by the pigment industry.

$TiO_2$ production is set to increase by 2.7 per cent this year to 6.65m tonnes and by 8.5 per cent to 7.22m tonnes in 2015, while consumption is only expected to grow by 2.3 per cent in 2014 to 5.53m tonnes and by 3.8 per cent in 2015 to 5.74m tonnes, the bank said.

This excess of supply coupled with already high inventory levels is likely to pull rutile prices down to $925/tonne for 2014 and 2015.

This compares with an average of $1,129/tonne in 2013, and a present price range of $950-1,100/tonne (rutile concentrate, min 95 per cent $TiO_2$, FOB Australia), according to the IM Prices Database.

"We believe inventories across the pigment value chain will decline relative to 2013 but will remain higher than the 2008-12 average," Goldman said.

"On the supply side, new production capacity will come online this year, putting even greater pressure on the large established producers to manage output while prices remain soft," it added.

The bank also warned that substitution of $TiO_2$ with other cheaper raw materials could also hamper demand towards the end of the decade.

Prices for $TiO_2$, which is used as a feedstock for rutile for paints and coatings pigments, slipped by between 10 and 15 per cent over 2013 as a result of economic weakness and, consequentially, reduced consumption in Europe, the US and China.

As a result, feedstock producers have accepted lower average prices in an effort to sell production.

Prices for rutile grade $TiO_2$ on a CFR Russia basis are reported to be around

$3,660-3,700/tonne, while US prices (bulk, CIF) material is in the range of $3,425-3,440/tonne.

$TiO_2$ prices tend to show cyclical behavior and marked regional differences. Average realized prices are forecast to have peaked in 2013 and then to decline until 2015 before peaking again in 2017.

Buyers expect $TiO_2$ prices to fall because of the weak macroeconomic conditions. DuPont, meanwhile, has delayed the introduction of its additional capacity until 2015. However, while $TiO_2$ plants are not running fully, inventory is now starting to go down.

## MARKET SHARE

DuPont produced more titanium dioxide ($TiO_2$) in 2013, but saw lower selling prices, reported in its fourth quarter 2013 results. Higher raw material costs in both $TiO_2$ and the company's refrigerant businesses (a major consumer of fluorspar), offset volume increases and improved plant utilization".

$TiO_2$ volumes increased by 18 per cent compared to the same quarter in 2012.

DuPont, based in Wilmington, Delaware, has approximately 20 per cent of global $TiO_2$ capacity, Saudi Arabia's Cristal has 15 per cent, Huntsman and Kronos Worldwide Inc. each have 10 per cent and Tronox has 9 per cent.

## FEEDSTOCKS

When it comes to market forecast, feedstock producers, feel 2014 looks a lot better than 2013.

It has been reported that the paint markets' use of $TiO_2$ is predicted to increase by 3.6 per cent per year through to 2020.

China $TiO_2$ exports amount today to approximately 20 per cent of its production and comprise an equal amount of Anatase and Rutile. The 2013 $TiO_2$ Rutile exports (approx 120,000 MT) represents an insignificant percentage of world Rutile consumption.

This will change in the future as the quality of Chinese $TiO_2$ rutile is improving and will become increasingly more acceptable in most industrialized countries.

## 2013 $TIO_2$ NORTH AMERICAN HIGHLIGHTS

In the global $TiO_2$ market, 2013 saw a consolidation in the industry with prices softening, impacting projects. In reviewing a little of what happened in North America to $TiO_2$ feedstocks in 2013

In February, US-based Rockwood Holdings Inc. signed an agreement with Finnish Kemira Oyj to purchase the company's 39 per cent stake in its sulphate $TiO_2$ pigment joint venture, Sachtleben, for Û97.5m ($130m).

In April, Argex Titanium signed a MoU to secure the location for its industrial sized plant in Salaberry-de-Valleyfield, 40km south-west of Montreal, Quebec.

In June, Kronos Worldwide Inc., declared a lockout of the majority of the workers at its plant in Varennes, Canada. The lockout was part of a labour dispute and was triggered when 93 per cent of workers rejected the latest contract offer made by the company's management.

Argex Titanium Inc. entered into a long-term offtake agreement with global paint producer PPG Industries Inc.

In September, Rockwood sold its entire $TiO_2$ pigments business to Huntsman Corp, for $1.1 billion.

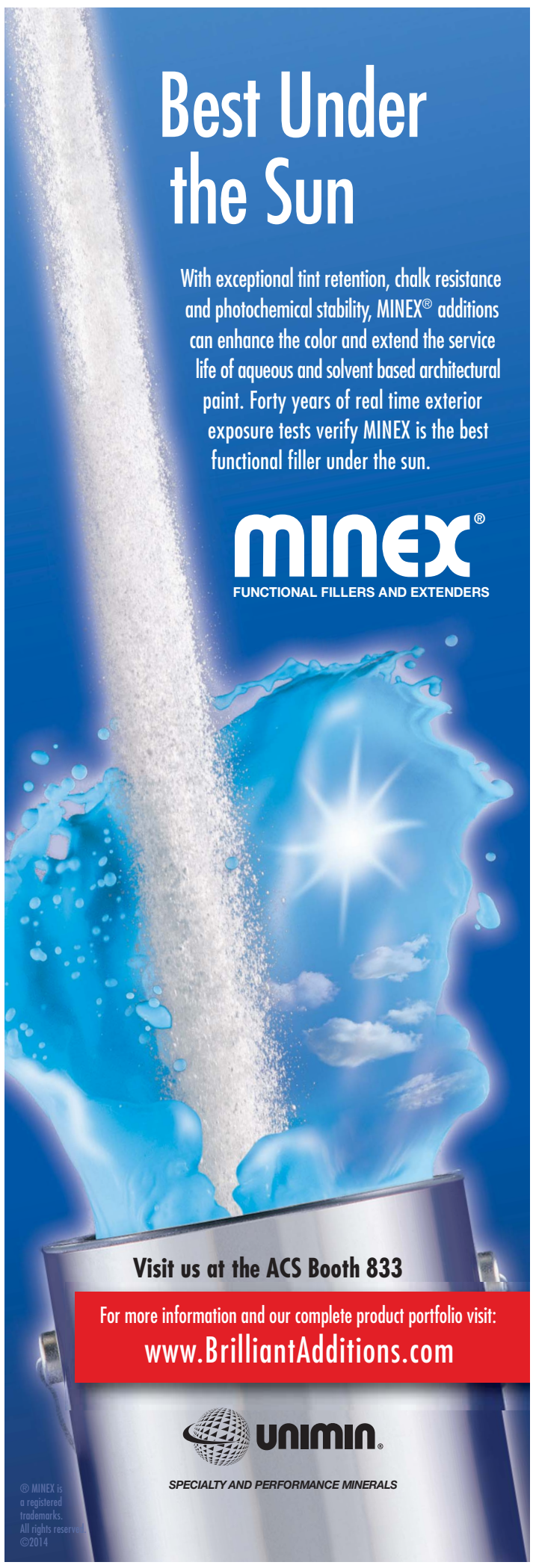
In November, AkzoNobel acquired a 50 per cent stake and management control of Sadolin Paints Oman SAOC.

Huntsman Corp. was upgraded to 'Buy' status by analysts at Goldman Sachs, despite the fact that analysts admitted the $TiO_2$ market had "bottomed".

US chemical manufacturer Southern Ionics said that it would bring zircon mines online in Georgia, US, in order to support its growing zirconium oxychloride (ZOC) business.

It has not been an easy year for feedstock producers as $TiO_2$ demand has waned in the face of disappointing economics in China, North America and Europe. However, most forecast that there will be a slight uptick in 2014, and there are some reports of demand returning to some markets.

## CORPORATE PROFILE: UNIMIN




Unimin Corporation is a worldwide supplier of engineered mineral fillers to the paint and coatings industry. Our broad product range provides a matrix of physical, chemical and functional properties, and offers paint and coating manufacturers easier access to more formulating solutions. Whether your objective is brightness and color development, transparency or hiding power, chemical and UV stability green formulating or cost management, we can provide a solution.

### Brilliant Additions:

The Brilliant Additions portfolio represents our industry's largest selection of reinforcing silicate fillers and extender pigments. These products are proven performers in architectural paints, original equipment manufacture (OEM) and powder coatings, wood finishes, and industrial and marine coatings.

Unimin employs advanced production technologies and quality management systems to insure product consistency and uniformity. From mining to product delivery, our goal is to exceed responsible care guidelines while delivering products and services that help our customers satisfy their regulatory and sustainability objectives.

As reduction of organic solvents and volatile organic compounds becomes an increasingly important objective, the Brilliant Additions portfolio can be a valuable formulating tool. Our fillers and extenders add functional performance in waterborne, high solids and powder coatings to produce environmentally friendly coatings. In oil, alkyd and solvent-based systems these products provide the low viscosity properties needed to meet high solids and low VOC requirements.

### Key Products Include:

- MINEX® Unique and distinctive properties deliver premium performance in architectural, decorative, clear and powder coatings. Low oil absorption, excellent tint strength, and optimal refractive index protect the resin system from UV attack for improved binder stability and longer service life.
- IMSIL® Offers superior chemical / corrosion resistance, and intercoat adhesion in industrial and OEM primers, with flatting and abrasion resistance properties in marine and industrial topcoats.
- SIBELITE® Delivers low tint strength to preserve deep tone color intensity and an octahedral crystal structure adds light reflectance properties to energy efficient "cool" coatings.
- SILVER BOND® Adds abrasion resistance, structural reinforcement, non-conductive and non-reactive properties to a complete range of industrial, chemical and marine coatings.
- SNOBRITE® An excellent multi-use filler and extender to provide semi-reinforcing and chemical resistance properties in emulsion primers, maintenance coatings and building products.
- HIFILL™ Cost effective hiding power with excellent brightness, gloss and color integrity in styrene acrylic and vinyl acrylic emulsion white and pastel colored paints.
- HIWHITE™ Unique synthetic mineral fillers recycled from a post-industrial waste stream, offers flatting efficiency and titanium dioxide extension.

### Customer Service:

Complementing the Brilliant Additions product portfolio is a global support system of technically proficient sales representatives, research personnel, and production and transportation professionals.

Technical teams from regionally established "Centers of Excellence" work in partnership with customers to focus research and development to fulfill both current and future performance and compliance expectations. By actively listening to our customers, and with continuous reinvestment in product development, our objective is to supply the paint and coatings industry with proven, performance oriented industrial minerals.

### Contact Information:

Unimin Specialty Minerals, Inc.
Tel: 203-442-2500 Fax: 203-966-3453
E-Mail: ContactUs@brilliantadditions.com
Website: www.brilliantadditions.com

# Catapulting the Chemical Reaction

A catalyst is a chemical, which makes a chemical reaction go faster, but is not itself used up in the reaction. In paints, catalysts speed up the formation of polymers from the resin.

Cobalt or manganese naphthenate are used in gloss paints to accelerate the polymerisation of the alkyd resin.

Siccatives (Paint and Ink Driers) are metal carboxylates (soaps) used to accelerate the drying process in, for example, linseed oil. The metal can be a transition or a group II metal and the carboxylate can be naphtenate, 2-ethyl hexanoate (widely known as octoate) or C7-C11 salts.

Cobalt (II) octoate is the most reactive and most commonly used siccative. It catalyses the oxygen uptake and accelerates peroxide formation. Cobalt octoate causes a surface film to form rapidly. Other auxiliary driers are added which either reduce the activity of cobalt (e.g. zinc octoate) or enhance the drying of the interior of the paint (e.g. lead octoate).

## CATALYST ACCELERATORS

There are several catalysts on the market. There are epoxy catalysts and curing agents. Catalyst activated paint will not adhere to any type of non-catalyst activated paint for more than a week. That means you have to get down to the bare metal before you prime.

Once the paint (5 parts) and catalyst (1 part) have been completely mixed together at this ratio, depending on your particular needs and painting environment, you may reduce this mixture by no more than 15 per cent. Under normal circumstances, a reduction of less than five per cent should suffice. Activated paint must be used within 2 hours.

Alkyd resins are polyesters containing unsaturated fatty acids that are used as binding agents in paints and coatings. Chemical drying of these polyesters is based on heavy metal catalyzed cross-linking of the unsaturated fatty acid moieties. Among the heavy-metal catalysts, cobalt complexes are the most effective, yet they have been proven to be carcinogenic. Strategies to replace the cobalt-based catalyst by environmentally friendlier and less toxic alternatives are under development.

## FROM THE MANUFACTURERS

**Arkema** has the FASCAT line of catalysts. FASCAT 4201 for example is a solid catalyst that is thermally and hydrolytically stable. It is widely used in low temperature transesterification reactions as well as urethane crosslinging reactions.

**BASF** is a global leader of catalysts made for anything from Adsorbents to Temperature Sensing. BASF Qtech offers advanced catalytic surface coatings that are applied on the internal surfaces of steam cracker furnace tubes and coils, enabling the Catalytically-Assisted Manufacture of Olefins (CAMOL) from a range of petroleum feedstocks. The coatings improve operational profitability of steam cracker furnaces by reducing carbon formation, increasing on-line production time and reducing decoke frequency, energy requirements and CO2 emissions. BASF's Catalysts division, headquartered in Iselin, New Jersey,

## CORPORATE PROFILE: WALTHER PILOT NORTH AMERICA

WALTHER PILOT North America is the North American agent for WALTHER Spritz-und Lackiersysteme GMBH. WALTHER PILOT is well respected for its top quality, precision equipment in the spray finishing, adhesive application, and dot marking industries. Our years of experience allows us to bring you engineered excellence in our spray equipment. We offer the following product lines:

### Automatic Spray Guns

Our large selection of automatic guns feature absolute excellence in engineering and performance. Versatility, durability, and precision are the cornerstones of our automatic guns. We feature standard automatic guns as well as manifold mount guns and guns that are extremely compact in size (some that are under 2 inches in width).

### Manual Spray Guns

WALTHER PILOT has a large selection of manual guns ranging from Conventional to HVLP to Medium Pressure to our very own "HVLP Plus" (conventional atomization characteristics & up to 88 per cent transfer efficiency). We have a manual gun for almost every spray situation. Guns with polished bodies, guns that are PTFE-coated, compact size guns, guns with both a gravity feed and material feed port, heavy duty guns, two-component guns, and cost-efficient guns.

### Dot & Line Marking Spray Guns

Featuring some of the most precise and accurate spray guns on the market, our marking guns really stand out. They can be used in many different industries, in applications such as:

- Marking weld seams and sheet metal
- Marking engine blocks
- Marking blow holes during glass production
- Cutting and bending lines for cardboard packaging
- Line marking for manufacturing
- Paint marking to aid in assembly
- Paint markings for logistics
- Adhesive Spray Guns

We feature some of the highest quality, most fully featured, dedicated adhesive guns on the market today. We have guns to spray solvent-based, water-based, and even two-component adhesives with precision and ease. We feature special rotary nozzles that are excellent for solvent based and high viscosity adhesives. We even tailor match your equipment to your particular adhesive so you can experience optimum atomization and performance.

### Abrasive Resistant Spray Guns

Our toughest spray guns are tailor-made for your most abrasive materials. Available in manual or automatic, these spray guns feature a special hardened needle/nozzle and a removable grease packing for extended longevity and optimum performance with aggressive materials. These spray guns are perfect for ceramics, enamels, and military coatings.

### Low Pressure Nozzle Extensions

We carry a vast selection of low-pressure nozzle extensions that allow for 45o, 90o, and even 360o spraying patterns. The extensions are available for most of our spray guns, both manual and automatic, and range in size from 200 mm to 1000 mm. We can make extensions that are as small as 8mm in diameter. Custom sizes and lengths are also available.

### Material Supply

We feature a full range of pressure tanks, mixing tanks, hoses, and pumps. Our modular pressure tanks are fully ported and ready for just about any accessory you may need. They feature bolt-on agitators, casters, level sensors, regulators, top feed kits, bottom feed kits, and more.

If you are in the spray finishing business, whether it is paint, adhesive or marking, let the experts at WALTHER PILOT North America help you select the right equipment to meet your needs.

Give us a call at 1-586-598-0347 or e-mail us at sales@waltherpilotna.com for quality equipment and technical support.
**www.waltherpilotna.com**

is the world's leading supplier of environmental and process catalysts.

**Brenntag Specialties** offers the dibenzoyl peroxides Perkadox line of catalysts. They offer anything from 40 per cent Suspension in Diisobutyl Phthalate, BPO 40% Low viscosity - Pumpable, Sprayable, Laminating and casting; powder, paste and solvent mixtures. They also have the Trigonox line of catalysts.

For paint and coatings in crosslinkers and catalysts they offer:

**Amines**
- Baxxodur

**Organic Peroxides**
- Ketone Peroxides
- MEKP Peroxide Blends
- Hydroperoxides
- Benzoyl Peroxides
- Perketals
- Peroxyesters
- Peroxydicarbonates

**Photoinitiators**
- Photoinitiators
- Aminesynergist

**Tin Catalysts**
- Fascat

**Waterborne Crosslinkers**
- Witcolink

**Univar** carries K-CURE mixed acid Catalysts, K-Kat non-tin catalysts and NACURE acid/blocked catalysts for use in coatings, from King Industries Inc.

Acid Catalysts such as NCURE and K-CURE are blocked and unblocked acid catalysts for amino reactions. K-Kat are tin free catalysts for Urethanes for 2k PU systems and blocked isocyonate systems.

This is just a small sampling of catalysts for paint and coatings in the marketplace.

A catalyst can enhance the cure of a system without significantly changing the front end of the reaction. They can have low emission delayed action that strongly promotes a urethane reaction while maintaining cream time and pot life. Some organotin stabilizer catalysts are effective in many crosslikable polymers, such as in polyurethane foam. They can be in-free metal catalysts that act as photo-latent catalysts and curing agents showing fast curing and reduced energy consumption, long pot-life, reduced paint waste and more.

Catalyst choice depends on outcome of the properties desired in the paint and coating.

## Calendar of Industry Events 2014

**January 6 - April 26, 2014:** UBC Certificate in Industrial Wood Finishing, A comprehensive training program consisting of 100 hours of online study over three months followed by a 6-day practical session in Vancouver, BC. Runs annually, starting every January. *www.cawp.ubc.ca/training*

**March 18-20, 2014:** FABTECH Canada, Toronto Congress Centre, Toronto Canada, *www.fabtechcanada.com*

**April 18-19, 2014:** American Coatings Show, Georgia World Congress Center, Atlanta, GA, *www.american-coatings-show.com*

**April 22-24, 2014:** ECOAT14, Rosen Centre Hotel in Orlando, FL, *www.electrocoat.org*

**May 12-14, 2014:** RadTech 2014, UV & EB Technology Expo & Conference, Hyatt Regency O'Hare Rosemont, IL, *www.radtech.org*

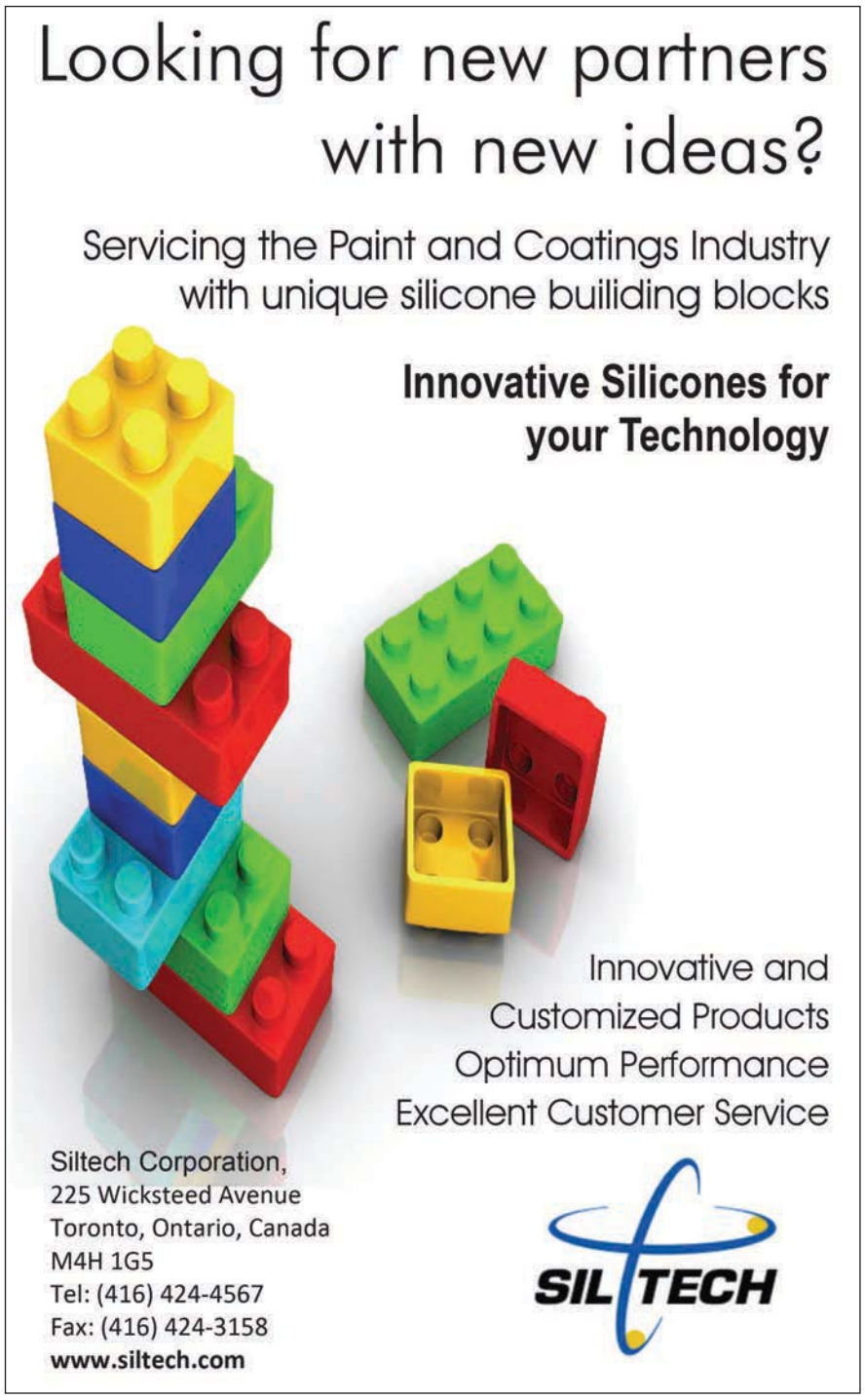
**June 9-11, 2014:** SUR/FIN 2014, Cleveland Convention Center, Cleveland, OH, *www.nasfsurfin.com*

**September 16-18, 2014:** Powder Coating Show, Indiana Convention Center & Lucas Oil Stadium, *www.PowderCoatingShow.com*

**September 26-27, 2014:** Canada Woodworking East, Olympic Stadium, Montreal, QC. *www.mpltd.ca*

**November 11-13, 2014:** FABTECH 2014, Georgia World Congress Center, Atlanta, GA, *www.fabtechexpo.com*

## CORPORATE PROFILE: SILTECH CORPORATION




### Innovative Silicones for Your Technology

Siltech is a privately owned business, we hope and believe that the pride we feel in this company channels its way through each of our employees to every customer.

As an Innovation company, Siltech has built our business and reputation by creating new silicones for new customers with new applications. Change is the only constant in business and Siltech understands and embraces your need to change. Our philosophy is to constantly innovate and create new products which provide you with enabling solutions to your problems.

Siltech develops, manufactures and markets a full line of organo-functional silicone compounds and related specialties for a wide range of industrial applications, using our patented and otherwise proprietary technologies. Our expertise in specialized organo-modified silicone polymers has resulted in more than 40 patents.

Siltech owns and operates two manufacturing plants in the Greater Toronto Area. These plants are equipped with efficient, large-scale, high-temperature and pressure reactors, thin film evaporators and other modern equipment. Siltech is proudly ISO 9001:2008 certified.

Siltech invests a substantial portion of our resources into R&D and new product development. Our R&D and technical service laboratories are modernly equipped and staffed by chemists with many decades of experience in diverse segments of the chemical processing industry. In addition, we have efficient pilot plant facilities available to produce special products for your experimental needs.

Siltech offers the coatings industry a broad line of Siltech additives and Silmer® reactive silicones as well as more unique chemistries.

### Additives

Siltech inks & coatings additives have long been recognized as providing special properties including improved slip, gloss, mar resistance, flow, leveling and foam control. Furthermore, because these silicones are efficient at very low concentrations, they are cost effective, and widely used.

### Silmer® Reactive Silicones

Our expertise and portfolio of reactive silicones aligns with industry needs to bind into a coating as well as to modify resins obtaining hybrid properties.

### R&D

Our R&D, Technical Service and Process R&D laboratories are modern, well-equipped, co-located with our manufacturing facilities and staffed with first-class chemists and engineers. These scientists have years of experience in synthesis and key applications such as personal care, polyurethane foam stabilization, inks and coatings, and silicone gel formulation.

Our first rate analytical labs support the quality of our manufactured products as well as new product development and technical service.

Siltech's track record of innovation and outside-of-the-box problem solving is demonstrated by our broad portfolio of product types. Our early history as an organic surfactant company gives us a different perspective from other silicone manufacturers and results in classic organic surfactant derivations to silicone such as Silamine®, Silphos® and Silquat® grades.

### Manufacturing

All Siltech products are manufactured to the highest standards to ensure that they meet our customers' needs. Siltech also offers the flexibility of providing many of these products either in an appropriate solvent, or neat. They are designed to meet specific requirements of various coating systems such as high solids, water-based, or energy curing.

Many problems old and new may be solved with new silicone specialties. We welcome the opportunity to partner with customers, as we believe that this results in the creation of the most formulator-friendly, cost-effective silicone specialties anywhere.

**"Our success is measured by our customer's success. When they succeed, we succeed"**

**Siltech Corporation**
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www.siltech.com

# Fine Tuning

## Powder Coating with the Proper Resin

**Various lines** of resins for powder coatings offer a wide range of choices to meet a formulator's needs. Manufacturers focus on delivering performance, value and versatility to the powder coating formulator.

Powder resins offer environmentally friendly versatility, with several curing and functional technologies for powder coatings formulation.

Characteristics of powder resins are adapted to fit the strict needs of powder coating production.

Combination of innovative technology, global support and broad product lines help to achieve the highest quality paint.

If a manufacturer carries extensive lines of additives, it enables the formulator to add value to powder coating formulations. Choices range from rheology modifiers or specific performance-enhancing additives.

Fine-tuning formulations with specialized additives for powder coatings will achieve:

- Rheology control
- Matting agents
- Slip and mar resistance
- Scratch resistance
- Flow and levelling agents

### ESSENTIAL

Resins are an essential to powder coatings, an advanced and fast growing technology used to apply a decorative or protective finish to a wide range of substrates in several markets including automotive, furniture and appliance.

Powder coatings are very sustainable and virtually pollution-free; no solvents are used, therefore, very little volatile organic compound emissions (VOC), and over-sprayed powder can be easily recovered, resulting in minimal waste.

Technology advancements, such as the ability to cure at lower temperatures, offer opportunities for use on heat-sensitive materials, such as wood and plastics.

The resin component in the powder coating formulation will largely determine its processing and end-use performance properties.

There are two main classifications for powder coatings: thermoplastic and thermoset.

A thermoplastic powder coating melts and flows when heat is applied, but continues to have the same chemical composition once it cools to a solid coating.

Thermosetting powder coatings also melt when exposed to heat. However, after they flow to form a continuous film, they chemically crosslink on additional heating. The final coating has a different chemical structure than the applied powder.

Once cured, thermosetting powders are heat stable and, unlike thermoplastic powder coatings, will not revert back to

## CORPORATE PROFILE: CHEMROY CANADA INC.

**We are Proud to be Known by the Company we Keep.**

Since 1967 Chemroy Canada has been servicing the Canadian Paints and Coatings industry. Customers have come to trust Chemroy's hands-on expertise to deliver quality chemicals and additives. The supplier base are global industry leaders providing value add products with the highest of quality standards. Chemroy currently represents over 30 companies in the Coating and Construction Industry for the Canadian marketplace. Warehouses across Canada hold stock to meet customer production requirements.

**Products distributed by Chemroy to the Canadian Coatings Industry include:**

- biocides
- coalescent agents
- dispersants and surfactants
- pigments/dispersions
- rheology modifiers
- waterborne and solvent borne resins
- cross linkers
- high solid resins
- TiO2 replacers

These products are used in industrial, architectural and automotive coatings applications, meeting specific technical and aesthetic needs. With the drive to low VOC and "green" products, Chemroy has resins and additives packages to meet most formulation, performance and cost goals.

Chemroy is a charter member of the CACD (Canadian Association of Chemical Distributors), which is committed to compliance within the "Policies on Responsible Distribution" and ensures distributed chemicals or additives are safely delivered and in accordance with the highest standards established by the association and governmental laws. The company is also ISO 9001 certified.

Chemroy is a customer-focused distributor with a collaborative approach to the marketplace. We have an engaged and passionate staff that is looking to help customers find the right product for their specific application, technical and cost need.

Warehouses are located in Toronto, Montreal and Vancouver in order to service the large customer base quickly and efficiently. Customer Service operations are established in Toronto and Montreal.

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Fax: (905) 789-7170

**Eastern Canada**
4025 Blvd. Industriel
Laval, Quebec
Canada H7L 4S3
Tel: (450) 625-0505
Fax: (450) 625-1734

**Western Canada**
Suite 495, 104-1015 Columbia St.
New Westminster, BC
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Tel: (604) 540-7620
Fax: (905) 789-7170

**Proud to be Known by the Company we Keep**

the molten stage when reheated. Thermosetting powders are also tougher, have better adhesion to metal substrates, and are more resistant to solvents and chemicals than thermoplastic coatings. Thermosetting powders account for about 95 per cent of all powder coatings.

Thermoplastic powders are typically high molecular weight materials that require high temperatures to melt and flow. The primary advantage of thermoplastic coatings is that they form a smoother finish and require less energy. They are commonly applied by fluidized bed application, and the parts are both preheated and postheated. Most of the thermoplastic powder coatings have marginal adhesion so that the substrate must be pretreated and sometimes primed prior to coating application.

| Thermosetting powders | Thermoplastic powders |
|---|---|
| Epoxy | Polyvinyl Chloride |
| Epoxy - Polyester Hybrid | Polyolefins |
| Urethane Polyester | Nylon |
| Polyester TGIC | Polyester |
| Acrylic | Polyvinylidene Fluoride |

## PROCESSING

The raw powder coating materials are generally mixed dry and then fed into an extruder for melt mixing. Once cooled, the extrudate is then chipped and ground into the final product. The chips are ground to a very specific particle size distribution depending on the application.

The particle size is important to the performance and appearance of the coating. The size of the powder particle can have an influence on the behavior of the material in the delivery system, the charging systems, and the final film characteristics. When reclaimed powder is used, the coater must maintain a consistent particle size distribution. There are several methods by which particle size distribution can be measured.

## WHAT'S NEW IN RESINS

Powder coating resin manufacturers are continually coming out with new resins that they feel will boost their market potential. High performance lines of polyester resin products for outstanding aesthetic performance for example. Acrylic Polyester hybrid cured resins are good for building materials, electrical products and metal. Blocked Isocyanate-cured hydroxyl-containing polyester resins and epoxy resin-cured carboxyl-containing polyester resins and hydroxyalkyl amide-cured carboxyl-containing polyester resins are as well. Diacid-cured glycidyl-containing acrylic resins have all those uses plus road vehicles and acreylic resin additives also have multiple uses. With powder coatings intermediates, formulators can achieve the coatings performance that's desired: high- to low-gloss finishes, standard and super-durable applications, good to excellent chemical resistance, and even anti-graffiti applications. Formulators are asking for resins that are versatile and still perform.

Powder resin technologies include:

- TGIC Systems
- Polyester
- Hybrid
- Polyurethane/Glycolurile
- UV Cured Powder
- Superdurables
- Additives for Powder Paints

Looking to the future, advancements are focused in the development of energy

## CORPORATE PROFILE: FINISHING BRANDS



Customers involved in challenging finishing applications in particular, and the industrial marketplace overall, know and rely on the equipment and solutions from DeVilbiss, Binks, Ransburg and BGK. These globally recognized names in the finishing industry have been inventing, introducing and improving finishing technology and processes for over 125 years.

Today, these brands are part of the Finishing Brands' family. By joining the precision fine atomization of DeVilbiss with the diversity of Binks atomization and fluid handling, along with Ransburg electrostatics, BGK curing and controls, distributors of Finishing Brands equipment are able to provide exceptional solutions through a coordination among research, development, and technical support.

For over 125 years, the DeVilbiss philosophy has been finding innovative solutions to problems.

DeVilbiss is the leading supplier of spray finishing equipment to the industrial and automotive markets with a focus on fine atomization.

Binks is at work in virtually every industry around the world with its wide range of finishing resources.

Since1890, Binks has been setting global standards for industrial finishing from spray guns, tanks, pumps and complete fluid handling systems, to 2K solutions in a diverse range of applications.

Invented as a way to minimize waste, Ransburg remains the global electrostatic process leader.

Ransburg electrostatic application system results in up to 98 per cent transfer efficiency. Ransburg also manufactures manual and robotic applicators, electronic metering, process controls and complete systems working in many industries throughout the world.

BGK, the leader in coating curing solutions utilizing high intensity electric infrared.

BGK combines high intensity electric infrared ovens and material handling equipment into custom systems, providing customers with technology that reduces heating times from minutes to seconds, saving floor space and energy.

The DeVilbiss, Binks, Ransburg and BGK brands were brought together into one group by Finishing Brands to provide more advanced finishing technology, expert support and better solutions as the one source with world-wide resources and experience for industrial customers' finishing needs.

Visit **www.finishingbrands.com** and select your global region for more information.

efficient powders - such as ULB and UV curing technology - that expand the use of powder coatings to new markets including wood and wood composites finishes, plastics, automotive coatings, and can and coil applications.

## FUTURE TRENDS

The success of conventional powder coatings is the result of their excellent properties and many economic and environmental advantages over traditional solvent based paints. Many of the original disadvantages of powders have been eliminated or minimized through formulation and equipment development. These developments will help to assure that powder coatings market will continue to grow at an impressive pace.

> "Many of the original disadvantages of powders have been eliminated or minimized through formulation and equipment development. These developments will help to assure that powder coatings market will continue to grow at an impressive pace."

New resin systems allow powder to meet the end-user's specification for almost any product. Many of these coatings can be cured at temperatures as low as 121°C. The advent of low curing temperature systems, such as IR cured powders, has significantly opened up the market to heat sensitive substrates such as wood, plastics, and assembled components with heat sensitive details. The coating of metal substrates also benefits from this technology, with lower energy and investment costs, shorter curing times, and higher line speeds.

Powder coatings are also being developed for high temperature applications. Silicone-based powder coatings are often used on products that must retain their appearance, adhesion, and surface protection even after prolonged exposures to high heat (up to 538°C). Some of these products include gas and charcoal grills, fireplace inserts, engine exhaust components, and light fixtures.

Significant advancements are also being made in the weatherability of powders for use in automotive and architectural applications. Polyester TGIC based powders, for example, have been used on outdoor stadium seating and other exterior applications that were previously susceptible to degradation from UV. The use of TGIC, which has been labeled as toxic in certain regions, is now being replaced by other binders. Clear, corrosion resistant, and durable powder coatings are used for a wide range of applications including automotive parts. Auto manufacturers such as BMW and Volvo are using powder clearcoats over automotive exterior basecoats.

Choosing the proper resins in formulations are key to a powder coating's performance and resins manufacturers are stepping up to the plate offering wide range of products to answer any formulator's need. Powder resins bring environmentally friendly technologies to the global marketplace.

## CORPORATE PROFILE: HOWARD MARTEN FLUID TECHNOLOGIES INC.

=Howard Marten Fluid Technologies Inc. is the preferred partner of companies across Canada providing our customers with products, services and solutions for your fluid handling, lubrication, coatings, spraying, pumping and filtering requirements. Through our Applied Fluids and Coatings (AFC) and Industrial Lubrication and Process (ILP) divisions Howard Marten Fluid Technologies Inc has your needs covered.

Our experienced sales, customer service and engineering teams from our strategically located branches work closely with our customers to understand their unique requirements. With branches in Coquitlam, British Columbia; Edmonton and Calgary, Alberta; Saskatoon, Saskatchewan; Winnipeg, Manitoba; Pickering and Cambridge, Ontario; and Brossard, Quebec; Howard Marten Fluid Technologies Inc has grown to become your local Canadian distributor.

Since 1950 Howard Marten Fluid Technologies Inc. has been providing high quality products by partnering with great companies like Graco, Nordson, Gusmer Decker, Glascraft, Devair, SMC, Bullard, Powerblanket, Veledon Andreae, Curtain Walls, IST Canablast, GFS AFC and DeVilbiss Binks, Colfax, Gusher, Fulflo, Hilliard, UFM and Hydra-Zorb products. These relationships enable us to recommend and provide the best components that will meet and exceed customers' requirements.

Fully equipped service vehicles and extensive service facilities across Canada allow Howard Marten Fluid Technologies Inc to provide unparalleled after sales support to our customers. The installation, troubleshooting and repair of spray and coating systems, centralized lubrication systems, pumping and dispensing equipment is our specialty.

Our branches are authorized service centers for:

- Graco Lubrication Equipment
- Graco Industrial Products
- Graco Protective Coatings / Foam Equipment
- Nordson Powder, Liquid & Hotmelt Equipment
- Colfax products including: Imo, Zenith & Allweiler Pump Products

Each branch carries stock of common replacement parts and components for their local markets, enabling minimal downtime for our customers, and maximum performance from your coatings, spraying, filtering, fluid handling, pumping and lubrication systems.

Howard Marten Fluid Technologies Inc is much more than a distributor with parts and service capabilities. Our Integrated System Solutions (ISS) group provides custom engineered systems for customer's unique coatings, spraying, filtering, fluid handling, pumping and lubrication systems application requirements. Our experienced applications engineering teams work closely with customers to understand the requirements of each unique project. This allows us to utilize and integrate standard components to create outstanding solutions for our customer's requirements.

Offering a complete solution to our customers' requirements is what has set Howard Marten Fluid Technologies apart from the competition since 1950. Contact your local branch to discuss how we can help you with your unique requirement today.

**www.howardmarten.ca**

HOWARD MARTEN FLUID TECHNOLOGIES INC. Est. 1950

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***SASKATCHEWAN***
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*Phone: 306-931-1164*

***ALBERTA***
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*Edmonton, AB*
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*Phone: 780-438-3468*

*4450–50th Ave.,*
*Calgary, AB*
*Phone: 403-259-2201*

***BRITISH COLUMBIA***
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*Coquitlam, BC*
*Toll Free: 1-800-563-1248*
*Phone: 604-525-8499*

**sales@howardmarten.com**

**www.howardmarten.ca**

# FABTECH 2013 Largest Show in History


## Record Numbers of Attendees and Exhibitors and Brisk Sales at Show Set Tone for Upcoming Year of International Events

FABTECH, the largest metal forming, fabricating, welding and finishing event in North America, set records for its show in Chicago for numbers of attendees and exhibitors as well as for floor space. A total of 40,667 attendees visited 1,573 exhibitors to see live equipment demonstrations, compare products side-by-side to find cost-saving solutions at product displays spread across 650,000 square feet of exhibits at McCormick Place. Attendees also benefited from the FABTECH educational conference held simultaneously with the four-day expo that included an unprecedented number of expert-led sessions on some of the hottest topics in manufacturing.

"While breaking our own records is impressive, most important were the reports we received from attendees and exhibitors," said John Catalano, FABTECH show co-manager. "Attendees were impressed with the record size and scope of the show and the number of new products and innovative technologies on display. Exhibitors were enthusiastic and report that sales activity was brisk and leads were plentiful."

FABTECH attendees and exhibitors in Chicago also raised more than $15,000 for the victims of the severe storms and tornados that devastated Washington, Illinois and other areas of the state on November 17th. The five FABTECH co-sponsors made a financial commitment to start the campaign with all funds collected going to the American Red Cross to help victims of the storms.

"We send our condolences to the residents of Illinois, our host state for FABTECH 2013, and we know that many are struggling to recover from the physical and economic damage caused by these storms that hit on a set-up day for the show," said Catalano. "Some of our exhibitors and attendees were directly impacted by this tragedy, and we wanted to show our support. We are continuing to collect donations www.crowdrise.com/fabtechexpocares and encourage the manufacturing community to contribute."

FABTECH 2013 in Chicago sets the tone for the upcoming year of international programming by the FABTECH Partners. FABTECH Canada, will take place March 18-20, 2014 at the Toronto Congress Centre. On April 10-12, the inaugural FABTECH India, co-located with the India Institute of Welding's Weld India Exhibition, will take place in New Delhi. On May 6-8, 2014, FABTECH Mexico will take place at the Centro Banamex in Mexico City.

The five FABTECH co-sponsors represent a wide variety of expertise and include: SME, the American Welding Society (AWS), the Fabricators & Manufacturers Association, International (FMA), the Precision Metalforming Association (PMA), and the Chemical Coaters Association International (CCAI). Together, these associations bring unmatched technical proficiency and industry insight to FABTECH. Read more about FABTECH's co-sponsors here.

FABTECH 2014 will be held on November 11-13, 2014 in Atlanta, GA. Additional information can be found at www.fabtechexpo.com.

CFCM was there.

Photos By Pete Wilkinson

Chantal Rousseau- Proceco, Montreal, QC.


Michael Vrshek, Trena Benson and Michael Withers, Axalta Coating Systems.

Allan Friesen Diemo Machine Works, Arborg, MB.

George Faheem Ultra Lift Mfg. Mississauga, ON.

Jerome Waldner, Waber Mfg. Sperling, MB.

Greg Taylor, Gema.

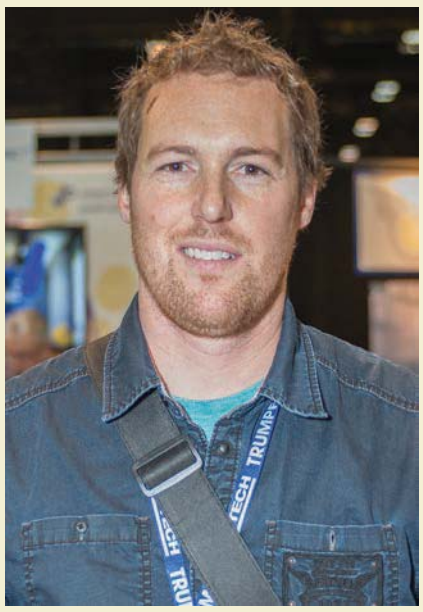

Stephane Girardin, Brian Daigle, and Isaac Verdegan, IST International Surface Technologies, Laval, QC.


Adam Mitchell, Robert Riggle Pollution Control and Dave Freeman, ProQuip Consultants, Toronto, ON.


Ed McGhee and Lanny Hypes Nordson.

Alan Moon and Monica Sluys, Guspro, Chatham ON.

JR Rogers, Evelia Garcia, and Joe Glassco, Wagner.



Russell Schartner. Shield Industries, Taber, AB.


Grace Biondi, Vanessa Ades, Mark Lazarus, Sylvain Rivest and Tim Bruner Protech Chemicals, St. Laurent, QC.

## CORPORATE PROFILE: GRACO

### Providing Innovative Solutions to a Diverse Global Market

Founded in 1926, Graco is a world leader in fluid handling systems and components. Graco products move, measure, control, dispense and apply a wide range of fluids and viscous materials used in vehicle lubrication, commercial and industrial settings.

The company's success is based on its unwavering commitment to technical excellence, world-class manufacturing and unparalleled customer service. Working closely with qualified distributors, Graco offers systems, products and technology that set the quality standard in a wide range of fluid handling solutions.

Graco provides equipment for spray finishing, protective coating, paint circulation, lubrication, and dispensing sealants and adhesives, along with power application equipment for the contractor industry. Graco's ongoing investment in fluid management and control will continue to provide innovative solutions to a diverse global market.

### New Product: ProMix PD2K Positive Displacement Proportioner

Graco's new ProMix PD2K mixes material close to the gun so the flush zone is significantly smaller than traditional systems. This gives customers the opportunity to use less paint and spend less on disposal costs, plus you get for faster color changes. Since there is limited mixed material in the system, the ProMix PD2K works well for short pot life materials and is also compatible with acid-based materials. "Our customers were looking for ways to increase efficiency in their plants," said Graco Global Product Marketing Manager, Blake Erickson. "By moving the mixing point closer to the gun, it is possible to reduce solvent use and mixed material waste by up to 80 percent compared to traditional electronic proportioners."

The ProMix PD2K Proportioner was developed using 100% positive displacement technology that produces accurate mix ratios (within 1 percent accuracy) and more consistent pump performance. Because the ProMix PD2K can be equipped with either two or four dosing pumps, it can manage up to 30 colors and four catalysts. It also allows customers to proportion both epoxy and urethane using one system, rather than using multiple units to achieve the same result.

"This proportioner is very easy to set up and maintain. It handles various inbound pressures and viscosities without touchy fine-tuning," said Erickson. "And unlike gear pumps, the ProMix PD2K has positive displacement precision dosing pumps that do not require factory rebuilds and can be serviced in the field in less than 20 minutes."

### Finishing Solutions

Graco provides finishing solutions for all types of wood, metal and plastic applications. Our applicators, pumps, packages and plural component equipment improves productivity, reduces paint usage costs, lowers emissions and provides consistently better finishes.

### Finishing Spray Guns

Designed to deliver excellent spray quality in a wide variety of finishing applications. Choose from our complete line of applicators including air-assist, conventional, HVLP, compliant and electrostatic technologies available in either manual and automatic options.

### Graco Pumps

Graco offers a wide range of pneumatic, hydraulic, and electric pumps designed for a variety of markets. The flexible nature of our pump line lets the customer easily upgrade their existing platforms to more energy efficient systems as their business grows.

### Graco Spray Packages

Available in a variety of configurations including air spray, air-assisted and airless. Our packages are designed for specific materials and markets, including general metal, wood finishing and waterborne, and have unique features including, DataTrak for monitoring and protecting your pump.

### Graco Plural Component Equipment

Our broad range of plural component equipment can be used for proportioning, batch dispensing, monitoring, controlling and metering for precise materials measurements. Get increased efficiency and higher quality processes, leading to a superior return on investment.

For more information about Graco Finishing products, please visit www.graco.com/finishing.


Aivars Freidenfelds and Denis Housewert, ElektroPhysik.


Steve Larson and Mark Hebbeler, Anest Iwata.


Brenan Johnsee, Torsten Broeker, and Bill Johnsee, Walter Pilot.


Phil Marks, Sherwin Williams, Ed Eckhart and Matt Schnieder, Finishing Brands.


Terry LaRue and Scott Bate, DeFelsko.

Don Adams, Megan Stalboerger, Mike Vangstad, and John Murphy, Graco.

# FABTECH 2013

## CORPORATE PROFILE: FISCHER



### Coating Thickness Measurement and Material Analysis with FISCHER

FISCHER is recognized as a leading producer of high quality, precision handheld and desktop instruments for coating thickness measurement, material analysis, material testing and nanoindentation instrumentation. There is a FISCHER solution for every industrial measuring application.

FISCHERSCOPE® X-ray fluorescence instruments for coating thickness measurement and material analysis are optimally suited for determining the composition of materials, measuring thin coatings and coating systems for a wide variety of applications with and without calibration standards.

Fischer offers a complete range of hand held coating thickness gauges ideally suited for measurements of paint, powder coating, plating and anodize. FISCHER DataCenter software, for quick and easy data transfer to your PC and personalized inspection reports, is included with most of Fischer's handheld instruments. All Fischer units and foils come serialized and certified at no additional charge.

Different applications require different test methods. The FISCHERSCOPE® MMS® PC2 combines the most commonly used non-destructive test methods in one measuring system. It is a compact universal coating thickness and material property measurement system with data archiving and measurement data processing capabilities used for incoming inspections, ongoing production, sampling or routine tests. The modular design allows the user to combine and configure different test methods and probes for virtually any coating/substrate combinations; some methods available are: magnetic induction, eddy current (amplitude-sensitive and phase-sensitive), magnetic, beta-backscatter, micro-resistance and duplex. The unit includes Fischer DataCenter software makes it possible to easily generate individual reports and design them with your own logos, images and graphics. You can integrate any desired measurements, statistical values and graphic displays via drag and drop. This eliminates the need to work with pen and paper.

Visit Fischer's booth #1443 at the FABTECH Canada Show in Toronto for a product demonstration.

**Fischer Technology, Inc.**
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www.fischer-technology.com
info@fischer-technology.com

Photos By Pete Wilkinson

# CASF Environmental Forum

The Canadian Association for Surface Finishing (CASF), held its Environmental and Technical Forum, November 13, 2013, at the Hilton Garden Inn, Vaughan, ON. The day was well attendee and featured presentations on waste reduction, chromium issues, Proposed Technical Standard for metal finishing, GHS, an update from the NASF and much more. There were some exhibitors, and breakfast and lunch was provided. **www.casf.ca**

Christina Labarge, Ontario Ministry of the Environment.


Maurice Pestowka and Angela Chen, AG Simpson.


Ian Borrell, Metpro, and Yashogaran Reddy, Hudson Plating.


Andrew Tymec and Mike Sklash, Dragun Corporation.

Bob Lapple and Dale Pritchett, Palm Intl.


Jeff Battiston, of Atom.


Charles Morris, Janice Jacula, and Stewart Tymchuk.

John Armiento, MOE .


Andrew Harvey, CDS.

Helmut Horsthemke, Enthone,

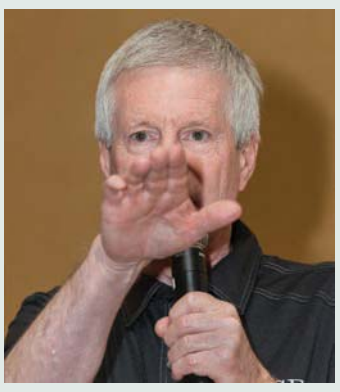
Lyle Safronetz, Vale Inco.


Michael Tingle, Ortech.

Mike Kuntz CASF.


Richard Thibideau CASF.

Christian Richter, NASF.



Bob Smith, CASF.

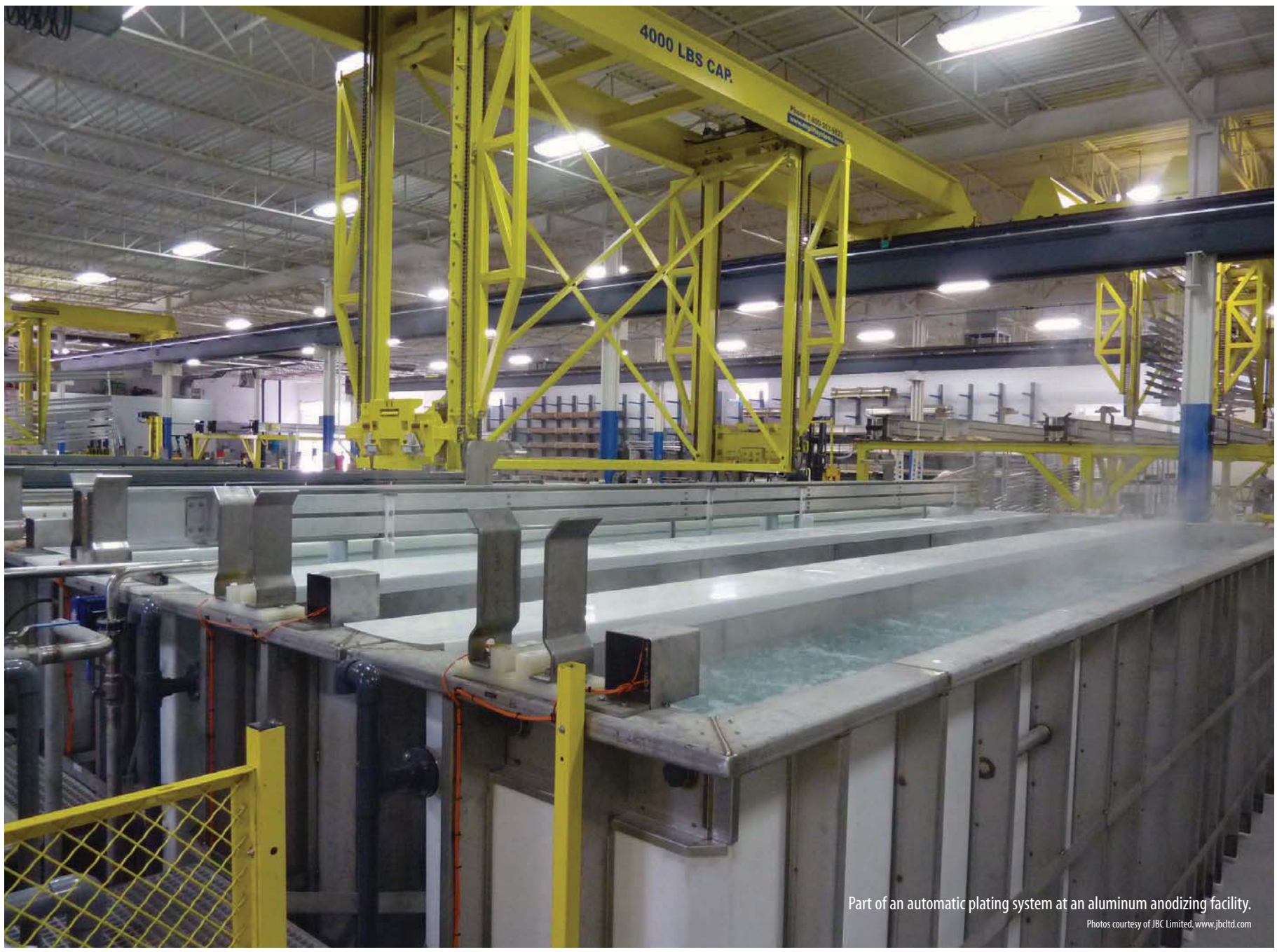
Neil Patton, Atotech.

Michael Douglas and Mark Jezierzanski, Uba.

Peter Forth, JBC and Peter Paine.


Stephen Spray, Ardaven Plastics, Jonathan Holland , and Peter Meresz, RFT Technologies.

# Control of Automation Systems Used in Plating




Part of an automatic plating system at an aluminum anodizing facility.
Photos courtesy of JBC Limited. www.jbcltd.com

Computers have made automatic plating systems more desirable, more profitable and less risky. Captive plating shops are more apt to install Automatic Plating Systems rather than contract plating shops due to a lower variety of components and controlled scheduling. In addition, there are usually more engineering, maintenance and support services to plan and install the correct system for the application. Most contract shops are run by an owner operator, along with a couple of key employees, who have worked hard to succeed in a very competitive regulated industry. The old reasoning is that due to the large variety and constant changes of work in contract shops, automation is too inflexible to pay for itself. The reason for this inflexibility was not so much the hardware involved but more to do with the limits put on the control system by the use of relay logic, NC controls or low powered PLC's. Programming options were limited and many employees of contract shops were uncomfortable with computers and programming languages. Most owner operators are proud of their own ability to run everything in their shops and are not comfortable with handing over control of key processes to outside entities that may not be able provide the needed services on a timely basis.

## COMPUTERS AND CONTROL SYSTEMS

User interfaces are more intuitive and easy to use without reading manuals and there is no need to learn programming languages. Wireless technology lowers cabling costs and ensures widespread access to servers and networks. The additional computing power available is used to allow more inputs, outputs and logic to systems thereby providing more complete control and feedback. Interface standards have gotten rid of a lot of custom components that are now replaced by off the shelf parts that are very competitively priced. Shop tough touch-screens can bring up different screens and eliminate fixed menus thus making retrieving and entering data easy. Networking your automation control system to your management PC's can allow for the downloading of parameters and instructions for the operator and equipment.

Automation Control Systems will monitor many interrelated variables, consider the workload, provide plating parameters and track actual outputs of each job. The more integrated the control system is with all of the devices, the better it is able to provide the maximum benefits. By collecting all of this data, it can be reported, analyzed and provide information for further improvements in the future. In effect, it becomes part of your management cycle, showing you the results that a given set of parameters will provide. Costs have reached the point where small shops can afford these control systems. They improve traceability and quality, because they remove the guesswork when doing root cause analysis and new process development. For platers, the flexibility and consistency provided by modern control systems will lower costs and improve quality. Electronic controls that are well integrated into your automation system can make the difference between success and failure. It is the brains of the operation, and it provides you with the ability to input your parameters, remember parameters that you have saved, send signals to your equipment, receive feedback from your equipment about what is happening during processing and provide analysis and documentation about the process. A fully integrated system can even "read" a shop traveller and document each job accordingly.

Rectifiers are used in many areas of plating processes. Amperage, voltage, ramp, pulse and time all need to be controlled. In many cases, parameters are load sensitive so a calculation needs to be made to the rectifiers output. By tying the rectifier's controls into the main control system, parameters can be optimized, calculation errors reduced and optimal results achieved.

In the past, data on shop travelers would be hand written by operators and stored in filing cabinets making retrieval

of data time consuming. Inputting shop floor data was time consuming and inefficient, so it was rarely done. Data can now be input by scanning barcodes or by using non-contact Radio Frequency Identification (RFID) sensors. Coming on the scene now are tablets on the shop floor to eliminate paper and provide live tracking of shop floor data. The control system can be integrated into all the various elements of automation to create a virtual model of your plating system. It not only provides control of movement but also warns you of potential problems, upcoming maintenance needs, and can stop processes from being performed when parameters fall outside of acceptable limits.

## HOIST SYSTEMS

A hoist drive system provides control for both horizontal and vertical motion. Some hoists are also able to tilt or vibrate the load in order to aid drainage. Automating the hoist saves labour, increases throughput and improves quality by providing process repeatability. Electric hoists and drives with linear position sensors or micro-switch stops let the control system know where the hoist is vertically and horizontally. An ideal control system will control drive speeds, acceleration, deceleration, drainage times, time in tank and position. Most control systems work in milliseconds so there will be a vast improvement in consistency. Acceleration and deceleration speeds can be tailored to the weight of the load and accidents from hitting the tops or sides of tanks can be eliminated. Drag out can be tightly controlled to help preserve various tank chemistries. With automated hoists, you can more reliably predict completion times and create better schedules.

## TANK SOLUTION CHEMISTRY

Tank chemistry can be controlled through automation with sensors in your tanks and using precision dosing pumps, eliminating the peaks and valleys of solution concentrations that in turn will give you more consistent plating results. The sensors and the pumps can report to the control system as to their operation so that any negative trends can be identified before they become a problem. SPC control of solutions is very difficult to maintain manually because of the amount of data that needs to be collected, analyzed and acted upon. A good control system will provide an SPC level of control with no additional cost once the system is setup to provide it. Most plating shops without computer control systems that attempt to implement SPC find that they are able to control one or two key parameters per process at best. An automated system can provide SPC control over several characteristics per tank.

## RINSE CONTROL

All plating shops use water for rinsing. There could be a mixture of Municipal water, DI and recycled water. A system of reusing rinse water by filtering or moving water from critical to less critical rinse tanks may be in use. By adding rinse water monitoring into the control system, water consumption can be further reduced by turning off rinse waters when they are not needed. In many shops, rinse waters are turned on at the beginning of the day and turned off at the end of the day. A control system can monitor production and rinse water quality, then adjust water flows accordingly.

## FLEXIBILITY

Modern control systems can provide the flexibility to achieve greater control at lower cost while improving capability and quality. It is important that the Plater select the right contractor and then working closely with them to ensure that they understand the company's needs, both now and in the future. Although supporting key personnel in the design of the automatice plating system project may stretch resources, the payoff is that the system performs as desired. It can be an educational process for all involved. With new control systems being so flexible, in-house expertise is needed to ensure that full advantage is taken of this flexibility. Once employees start to understand the control systems capability and how to adjust it, full benefits will be achieved.

Editor's Note: Photos in this article of an automatic plating system at an aluminum anodizing facility appear courtesy of JBC Limited. www.jbcltd.com

# THE HEALTH OF ZINC COATING

Zinc, a natural, healthy, and abundant element was first used in construction in 79 AD. Zinc metal has several characteristics that make it a good corrosion protective coating for iron and steel products.

This proven corrosion resistance is a result of zinc's ability to form dense, adherent corrosion byproducts, which leads to a rate of corrosion considerably lower than ferrous materials – 10 to 100 times slower, depending on the environment. While a fresh zinc surface is reactive when exposed to the atmosphere, zinc corrosion products develop rapidly on the surface as the coating is exposed to natural wet and dry cycles in the atmosphere. These corrosion products, collectively known as the zinc patina, act as an additional barrier between the steel and the environment.

Zinc is the primary component of the hot-dip galvanized coating. (HDG). But to only recognize zinc as it is used in the galvanizing process would be a huge disservice to the natural, healthy metal. The silvery, blue-gray vital metal is abundant, essential, common and recyclable.

Zinc is the 27th most abundant element in the Earth's crust. It naturally exits in air, water, soil, and the biosphere. Most rocks and many minerals, as well as humans, plants and animals contain zinc in varying amounts. Approximately 5.8 million tons of zinc naturally cycle through the environment annually by plant and animal life, rainfall, natural phenomena, and other activity.

## THE HDG COATING

The coating that develops during the galvanizing process is metallurgically bonded to the steel – virtually becoming a part of the steel itself. During the reaction in the kettle, the zinc interacts with the iron in the steel to form a series of zinc-iron alloy layers. The galvanized steel coating is comprised of three alloy layers and a layer of pure metallic zinc:

- The thin Gamma layer composed of an alloy that is 75 per cent zinc and 25 per cent iron
- The Delta layer composed of an alloy that is 90 per cent zinc and 10 per cent iron
- The Zeta layer composed of an alloy that is 94 per cent zinc and 6 per cent iron

The outer Eta layer that is composed of pure zinc.

## ELECTROPLATING

Electrogalvanized (electroplated) coatings are created by applying zinc to steel sheet and strip by electro-deposition. The operation is continuous and coating thickness is minimal. Applied in a steel mill, sheet or strip is fed through entry equipment into a series of washes and rinses then into the zinc plating bath.

The most common zinc electrolyte-anode process uses lead-silver, or other insoluble anodes and electrolytes of zinc sulfates. Soluble anodes of pure zinc are also used. The coating develops as positively charged zinc ions in the solution are electrically reduced to zinc metal and deposited on the positively charged cathode (sheet steel). Grain refiners may be added to help produce a smooth, tight-knit zinc coating on the steel.

Electrogalvanized coatings are applied to sheet steels and wire; and therefore, are used in similar applications to continuous sheet galvanizing or wire galvanizing. The most common applications are in automobile and appliance bodies and fasteners. Electo-coatings can be treated to make them suitable for painting, and this is often recommended due to the extremely thin zinc coating.

## COATING CHARACTERISTICS

This electro-deposited zinc coating consists of pure zinc tightly adherent to the steel. The coating is highly ductile remaining intact even after severe deformation. Produced on strip and sheet materials, the coating weight ranges up to 0.2 oz/ft2 (60 g/m2), or thicknesses up to 0.36 mils (9.1 m) per side, while on wire, coating weights may reach up to 3 oz/ft2 (915 g/m2). The coating of pure zinc is thinner than continuous sheet galvanizing, mechanically-bonded, and there are no alloy layers, but provides a smoother finish. Heat-treated and electro-coated wire can be cold drawn to about 95% per cent reduction in area, depending on the chemical composition of the wire, heat treatment, and diameter. Zinc Plating

## ZINC PLATING

Zinc plating is identical to electro-galvanizing in principle because both are electro-deposition processes. However, zinc plating is used on small parts such as fasteners, crank handles, springs and other hardware items rather than sheet metal. The zinc is applied as an expendable electrode in a cyanide, alkaline non-cyanide, or acid chloride salt solution. Cyanide baths are the most operationally efficient but can potentially create pollution and are hazardous.

After alkaline or electrolytic cleaning, pickling to remove surface oxides, and rinsing, the parts are loaded into a barrel, rack, or drum and immersed in the plating solution. Various brightening agents may be added to the solution to add luster, but careful control is needed to ensure a quality product. Post-plating treatments may be used to passivate the zinc surface as well as impart various translucent colors or to extend the life of the coating.

Zinc plating is typically used for screws and other small fasteners, light switch plates, and various small parts that will be exposed in interior or mildly corrosive conditions. For use in moderate or severe environments, the materials must be chromate-conversion coated for additional corrosion protection.

Steel and iron components are zinc

# Zinc in Canada

Canada is the world's largest zinc producer making it a billion dollar industry. About 90 per cent of production is exported as refined metal or concentrates; major customers are the US and Taiwan for metal, and Belgium, Germany, Spain, Italy and the Republic of Korea for concentrates. Zinc is used principally to galvanize steel as a protection against corrosion. The next most important use is in the creation of alloys such as brass and bronze, followed by use in die-cast products.

Production in Canada began in 1916 at TRAIL, BC, when Cominco Ltd (now Teck Cominco) opened a small electrolytic plant, using ore from the Sullivan Mine. Production was hampered because the complex lead-zinc-iron ore was difficult to treat. In 1920 the differential flotation method was successfully used to separate out lead and zinc concentrates, marking the beginning of substantial zinc production in Canada.

Zinc mines are currently operating in British Columbia, Saskatchewan, Manitoba, Ontario, Québec, Northwest Territories, Yukon and Nunavut. As well as the original Sullivan mine, Teck Cominco operates the Polaris mine on Little Cornwallis Island, Nunavut, the world's northernmost base metal mine. Other Canadian zinc producers include Noranda, in British Columbia and Québec; Breakwater in Québec and Nunavut; Agnico-Eagle Mines Ltd in Québec; Falconbridge in Ontario; Hudson Bay Mining and Smelting in Manitoba and Saskatchewan; and Boliden in British Columbia.

All primary zinc metal production in Canada is carried out by the electrolytic process, which yields a product that is more than 99 per cent pure. Solution purification, electro winning and casting are preceded by either conventional roasting and leaching or by the zinc pressure leach hydrometallurgical process.

plated to provide improved corrosion resistance. The protection is largely the result of the zinc plate acting as an anode to the base metal. This means the zinc corrodes preferentially to the steel, therefore extending component life.

Zinc Plating can also offer a bright 'blue chromium type' appearance, which adds aesthetic value to the component. The zinc plated deposit can also be passivatedpassivized to produce 'black zinc' and 'zinc yellow' finishes.

Zinc Plating systems offer environmental advantages because they are free from cyanide and strong complexing materials. The Alkaline Zinc Plating system is very popular, has been globally in use for decades and is suitable for both barrel and rack zinc electroplating installations.

The Acid Chloride zinc plating system has high quality, brilliant deposits. And is suitable for both barrel and rack zinc electroplating installations and used for both functional and decorative zinc plated steel.

## COATING CHARACTERISTICS

The normal zinc-plated coating is dull gray in color with a matte finish, although whiter, more lustrous coatings can be produced, depending on the process or agents added to the plating bath or through post-treatments. The coating is thin, ranging up to 1 mil (25 µm), restricting zinc-plated parts to very mild (indoor) exposures. ASTM Specification B 633 lists four classes of zinc plating: Fe/Zn 5, Fe/Zn 8, Fe/Zn 12 and Fe/Zn 25. The number indicates the coating thickness in microns (µm). The coating finds application in screws and other light fasteners, light switch plates and other small parts. Materials for use in moderate or severe applications must be chromate conversion coated. The coating is entirely pure zinc, which has a hardness about one-third to one-half that of most steels.

*Editor's Note: The main source for these articles was the American Galvanizers Association and The Canadian Encyclopedia.*

# New Products & Technology

## New Line form MOCAP

MOCAP's new line of Pipe and Flange Protection Products include Pipe Caps, Pipe Plugs, Outside Fitting Flange Protectors, Push-In Flange Protectors and Bolt Hole Flange Protectors. They are designed to protect many sizes and styles of pipes and flanges from moisture, contamination and damage during transit, handling and storage. They all provide for easy installation and removal by hand. All parts are available in stock for immediate shipment in box, mini-pack and new micro-pack quantities.

**www.mocap.com**

## Wagner's New Colorselect X Offers Powder Color Changes in Less Than A Minute, and Even as Fast as 20 Seconds

The new ColorSelect X from Wagner Industrial Solutions is designed for the quickest powder color change while providing the least potential for cross contamination and powder loss. Wagner ColorSelect X incorporates a simple, robust pneumatic control system of up to 10 powder feed systems including hopper fluidizing air, powder injector feed air, and dosage air. The operator control panel includes an intuitive selection dial, and quick connect ports for up to 10 colors. The primary features and advantages of our new ColorSelect X include:


- Super-quick color changes, as fast as 20 seconds
- EPG-Sprint recipe control
- Quick connect ports for up to 10 colors
- Least potential for powder loss and cross-contamination
- Easy to maintain, and requires 5 simple steps to operate
- Lowest cost of ownership

**www.wagnersystemsinc.com**

## PPG Introduces DURANAR GR and CORAFLON GR Graffiti-resistant Coatings

PPG Industries' industrial coatings business has introduced DURANAR GR (graffiti-resistant) and CORAFLON GR coatings. Duranar GR and Coraflon GR coatings feature a clear, graffiti-resistant barrier over the pigmented color layer of the coating. If the coating is spray-painted or otherwise marred, it can be cleaned by applying DURAPREP Prep 400 graffiti remover by PPG. After the solution has been allowed to dwell on the stain for 10 to 60 seconds, it can be wiped with a clean cloth or scrubbed with a nylon brush. Most stains can be removed in 10 minutes or less. When applied on either Duranar GR or Coraflon GR clear coatings, Duraprep Prep 400 field-applied graffiti remover eradicates graffiti as well as paint overspray, pen and marker ink, lipstick, scuff marks, tape residue, bugs, tar and many other substances that mar the appearance of commercial buildings. It is believed to be the only graffiti-resistant coating system sold and tested by the same company.

**www.ppg.com**

## Full Package of New Products for Heubach

As a consequence of the strong focus on research and development work, Heubach introduces a new and innovative production line for Complex Inorganic Colored Pigments (CICP's). This new production line enables the production of chrome rutile yellows revealing premium high tinting strength pigments. The special feature of these pigments is that they not only show extremely high tint strength but they exhibit a high level of chromaticity as well. The first product introduced to the market is the HEUCODUR Yellow 2550. It combines multiple outstanding properties in terms of chemical, temperature and weathering resistance with an extremely high tinting strength. It also has a high level of chromaticity and is the first choice in formulating durable colours.

**www.heubachcolor.de**

## Newest Axalta Nap-Gard Achieves New Depths for Oil Pipelines with Operating Temperatures in Excess of 155°C

Axalta Coating Systems is rolling out its latest generation Nap-Gard product which can withstand continuous operating temperatures of 155°C (311°F). Nap-Gard High Tg 7-2555 is a thermosetting epoxy powder designed for use as a corrosion barrier coating for underground and sub-sea pipelines that operate in high temperature service. It can be used as a corrosion coating in a stand-alone or dual-powder coating system or as a corrosion coating under multi-layer insulation systems. When used in conjunction with Axalta's most recent dual layer system Nap-Gard 7-2675, the operating sys-

tem increases to 180°C (356°F). The second layer ensures reduced water permeability and improved chemical resistance.
**www2.dupont.com**

## Cefla Introduces New Surface Finishing Technology for High-Output Panel Production Operations

With raw materials, labor, and energy costs continuing to rise, production efficiency is often the difference between managing a profitable enterprise, and just breaking even.

For large-scale manufacturers of panel-based products, Cefla North America is pleased to introduce new surface and edge finishing technologies that make low-cost materials into high-value panel products; cost-effectively.

Designated Inert Coating Technology (ICT), for the heat-free, UV curing process, which achieves the surface finish, this patented process applies a durable sealer coating on inexpensive raw materials; MDF, OSB, chipboard, honeycomb, and others. The resulting surface can be combined with Cefla Pixart digital printing to create high-value appearing products, virtually indistinguishable from the real thing – at considerably lower cost.

ICT is ideal for RTA furniture, flooring, store fixtures or any other high-production flat panel operation.

ICT also offers the flexibility to create perfectly smooth surfaces as well as three-dimensional grain. Realistic patterning can be creating in surfaces where additional depth or texture is desired, while reducing production time and processes.
**www.cefla.com**

## High Temperature Walk-In Oven

The Grieve Corporation's 1100ºf electric walk-in oven for heat treating and curing paint and varnish offers:

- Maximum operating temperature: 1100°F.
- Work space dimensions: 9′ wide x 9′ deep x 9′ high
- 240 KW installed in Incoloy sheathed tubular heating elements
- 24,500 CFM, 20 HP recirculating blower providing combination airflow
- Type 304, 2B finish stainless steel interior

- Inner and outer door gaskets; inner gasket seals directly against door plug; outer gasket seals directly against front face of oven
- Safety equipment for handling flammable solvents
- 8″ insulated floor with truck wheel guide tracks

**www.grievecorp.com**

## Adhesion Testing Keeps You in the QC Loop

Brookfield Engineering offers the new TA-LTT Loop Tack Tester for use with the CT3 Tester. The TA-LTT Loop Tack Tester is designed for testing the adhesive strength of materials per ASTM D2979. The sample is adhered to a slide that is placed in the bottom fixture. The top of the sample is then gripped by the upper clamp and the CT3 Tester applies tension, measuring the force required to break the adhesive bond.

The Brookfield CT3 Tester is the best value in a stand-alone instrument for physical testing. It combines simplicity of operation with expanded test method capability and operates in both compression and tension modes.

Brookfield offers a wide variety of fixtures and probes for use with the CT3 Tester, providing testing solutions for a large and growing number of applications.

TexturePro CT Software, which offers a range of test modes, generates detailed analytical data for each test and produces statistical reports over multiple samples.
**www.brookfieldengineering.com**

## New Rust Converting Additive

Halox introduces the Halox RC-980 easy to use rust converting additive. This product low-odor, water miscible paint additive which transforms red iron oxide into a stable black finish and provides an excellent base primer for various top coats.

HALOX RC-980 does not contain tannic acid or phosphoric acid. It can be post-added to most vinylidene chloride binders used in rust conversion primers. It is less soluble and less acidic (pH 4-6) than tannic acid. HALOX® RC-980 provides better salt spray and cyclic corrosion performance and is non-flammable. This product can also be used in short and medium oil alkyd solvent-based rust converters.
**www.halox.com**

## Metal Blackening Using Near-Zero Water and Presto Black

Metal finishers facing water restrictions now have a great new option for the black oxide process from Birchwood Technologies. Now it is possible to operate the In-House TRU TEMP black oxide system while utilizing almost no rinse water. The Near-Zero Water Recycler allows for re-using the rinse water in the process line, reducing water consumption by 99 per cent. For black oxide users in water-restricted areas, this is huge - it means they can continue critical metal finishing operations while observing tight water usage guidelines.


The company also offers Presto Black cold blackening that produces a uniform depth of blackness and corrosion resistance that is the ideal finish for oil and gas drilling components.

Without the hazards of the hot oxide process, Presto Black is a fast, economical and safe room temperature process that provides high corrosion resistance tested for up to 1200 hours humidity exposure. With a uniform .000030 inch (1 micron) thickness, the porous crystalline structure of the Presto Black finish makes it an excellent absorbent base for a rust preventative topcoat for extra corrosion protection without chipping or peeling.
**www.birchwoodtechnologies.com.**

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## AD INDEX

# " au delà de la chimie"

Plus que des mots, notre devise représente la volonté d'offrir à nos clients et fournisseurs un service unique et inégalé.

Notre personnel de grande expérience tant dans le service à la clientèle, la vente, la règlementation, et le service technique, saura vous appuyer dans vos projets de développement. Notre laboratoire de R&D à la fine pointe de la technologie et constamment tenu à jour par l'ajout de nouvel équipement, comme l'acquisition cette année d'un Weather O Meter de dernière génération, sait vous donner un appui de taille pour l'intégration de nouvelles technologies dans vos lignes de produits.

La mission d'Inortech a toujours été de repousser les limites des possibilités actuelles offertes, pour offrir à nos clients et fournisseurs les solutions les plus innovantes et avant-gardistes du moment.

L'ensemble de notre personnel assiste à de nombreuses conférences, formations, et congrès, afin de se perfectionner et de confirmer leur dominance technique et leurs qualités humaines, tant reconnues par le marché.

Depuis maintenant 21 ans, Inortech n'a de cesse de donner à ses clients des occasions uniques de développement par l'appui technique incomparable qu'elle seule est capable de leur offrir. Pour nos fournisseurs, il s'agit d'une assurance de visibilité et de mise en marché hors pair de leur gamme de produit.

Pro-actifs dans l'industrie des encres, adhésifs, plastiques, et revêtements, attentifs et attentionnés aux problématiques modernes, la sélection de nos fournisseurs représente l'élite technologique disponible, et renforce la solidité ainsi que la longévité des liens qui unit Inortech a ses partenaires.

Ce lien nous rend extrêmement fier et nous pousse tous les jours à donner le meilleur de nous-même.

Afin d'être au plus près de notre clientèle, nous avons établi un réseau de stockage par l'utilisation d'entrepôts publics à travers le Canada, là ou les besoins sont établis. Ce faisant, nous offrons à notre clientèle la flexibilité et la proximité nécessaires à une époque où les délais sont un facteur clé de réussite tant pour nos clients que fournisseurs.

Maillon indispensable de réussite Inortech s'est toujours démarqué par une connaissance parfaite des besoins de ses marches, de l'évolution technologique et commerciale actuelle, et s'adapte en permanence aux modifications incessantes de notre industrie.

Prête à relever tous les défis auxquels elle a été, est et sera confrontée, Inortech est l'atout incontournable de votre réussite, grâce à son modèle unique et avant-gardiste d'entreprise .

Ensemble, voyons …



# "beyond chemistry"

More than words, this motto represents Inortech's "raison d'être", always striving to give a unique and unparalleled service to our customers and suppliers.

The great experience of Inortech's personnel at the customer service, sales, regulatory and technical level will, without a doubt, enable you to successfully establish new technologies. Our laboratory is always maintained at the cutting edge of technology and we constantly make sure that the latest equipment is available. As an example, this year we purchased the latest generation of Weather-O-Meter. In doing so, we ensure outstanding support to our customers and suppliers.

Inortech's mission is always to push to the limit of the technologies offered by our suppliers and others for innovative and "avant garde" solutions.

In order to maintain our technology expertise and the excellent interpersonal skills so well recognized by the market we serve, all Inortech's personel, without exception, are invited to go to conferences, congresses and to follow continuous formations.

For the last 21 years, Inortech has strived to help customers successfully secure new opportunities supported by the unparalleled technical team. Also, for our suppliers, we assure an outstanding visibility and an excellent market penetration.

Being proactive in the market we serve – coating, inks, plastic and adhesives – and being especially attentive to our customers' demands and problems, we always make sure that the selected supplier is at the cutting edge of their technology. This approach strengthens and guarantees a long and fruitful partnership with our customers and suppliers.

In this day and age, delivery on short notice and on time is a paramount asset for our customers and suppliers. Our Canadian public warehousing network helps us to make sure that our customers have the material when needed and on time.

Inortech's success has always been its outstanding capacity to understand new technologies and to be able to explain them to our customers. This forces Inortech's staff to always adapt and be on top of the ever-changing market conditions.

Because of its unique and "avant garde" business model, Inortech can be part of your team and pivotal to your success.

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