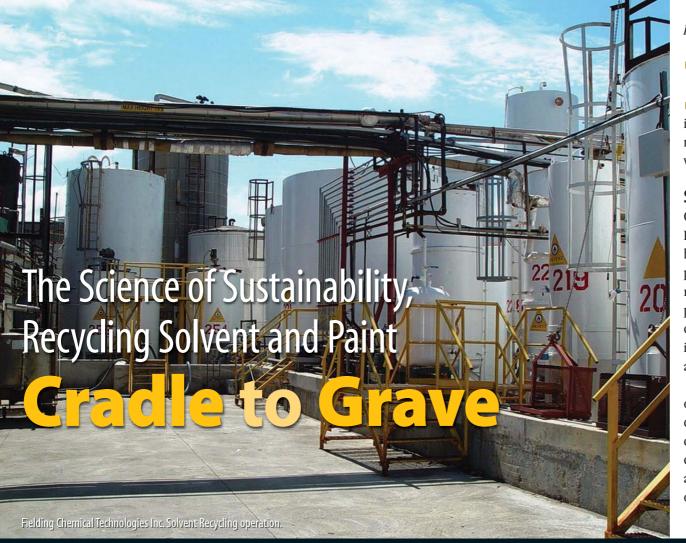


\$12.00



By Sandy Anderson

nvironmental concerns and recycling paint and solvents is easily the most significant concern within the paint and coatings industry and many manufacturers are leading the way with their recycling efforts.

April 2010

SAVING SOLVENT

One such company leading the way is Fielding Chemical Technologies Inc. based in Mississauga, ON. The company provided the following about its solvent recycling program. "Before recycling was popular, in fact back in the time that recycled chemicals were rare and considered inferior and unreliable, a visionary set about to make history.

In 1955, Jack McGregor took control of a Toronto based company with roots dating back to 1894, and laid out a plan to collect and recycle solvents that were commonly and prolifically used by the automotive and other industries, used once and then discarded. The methods of *continued on page 10*

ALSO IN THIS ISSUE

- Low VOC Finishes for Wood
- Resins
- Manual Liquid Spray Guns
- Process Control

AND MUCH MORE!

Anniversary for Irpinia Kitchens



IN THE NEWS

Association News

Canadian Construction Association Pleased with Commitment to Infrastructure Spending

The Canadian Construction Association (CCA) is very pleased to see the federal government follow through on the second year of the infrastructure stimulus measures from the Economic Action Plan.

"The federal government has recognized the importance of infrastructure and maintained its investment in development and renewal," says Michael Atkinson, President of the Canadian Construction Association. "The much needed

PM # 1151012 Return undeliverable Canadian addresses to Wilkinson Media Canada Inc., 250 The East Mall Suite 1103, Toronto, ON, Canada M9B 613 **Irpinia Kitchens** based in Richmond Hill, ON, has been very innovative in bringing the European styling to the market, but at the same time using the North American sensibility of customizing the entire product.

Joseph Marcantonio, Irpinia president says, "Customer service has built this company and to this day stands as the #1 priority throughout the company and its employees."

Begun as a custom shop by an Italian

Irpinia Kitchens' Nick Rossi, Joe Marcantonio and Marcello Marcantonio in the show room of their Richmond Hill, ON plant.

cabinet maker back in 1960, this Toronto company has grown and diversified these last five decades into a well respected high end kitchen and bath designer.

In 1985, the original owner decided to sell. The new owners used the company's reputation in the Toronto market as a *continued on page 15* spending announced last year provided stimulus to the Canadian economy through investments in infrastructure, college infrastructure, green technology, as well as new incentives to help in retraining Canada's unemployed."

The association says infrastructure programs in Budget 2009 have been instrumental in the rise of employment in Canada's construction industry since August. These important investments made by federal, provincial and municipal governments have not only been a necessary source of stimulus, but are long-overdue investments in the modernization of our Nation's infrastructure, which will be critical to our future global competitiveness. However, the industry is concerned with the *continued on page 4*

ONTARIO'S PAINT RECYCLING PROGRAM

Revitalizing Communities Around The World

- For the last decade, Hotz Environmental Services has been recycling Ontario's paint, following the model of the U.S.A. specification #TT-P-2846
- In accordance with the Ministry of the Environment's 3R's policy, both latex and alkyd paints are reworked back into high quality, low cost paint products, converting a local dilemma into a global solution.
- These product lines are marketed to countries outside North America, satisfying an international demand for affordable, quality paint. This well-established international demand confirms our commitment to North American paint manufacturers, that these products are for export markets only.
- With satisfied customers in more than 15 countries around the world, Hotz continues to develop new markets in preparation for increased paint recycling opportunities in the Province of Ontario, through the efforts of the WDO framework.



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In Prai\$e of Polymer\$

So now it is in the news that Canada's paper money is going to be made out of a tough polymer, a switch from the fabric cotton base it uses now.

The media is calling it "a switch to plastic currency". They say it will be cheaper and more secure. So these new plastic bills will join our other plastic money... credit cards and debit cards.

The Bank of Canada will begin introducing plastic banknotes using a polymer material by the end of 2011. The Canadian federal government announced the plans during its annual budget speech, stating that it was "taking steps to modernize Canada's currency and protect against counterfeiting".

Canadian money has been more tempting to forgers recently, as the Canadian dollar rises close to parity with the US dollar. Security measures that could be used include the addition of a clear window, holograms, iridescent ink, and metallic/reflective threads.

There are several additional benefits as well. The new bills are cheaper to produce and could last up to four times longer than traditional banknotes printed on cotton-fibers.

Tyvek-based plastic currency was first introduced in the 1980s, but Australia has since led the way with the development of polymer banknotes. The key ingredient is "biaxially oriented polypropylene", developed by Australian firm Securency.

Canada's \$1 and \$2 coins known as "loonies" and "twoonies" will also be undergoing a redesign. The Royal Canadian Mint plans to introduce a new composition that uses lower-cost "patented multi-ply plated steel technology."

Meanwhile, CIBC World Markets say the loonie is likely to rise above parity with the American dollar by the summer of 2010 as higher interest rates, demand for commodities and the perception of Canada as financially solid push up the currency. According to CIBC's report, the Canadian dollar will trade at \$1.02 to the US bill by September, then back to 97 cents by the end of 2010.

The high Canadian dollar may be good news if planning a vacation out of the country, but Canada's manufacturing sector, is not warm to the news as it continues to limp its way out of recession. The strong loonie makes Canadian goods more expensive in an already tough competitive market.

CIBC based its forecast on the Bank of Canada raising rates in July, six months ahead of a move by the U.S. Federal Reserve.

Early in March, the Canadian dollar hit its highest level in almost five months reaching 97.89 cents US in morning trading then dipping back down as oil prices eased.

Economists do say that the strength in the Canadian currency may help to reduce the impact of inflation, allowing the central bank more leeway in containing rate increases.

The bank said strong demand for commodities such as oil minerals and fertilizer may boost the currency as exporters repatriate profits.

The flow of foreign capital into Canada if mergers and acquisitions pick up, together with increased carry trade will also boost the dollar. Carry trade is when investors borrow at lower U.S. rates then turn around and invest in currencies with higher yields.

A perception of Canada as fiscally solid may also help the local currency as other governments around the world struggle to control deficits.

We will have to wait and see how this rising dollar will impact the paint, coatings, finishing, anodizing and plating industries.

Meanwhile, in other news, CFCM magazine is now digital. You can read the magazine in full and even download a pdf version at http://cfcm.dgtlpub.com. Contact brian.jones@cfcm.ca to register.

If you have any news or press releases to tell us about please contact the editor at sandra.anderson@cfcm.ca and feel free to visit our website at www.cfcm.ca

Sincerely, Sandra Anderson sandra.anderson@cfcm.ca www.cfcm.ca

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IN THE NEWS

continued from front cover

impact an abrupt withdrawal of funding from these stimulus programs would have on construction employment and economic activity.

"We believe a tapered withdrawal of stimulus funding poses less of a threat to Canada's economic recovery than the currently proposed deadline on these programs," says Atkinson. "Canada needs to continue to invest in its public infrastructure not simply because it stimulates the economy in the short term but because it is an investment in the very foundation of our Nation's future that ensures Canada's ability to remain competitive on the international stage, increase productivity, and to build upon our economic and social prosperity."

While CCA is pleased to see the Employment Insurance premiums frozen for 2010, they are concerned about the future impact significant increases in El premiums will have on employment moving forward.

Canada's construction industry employs close to 1.2 million men and women, and accounts for approximately 6 per cent of Canada's annual GDP. It buys goods and services in every region of the country and in every sector of the economy. As such, any significant increase in construction activity produces thousands of spin-off jobs in other sectors - steel, engineering, forestry, autos, banking, and retail - which is why it remains the barometer of economic health.

The Canadian Construction Association is the voice of the national non-residential construction industry. It represents over 17,000 members in an integrated structure of some 70 local and provincial construction associations.

Global UV and EB Curing Technology Conference & Exhibition

The RadTech UV&EB Technology Expo & Conference 2010 will be held May 24-26, 2010 at the Baltimore Convention Center, Baltimore, MD. The only place to see nothing but UV and EB curing.

If you are currently using or supplying UV or EB curable materials, or if you are looking to use or develop better, faster curing coatings, inks, adhesives or resins, you need to attend RadTech 2010 to learn about the latest materials, processes, and exciting new developments in UV and EB curing technology.

If you are a potential or current user of UV/EB curing technology, you may attend the conference and expo for free. All you have to do is visit http://www.radtech2010.com/enduser and fill out the qualification form and RadTech will send you the free code.

CACD Moves

The Canadian Association of Chemical Distributors (CACD) has moved effective September 2009.

The new address is 349 Davis Rd., Unit A, Oakville, ON L6J 2X2.

The phone number, fax and emails remain the same.

Executive Director, Cathy Campbell can be reached at ccampbell@cacd.ca, www.cacd.ca

Company News

PARA PAINTS and Lowe's Announce Partnership

Paint trendsetter PARA will now be available at Canadian Lowe's home improvement stores.

Lowe's Companies, Inc. and leading Canadian paint manufacturer PARA PAINTS have announced a strategic alliance, bringing PARA PAINTS to all Lowe's retail stores in Canada by mid-April 2010.

"We are thrilled to embark on this new partnership with Lowe's Canada," says PARA PAINTS General Manager, Dennis Duda. "Their company mission for superior customer service synergizes perfectly with our mission for superior quality."

Lowe's will carry two major PARA sub-brands including PARA Lifestyles paint for consumer markets, and PARA Professional Precision, which caters to both consumer as well as painting contractors.

"Partnering with well-established Canadian paint brands like PARA allows us to continue our efforts to offer Canadians the best products at the best prices," says Bob Sherwood, Vice President of Merchandising for Lowe's."By partnering with a trusted brand, we are ensuring that our customers have even more choice when it comes to choosing the right product to compliment their design and home improvement needs."

The launch of the PARA brand into Lowe's Canada will include their industry renowned

mils



home colour system with over 2150 designer shades along with PARA's Canadian Heritage Collection. The PARA colour system along with new themed colour brochures and inspiring colour coordinating idea cards will launch alongside the new paint lines later this spring.

Dow Declares Force Majeure for Phenol in the America's

The Dow Chemical Company (Dow) has declared force majeure for phenol in the Americas due to circumstances beyond its reasonable control. The phenol manufacturing asset located within the Oyster Creek, TX, facility was down for a scheduled two-week maintenance turnaround when a broken heat exchanger was discovered. This heat exchanger falls under Texas state regulations as a steam generator As a result, the shutdown will continue in order to make the unplanned repairs, which must be in compliance with state regulations. Dow expects the situation to be resolved by mid-April, 2010.

Sherwin-Williams Exclusive Distributor of Spraylat Shielding Coatings

Sherwin-Williams has signed an agreement with Spraylat Corporation of Pelham, NY, to become the exclusive North American distributor of Spraylat EMI/RFI shielding finishes, also known as conductive coatings, which are used to help protect enclosed electronic devices from electromagnetic and radio frequency 'noise' or interference. The Sherwin-Williams Chemical Coatings Division, which serves the product finishing market through 75 company-owned facilities in North America, will distribute Spraylat's Conductive Coatings to electronics-industry OEMs and product finishing shops.

EMI/RFI shielding finishes are functional coatings that are frequently used for telecommunications, office, medical and military equipment. The Sherwin-Williams Chemical Coatings Division offers a complete line of coatings for electronic enclosures, from solvent and waterborne finishes to polyurethane and powder coatings and functional shielding (conductive) coatings.

Spraylat Corporation is a privately-held global specialty coatings company. The electronic materials business unit of Spraylat Corporation, based in Mt. Vernon, NY, supplies conductive coatings and materials to the electronics industry. This product family includes silver-coated copper, pure silver and hybrid coatings.

Wagner Welcomes New Liquid Distributors

Wagner Systems, Inc. Elgin, IL, has added three new liquid distributors to its growing network. With over 40 distributors in the US, Canada and Mexico, Wagner continues its commitment of excellent service to new and existing customers. New distributors include, KIRKCO whose territories include North Carolina, South Carolina, portions of Georgia, Tennessee and Florida. Rontier Industrial Supply will cover the province of Ontario in Canada. The new distributor in the West is Automotive Industrial Supply covering Nevada, Utah, Idaho and Montana. Contact information can be found on our website by clicking on Contact Us, Liquid Distributors. for the paint and coatings market, has appointed Ferguson/ICC as the exclusive distributor for northern Alberta and Eastern Canada.

"The addition of EPS Materials complements our outstanding portfolio and builds on our commitment to excellence in the delivery of innovative technology and competitive solutions from around the world," says David Jackson, Ferguson/ICC President and CEO.

"We selected Ferguson/ICC for their strong presence in the coatings and industrial market and for their commitment to this market," says Jorge Seuc, NAFTA & Distribution Sales. "With their lead, we will be able to increase our sales especially in the newer Green Technology offering lower VOC latex emulsions and colorants."

R.M. Ferguson & Company acquired Industrial Colours and Chemicals (ICC) on September 30, 2009 bringing together a new organization with a century of combined expertise in specialty chemical distribution. Ferguson/ICC has a strong market presence in coatings, graphic arts, rubber, plastics, adhesives and specialty care. Their state-of-theart chemical distribution facility is located in Brampton, Ontario, Canada.

Enthone Becomes Canadian Distributor For Dipsol America

Enthone Inc., a business of Cookson Electronics, has become the Canadian distributor for Dipsol America, headquartered in Livonia, MI, USA. The agreement represents a significant step in the partnership between two of the world's leading chemical suppliers. It also substantially expands Enthone's market presence throughout Canada, while further developing Enthone's strong portfolio of corrosion resistant coatings for the surface finishing industry.

Enthone's partnership with Dipsol is a continuation and expansion of its commitment to the Canadian market. Last year Enthone acquired exclusive rights and knowledge to all intellectual property of Ontario-based Westbrook Technologies relating to the surface finishing industry. Prior to that acquisition, Dipsol was represented in Canada by Westbrook. Enthone will now offer customers the full lines of both Dipsol and Enthone products and processes, including highperformance zinc and zinc alloy plating chemistries, sealants and more. To support its presence in Canada Enthone has added direct sales and technical service personnel over the last twelve months.

"Enthone remains strongly committed to deepening and expanding our direct market presence throughout Canada," says Terrence Copeland, Vice President, Enthone Americas."Both Enthone and Dipsol welcome the opportunity to introduce cost-effective, revolutionary technologies to our North American customers."



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Ferguson/ICC Distributes EPS

EPS-Materials, a supplier of resins and colorants

Toshiaki Murai, President of Dipsol America, adds, "The products and processes of Enthone and Dipsol complement each other well. I am quite confident in Enthone's ability to simultaneously represent Dipsol throughout Canada while leveraging its existing product line and worldwide support network to bring even greater value to Canadian customers."

Enthone Inc. is a business of Cookson Electronics. The company is a leading supplier of high performance specialty chemicals and coatings used in the electronics and surface finishing industries. *www.cooksonelectronics.com*

4 **CANADIAN** FINISHING & COATING MANUFACTURING APRIL 2010

Pro Glo Design Centre Expands to Vaughan

Pro Glo Paints has moved its head office to a new 10,000 sq.ft. show room and warehouse on Confederation Parkway near Dufferin and the 407 in Vaughan, ON.

Pro Glo was established in 1989 to service the professional market as an outgrowth of the Toronto Paint Store.

"We needed a dedicated facility where Industrial Wood Finishers could come to," says Pro glo's Dino De Lellis."They didn't like buying for \$20,000 kitchens at a paint store. We are set up to serve the small to large end user of Lenmar Industrial Wood Finishes in the Greater Toronto Area."

Pro Glo is the Canadian distributor for Lenmar finishes that

are available at authorized Benjamin Moore dealers and other professional wood finish suppliers across Canada. Lenmar, a division of Benjamin Moore, offers waterborne wood coatings, pre-catalysed finishes, NC lacquer, post-catalysed conversion varnishes, dyes and stains.

Education and training will be offered in-house and on-site. Pro Glo is an authorized distributor of Graco spray products. Pro Glo Design Centre 399 Confederation Parkway, Unit 3, Vaughan, ON L4K 4S1 Tel 905-532-9700 Fax 905-532-9709



Bruno De Lellis has 50 years experience in paint and coatings.

Dino De Lellis gets ready to spray a test panel.

Dipsol Chemicals Co., Ltd., of Japan, a longtime and respected supplier of metal coating technologies world wide, established Dipsol of America in 1989 to bring the North American market Dipsol's years of expertise in zinc alloy plating technology. www.dipsolamerica.com

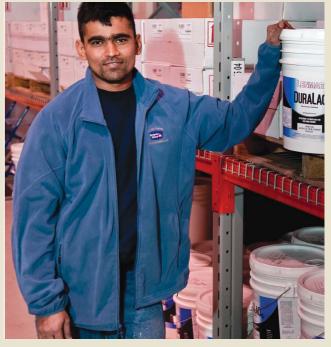
Epoxy Coating Named STI Product of Year

The Sherwin-Williams Company's Euronavy ES301 epoxy protective coating has been named the 2009 Affiliate Product of the Year by the Steel Tank Institute. The award was based on the coating's use on the Thunder Horse Field offshore drilling platform in the Gulf of Mexico. Brad Rossetto, vice president, marketing, Sherwin-Williams Protective & Marine Coatings described the solvent-free, two-component product as a durable, moistureand surface-tolerant coating that protects steel against corrosion, even when applied in wet and cold conditions. Coating application was required at the offshore drilling site due to hurricane damage and the need to refurbish the top-deck plate steel. The coating was applied by spray and roller in two coats, at 4.0 to 6.0 dry mils per coat. The anticipated service life of the coating system is more than 10 years in the extreme conditions of the Gulf Coast, the company said.

Sherwin-Williams Buys Italian Wood Coatings Business

Sherwin-Williams has agreed to purchase an Italian wood coatings business that sells products under the Sayerlack brand. Sayerlack Industrial Wood Coatings makes industrial wood stains and finishes for use in the furniture and cabinets industry. The business is currently a division of Pianoro, Italy-based Arch Chemicals, Inc. The division had net sales of \$147 million in 2009, according to Sherwin-Williams. Founded in 1954, Sayerlack is one of the largest wood coating manufacturers in Europe. The company has manufacturing sites across Western Europe and has sales, technical and distribution staff in the U.S. and Asia. Sherwin-Williams said the acquisition will increase the company's global presence and allow it to better serve its international clients. Sayerlack will join Sherwin's global chemical coatings division. The division acquired Singaporebased Inchem and Swedish Becker Powder Coatings in 2008.





Ritesh Patel is the lab manager and colour matcher.

Arkema Launches Bio-Based Acrylics Project

Arkema, the diversified French chemical company, announced an agreement with a regional government council in France and two university laboratories to launch a research program to develop bio-based acrylics. The program's objective is the production of new "green" acrylic-acid derivatives.

nal Ch mers/Oligomers for UV/E Evonik Solid Acrylic Resins, PE Waxes, Polybutadiene Hexion **Redispersible Latex and Additives** Jeco **Organic Pigments** Kukdo Chemicals Epoxy Resins and Specialities Munzing Rheology Modifiers and Defoamers **Novant Chemicals Inorganic** Pigments Plasticolors Inc. Pigment Dispersions and Additives Sachtleben TiO2, BaSO4, Lithopone specialities Call For The Chemistry! Your VOC compliance sourcing solutions/ Northspec Chemicals Corp. 2255 Sheppard Avenue East, Atria 1, Suite 408, Toronto, Ontario M2J 4Y1 Order Desk: 416-496-0128 Fax: 416-496-0453 www.Northspec.com

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ww.BrilliantAdditions.com

For more information and our complete product portfolio visit: www.BrilliantAdditions.com



IN THE NEWS

Acrylic acid is a key raw material in paints and coatings.

Christian Collette, Arkema research & development vice president, and Jean-Pierre Masseret, president of the Lorraine Regional Council, signed the research agreement at Arkema's CRDE (Centre de Recherche et de Développement de l'Est) R&D Center in Carling, France.

The research program will aim to develop an industrial process for the synthesis of glycerol – a byproduct of the processing of rapeseed into biodiesel – into acrylic acid. In conventional processes, acrylic acid is produced from propylene, a petrochemical.

Arkema said the program is part of a plan to establish an "expertise hub" in bio-based chemistry in the region, with glycerol – available in large quantities in the region – serving as a key raw material. Approximately 11 million euros will be invested in the project over a three-year period.

The company recently completed the acquisition of the Dow Chemical Company's acrylic monomers and acrylic latex polymers (UCAR Emulsions Systems) business in North America. The acquired business comprises a new business unit – Arkema Emulsions Systems.

Motoman Partners with Dassault Systemes

Motoman Inc., Dayton, OH, a leading industrial robot manufacturer, and Dassault Systèmes, Inc., a worldwide leader in 3D and PLM solutions, have entered into a partnership to market the DELMIA Digital Manufacturing simulation software to colleges and universities in North America. The DELMIA software suite includes Basic CATIA for 3D modeling, DELMIA V5 for robot simulation, plus three other components for human modeling, PLC validation and NC machining.

"The Dassault suite delivers the five most essential elements for educating today's engineering students in virtual manufacturing and PLM. Through this partnership we are pleased to offer DELMIA software preconfigured with Motoman's family of robots for the academic market," says Roy Smolky, DELMIA Academic Sales – Americas.



"As a global leader in industrial robotics, Motoman has a long history of providing schools with robots and software for use in their engineering or technology programs. Adding the DELMIA software allows for a single development environment to be used for the entire CIM cell, not just for the robot. Educators can now focus on imparting automation concepts rather than on the particulars of a given robot language," according to Erik Nieves, Technology Director for Motoman Inc.

Nieves adds, "Motoman is especially pleased to have DELMIA V5 support programming and simulation of our seven axis robots. The SIA family of highly dexterous robot arms is unique, and offers the academy an unprecedented hardware platform for research. Combining the SIA with Dassault's software will enable schools to explore new applications while preparing tomorrow's engineers to be productive upon graduation."

Perstorp Presents an Extended offer for PU Coatings

Following a spate of acquisitions, leading specialty chemicals company Perstorp presents its new comprehensive product range for polyurethane (PU) coatings and its strategy for the whole PU chain at American Coatings Show 2010 from April 13-15, 2010 in Charlotte, USA (Booth 2733).

Perstorp has significantly strengthened its portfolio for PU coatings through a number of key acquisitions of isocyanates, caprolactones and isophthalic acid businesses. In combination with its vast palette of polyols, the extended product range and synergies in sales, production and development, have transformed Perstorp into a key-supplier for the entire PU chain.

Strategically important additions to Perstorp's portfolio include isocyanates and polycaprolactones. Isocyanates are used as hardeners in coatings and elastomers, in foam products with major markets such as automotive (OEM & refinish), industrial maintenance, plastic & wood coatings, transportation, aerospace, coil & can coatings, leather finishing and adhesives.

Specific products to be featured by Perstorp at American Coatings Show 2010 include:

Tolonate[®] aliphatic polyisocyanates which provide exceptional durability, outstanding chemical resistance and mechanical properties to highperformance PU coatings.

Charmor[®] essential components of intumescent coatings that create a superior char barrier to insulate steel and wooden structures in the event of a fire. The coatings protect lives and property by significantly reducing the rate of temperature rise and delaying or even avoiding structural collapses.

Easaqua[™] self-emulsifiable polyisocyanates grades for the crosslinking of waterborne PU coatings, based on a unique patented technology. They offer an effective environmentally-friendly alternative to conventional solvent-based coatings. *www.perstorp.com*

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Wayne Pigment Corp. www.waynepigment.com Anti-Corrosion Pigments X-Ray Industries acquires PPI Aerospace X-Ray Industries, a leading provider of nondestructive testing services to the aerospace and defense industries has acquired PPI Aerospace, a Nadcap (formerly the National Aerospace and Defense Contractors Accreditation Program) accredited specialty surface finishing company based in Warren, MI. PPI Aerospace will operate as a wholly owned subsidiary of X-Ray Industries.The

6 CANADIAN FINISHING & COATING MANUFACTURING APRIL 2010

acquisition allows X-Ray Industries to broaden the range of performance critical services X-Ray Industries offer to its customers.

PPI Aerospace operates three facilities in Warren and currently employs 34 people. Mr. Larry Carlson, who joined PPI Aerospace in 2003, has been appointed Director of Operations with responsibility for day-to-day activities. He will report directly to Robert Broaddus, President of the X-R-I Testing Division of X-Ray Industries.

A privately held company, X-Ray Industries and its X-R-I Testing Division have nearly 70 years of experience in providing nondestructive testing services to the aerospace, defense industries. Its Test Equipment Distributors subsidiary markets a broad range of equipment and supplies to the nondestructive testing industry.

www.xritesting.com and www.ppiaerospace.com

Underwriters Labs and Atlas Announce Alliance

Underwriters Laboratories (UL), a third-party safety testing and certification provider, has entered into an alliance with Atlas Material Testing Technology, a leader in accelerated weathering instruments and weathering testing services. This alliance gives both companies increased global testing capacity and expertise in accelerated aging performance. It enables them to provide faster testing and certification turnaround time for manufacturers specializing in solar energy products.

ALTANA: Sales and earnings below prior year levels despite noticeable upturn in business

The specialty chemicals Group ALTANA recorded considerable declines in sales and earnings in the business year 2009.

"Despite our comparatively robust setup, the global economic crisis has taken a toll on

ALTANA," stated Dr. Matthias L. Wolfgruber, CEO of ALTANA AG. "Nevertheless,

2009 was not a lost year for us. We were able to further consolidate our position in the worldwide specialty chemicals markets. We have used 2009 to operate even more efficiently and to further optimize our structures; and we were drawn even closer together. These strengths, along with ALTANA's role as technology leader and our attractive product portfolio are the decisive factors to successfully continue our profitable growth course after the economic crisis is overcome," said Wolfgruber.

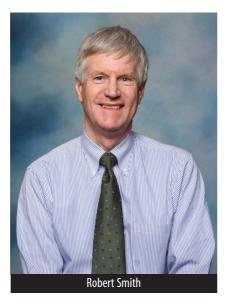
Despite the pronounced upturn in business in the second half of 2009, ALTANA remained below the sales and earnings levels of 2008. Sales decreased by 12 per cent from €1,341.7 million to €1,181.7 million. At €555.1 million, the strongest decline in sales was reported in Europe, where sales were down by 17 per cent. Sales in the American regions were down by 12 per cent to €267.7 million. of 2009 started at a later point in time and was less dynamic. The sluggish development in ECKART's important markets, particularly the automotive industry, had a negative effect. This is why ALTANA revised its earnings forecast for Effect Pigments downwards in the course of 2009.

Despite visible signs of a recovery of the global economy, ALTANA expects an environment that is still marked by high uncertainty. A stabilization of the economic recovery should give rise to a growing demand of the company's products in 2010 and thus to an increase in sales and earnings compared to the business year 2009. However, the company expects to return to the pre-crisis business level in 2011 at the earliest. Not least due to the experience gained in the past business year, it is confident in its ability to react appropriately to all conceivable and possible development scenarios. ALTANA is well-positioned to take advantage of opportunities arising from a recovering economy.

People On The Move

Robert Smith Joins Enthone as Eastern Canada Regional Manager

Mr. Robert Smith has been named Eastern Canada



Regional Manager by Enthone Inc., a business of Cookson Electronics. He will be responsible for managing the growing Enthone sales and technical service team that has been firmly established over the last year.

Smith comes to Enthone with nearly forty years experience in the metal finishing industry. A long-time member of AESF and NASF, he most recently served as the General Manager for Torcad Limited in Toronto. Previously, Mr. Smith was with Atotech Canada, where he served in sales management, technical support and operations roles.

Educated in England, Mr. Smith earned an O.N.C. diploma in chemistry from Welwyn Garden City College of Further Education, as well as an H.N.C. in chemistry from Hatfield Polytechnic Institute.

New Aradur[®] 3246 Epoxy Curing Agent

Huntsman Advanced Materials introduces a new lowviscosity, rapid-curing amine hardener to help cut down application and cure time – saving your company time and money.

Aradur[®] 3246 Epoxy Curing Agent, in combination with an Araldite[®] Liquid Epoxy Resin, offers outstanding resistance to chemicals - including organic and mineral acids. The new product also produces good inter-coat adhesion on high-gloss coatings, and cures in as little as 2.5 hours at room temperature. Ideal for pipe coatings, tank lining, industrial flooring and other high-performance coating applications.

For more information on Aradur[®] 3246 Epoxy Curing Agent or Huntsman's full offering of Aradur[®] and Araldite[®] Epoxy Resin Systems, please visit www.huntsman.com/advanced_materials.

Earnings before interest, taxes, depreciation and amortization declined by 16 per cent to €204.1 million (prior year:€242.9 million).

As of December 31, 2009, the ALTANA Group employed 4,789 people worldwide, almost the same number as at the end of 2008 (4,791). Compared to the other divisions, the global

economic crisis caused the most significant decrease in sales in the Effect Pigments division. In addition, the division's recovery in the second half The appointment of Smith demonstrates Enthone's commitment to the Canadian market and, more specifically, its Canadian customers and partners. Last year Enthone acquired exclusive rights and knowledge to all intellectual property of Ontario-based Westbrook Technologies relating to the surface finishing industry. Earlier this year, Enthone announced it had become the Canadian distributor for Dipsol America.

Smith currently resides with his wife, Linda, in Stouffville, Ontario, Canada. www.cooksonelectronics.com.

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IN THE NEWS

Sales Support Manager

Wagner Systems, Inc. has appointed Michael Horn-



baker its Technical and Sales Support Manager for Liquid Industrial. Hornbaker brings more than 10 years of expertise in the liquid paint industry as an account manager for several paint distributors. At Wagner Systems, Inc., Hornbaker is responsible for sales of liquid coating systems and products. He will help enhance the current Wagner distributor network and work with established Wagner distributors by providing the incentives and tools for superior customer service. Mike will also be involved in training and education of distributors and end users.

www.wagnersystemsinc.com

BYK-Gardner USA promotes Scott and hires Traister and Burich

BYK-Gardner — worldwide partner of the automotive, paint and plastic industries for quality control of color, appearance and physical properties — is pleased to announce the promotion of Richard Scott to Director of Key Accounts for North America and hiring of Carol Traister as Regional Sales Manager for the Ohio Valley area and Blake Burich as Regional Sales Manager for the Eastern Great Lakes area.

Since 2005, Scott had been a Regional Sales Manager for BYK-Gardner USA covering the Michigan, Ohio, Indiana, and Kentucky territory. He has over 20 years of experience in the paint and plastic markets with expertise in color and appearance instrumentation. In a continued effort to strengthen customer relationships in the Automotive and Paint industries, Scott will be closely cooperating with global business managers, Gabi Kigle-Boeckler and Klaus Wiesner of BYK-Gardner GmbH.

Traister will be responsible for the Ohio Valley territory, which will consist of TN, KY, IN and Southern OH. She began her career at Flint Ink as a Chemist for two years and moved on to Porter Paints as Group Leader Product Development. After 9 years at Porter, she spent the last 15 years as a Sale Representative for dar-Tech.

Burich will cover the Eastern Great Lakes region (Northern OH and Central/Eastern MI). Burich was previously employed by NB Coatings since 1990. Over the years, he held several positions from Technical Service Representative, Sales, Account Management, and lastly as Director Commercial Development. During his time with NB, he spent three years in Japan working as a Development Chemist.

www.byk.com/instruments

Pricing Updates Clariant Increases Price Of Waxes

The Additives Business Unit of Clariant, a world leader in specialty chemicals, has announced an increase in the price of its waxes because of higher raw material, transportation and energy costs. Clariant produces high performance waxes which are used mainly in plastics, coatings and inks, as well as in adhesives and polishes.

The company indicated that they already initiated reasonable efforts in order to offset these costs, such as in particular the LeanSigma-based "Clariant Excellence" program, but the recent further cost development leaves no other alternative than a price increase.

The increase will be effective on April 1st, 2010.

Dianal Price Increase

Effective April 5, 2010, Dianal America, Inc., will increase prices on its acrylic and styrene/acrylic bead resins by approximately 8 per cent. The increases are necessitated by unremitting cost increases.

Hexion Specialty Chemicals To Raise Prices For Epoxy Resins

Effective March 1, 2010, or as contracts allow, Hexion Specialty Chemicals, Inc. has increased prices for its epoxy resins in the Americas from four to



Low VOC Solutions

eight cents per pound, depending on the resin type. The price adjustment is driven by increases in the cost of key raw materials.

CCP Price Increases

Cook Composites and Polymers (CCP) has announced a \$0.07-\$0.10 per-pound price increase, depending on grade, for all Reafree powder coatings resin materials. New prices are effective for orders shipped on or after March 22, 2010, or as contracts allow.

Effective for orders shipped on or after March 12, 2010, CCP will increase prices for Chempol solution acrylic coatings resins and Coroc additives. Chempol resins, conventional solids, will increase 10-15 cents per pound. Chempol resins, high solids, will increase 15-20 cents per pound. Coroc additives will increase 30 cents per pound.

CCP has also announced a price increase for all emulsions products effective for shipments on and after March 25, 2010. Prices will increase up to \$0.07 per pound for all ESI-CRYL[®] and ESI-REZ[®] emulsion polymers, wax emulsions and resin solutions. Continued increases in key raw-material costs have driven the necessity for this increase.

Arkema Emulsion Systems Announces Price Increase for Latex Products

Effective April 1, 2010 or as contracts allow, Arkema Emulsion Systems will increase the price of all latex products. UCAR® acrylic, styrene-acrylic, styrenebutadiene and NEOCAR® Acrylic latexes will increase by \$0.07 per wet pound. UCAR vinyl-acrylic, EVOCAR® vinyl acetate-ethylene and NEOCAR Latexes will increase by \$0.03 per wet pound.

This action is driven by the sustained increase in the cost of key feedstocks and raw materials and by the company's commitment to maintain margins that allow for ongoing reinvestment to meet customers' future needs.

Customers should contact their Arkema Emulsion Systems account representative for additional details.

Ashland to increase North American pricing for vinyl-acetate-based polymer emulsions

Ashland Performance Materials, Dublin, OH, a commercial unit of Ashland Inc. is increasing the price of its homopolymer and copolymer vinyl-acetate emulsions, and its vinyl-acrylic emulsions, sold in North America by three cents per wet pound effective April 1, or as agreements allow.

"Despite Ashland's efforts to mitigate the impact of continued rising raw material costs and other factors that influence product pricing, the dramatic escalation in the cost of key raw materials for these products, particularly vinyl acetate and acrylic monomers, necessitates this price increase," says Gary Landsettle, vice president, North American Sales, Ashland Performance Materials."Responding to changing market conditions allows Ashland to continue to provide innovative products and industry-leading product support that add value for customers." Ashland Performance Materials is a global leader in unsaturated polyester resins and epoxy vinyl ester resins. In addition, it provides customers with leading technologies in gelcoats, pressure-sensitive and structural adhesives, coatings and metal casting consumables and design services.

products, services and solutions for many of the world's most essential industries. Serving customers in more than 100 countries, it operates through five commercial units: Ashland Aqualon Functional Ingredients, Ashland Hercules Water Technologies, Ashland Performance Materials, Ashland Consumer Markets (Valvoline) and Ashland Distribution. www.ashland.com.

BASF Price Increase

BASF has increased its prices for ACRONAL and ACRONAL OPTIVE all-acrylic latex products, ACRONAL styrene-acrylic latex products, and BASONAL multi-monomer latex products by \$0.08 per wet pound in the United States and Canada. ACRONAL, ACRONAL OPTIVE and BASONAL products are used as ingredients for various applications in the adhesives, fiber bonding, architectural coatings and construction markets. This increase was effective March 15, 2010, or as contracts allow.

WACKER POLYMERS Announces Price Increase

WACKER POLYMERS will implement a price increase, effective April 15, 2010, of \$0.03 per wet pound on prices for its vinyl acetate ethylene copolymer and ethylene vinyl chloride copolymer dispersion products sold in North America. These products are marketed under the VINNAPAS and VINNOL brands and are used in diverse applications ranging from adhesives, nonwoven textiles, coatings, building products, paper, carpet and textiles.

Pilot Chemical Price Increase

Effective April 15, 2010, Pilot Chemical Co. is increasing list and off-list pricing for a number of its surfactants. These price changes are in addition to Pilot's February price increase announcement. The company says the increase is in response to rising raw-material costs.

Aristonate alkyl aryl sulfonates will increase by 4.0–7.5 c/lb. Aristonic acids will increase by 5.0–8.5 c/lb. CalBlend performance blends will increase by 3.0 c/lb. Calamide alkanolamides will increase by 8.0 c/lb. Calfax diphenyl oxide disulfonates and disulfonic acids by 4.0–6.0 c/lb. Calfoam alcohol and ether sulfates will increase by 3.0–7.0 c/lb. Calimulse emulsion aids will increase by 2.0–8.0 c/lb. Calsoft and Calimulse alpha olefin sulfonates will increase by 2.0–4.0 c/lb. Calsoft flaked sulfonates will increase by 8.0 c/lb. Calsoft, Calimulse and Pilot branched alkyl benzene sulfonic acids will increase by 3.0–6.0 c/lb. Pilot hydrotropes will increase by 2.0–5.0c/lb.

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Ashland Inc. provides specialty chemical

and Pilot Chemical's specialty products will increase by 1.5–5.0 c/lb.

Celanese Announces Emulsions Price Increases

Celanese Corp. has increased the price of all vinyl acetate homopolymer and vinyl acetate ethylene emulsions by \$0.03 per wet lb.sold in North America, effective April 1, 2010, or as contracts allow. The increase affects all applications including, but not limited to, adhesives, paints and coatings, paper, nonwovens, and textiles.

Customers should contact their Celanese sales representative for more details.

8 CANADIAN FINISHING & COATING MANUFACTURING APRIL 2010

Good News Briefs

GTA REALTORS Reporting March Mid-Month Housing Statistics

Greater Toronto REALTORS reported 4,353 sales through the Multiple Listing Service (MLS) during the first two weeks of March.

This represented a 70 per cent increase compared to the 2,562 sales recorded during the same period in 2009 when resale transactions had dipped markedly due to the recession. The mid-month sales total was also 16 per cent higher than the previous March mid- month high reached in 2006.

"The spring-like weather in the first half of March brought the first green sprouts of the recurring spring market. Every year, monthly sales climb steadily through May," says Toronto Real Estate Board President Tom Lebour."People are buying homes because they are confident in the current economic recovery and mortgage payments on the average priced home remain affordable."

The average price for March mid-month transactions was \$440,153 - a 20 per cent increase over 2009. New listings within the Toronto Real Estate Board boundaries were up 34 per cent to 8,540.

"Look for double-digit annual price increases to cease later in 2010, as new listings rebound from the low levels experienced in 2009," says Jason Mercer, TREB's Senior Manager of Market Analysis."Increased listings will give buyers more choice, resulting in less upward pressure on home prices."

www.TorontoRealEstateBoard.com

Canadian Auto Workers Suggest Solution

The Canadian Auto Workers have suggested that General Motors Co. build Chevrolet Equinoxes and GMC Terrains in Oshawa, Ontario to help with shortages.

Despite the extra production, the Equinox started March with a thin 33-day supply, and the Terrain's supply was 29 days, according to the Automotive News Data Center. Sixty days is considered normal

GM owns two idled plants that lack plans for products: Spring Hill, TN and Janesville, WI.

But CAW President Ken Lewenza says GM could add more crossover production at Oshawa, about 125 miles from Ingersoll.

GM executives have responded to the CAW's suggestion by saying they are considering all opportunities to add production.

GM assembles the Chevrolet Impala and Camaro in Oshawa. In the first quarter of 2011, Oshawa will add a shift of up to 700 workers to build the Buick Regal sedan.

GM's Ingersoll plant is running on three shifts, plus about three Saturdays a month.

Canadian Rise in Manufacturing Sales

Manufacturing sales, led by primary metals, and petroleum and coal products, rose much more than expected in January and labour productivity grew at its fastest pace in more than 12 years, recently released figures show.

Statistics Canada reports that factory sales were up 2.4 per cent during the month to \$44.6 billion, marking the fifth straight monthly gain.

Most economists had expected sales to rise by between 0.5 and 0.6 per cent during the month.

Constant dollar manufacturing sales increased 2.2 per cent in January, reaching the highest sales level since November 2008 according to Statistics Canada.

Calendar of Industry events 2010

April 12-15: American Coatings Show and Conference, Charlotte, NC. www.american-coatings-show.com

April 13-16: PaintExpo, International Leading Trade Fair for Industrial Coating Technology, Exhibition Center Karlsruhe, Germany, Organizer: FairFair GmbH. www.paintexpo.de

May 18: Dollars to \$ense Workshops, Energy Management Planning, Holiday Inn Toronto Airport East, (Centennial Room) 6000 Dixon Road, Toronto ON M9W 1J1. Register at oee.nrcan.gc.ca/workshops before May 11.

May 24-26, 2010: RadTech 2010, Baltimore Convention Center in Baltimore, MD. www.radtech2010.com

June 15-16, 2010: Sur/Fin 2010, annual conference and trade show organized by the National Association for Surface Finishing, Grand Rapids, Michigan. www.nasf.org

October 2-3, 2010: CPCA 2010 Conference in Montreal. www.cdnpaint.org

October 5-7, 2010: Canadian Manufacturing Week: at the Toronto Congress Center. www.sme.org

October 12-14, 2010: parts2clean, International Leading Trade Fair for Cleaning within the Production and Maintenance Processes, Exhibition Center Stuttgart, Germany, Organizer: fairXperts GmbH. www.parts2clean.com

October 12-14, 2010: COROSAVE, International Trade Fair for Corrosion Protection, Preservation and Packaging, Exhibition Center Stuttgart, Germany, Organizer: fairXperts GmbH,. www.corosave.com

October 26-29, 2010: NAI (The North American Industrial Coating Show), hosted by The Powder Coating Institute (PCI) and NACE International, The Corrosion Society (NACE), at the Indianapolis Convention Center, IN. www.thenaicoatingshow.com

Nov. 2-4, 2010: FABTECH with the debut of the Chemical Coaters Association International (CCAI) FINISHING TECHNOLOGIES Pavilion & Conference, Georgia, World Congress Center, Atlanta, GA. www.fabtechexpo.com

Editor's Note: Please see more industry events listed online at www.cfcm.ca



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Meanwhile labour productivity grew 1.4 per cent in the fourth quarter of 2009, the first increase in more than a year and the highest quarterly growth rate for almost 12 years. Analysts had on average predicted productivity would increase by 0.8 per cent. The increase was the largest since the 1.6 per cent rise posted in the first quarter of 1998. Businesses increased real output by 1.4 per cent on the back of higher exports, consumer spending and residential investment.

The productivity of goods-producing industries rose by 1.7 per cent after three consecutive quarters of declines. Productivity in service-producing industries was up by 1.0 per cent for the fourth straight quarterly gain.

The stronger Canadian dollar meant the unit labor costs of Canadian businesses expressed in U.S. dollars increased by 3.8 per cent, the third quarterly gain in a row. U.S. businesses' labour costs fell by 1.6 per cent in the fourth quarter.



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PAINT & COATINGS MANUFACTURING: PAINT AND SOLVENT RECYCLING



Fielding's Lab Overview.

continued from front cover

disposal of these spent chemicals varied, sometimes with little concern for human health and safety. Many forms of disposal were very short sighted, with no regard to consequences to life forms or Mother Nature.

Jack was a savvy entrepreneur. He knew that solvent waste had value and instinctively he knew that wasteful practices would catch up to society. Regulations, liability and dollars and sense would eventually prove him right. Recycling is good for People, Planet and Profit.

By 1963, McGregor moved his business to the outlands, an unpopulated rural area of Mississauga, then known as Cooksville. With only open fields around and a few cattle as witnesses, he built a plant from the ground up. Necessity, the Mother of Invention, inspired some of today's innovative technology. Used tanks and equipment, bailing wire and imagina-



Ellen McGregor

tion were fundamentals in creating what did not exist. Strong backs and rough hands worked along side educated engineers and scientists. Faithfully, they followed their leader on a journey though the decades to build what is today Canada's oldest and largest chemical and refrigerant repurposing facility.

The adage 'when you are number two – you try harder' helps describe



Jack McGregor

some of Fielding's drive. From the beginning, when chemical recycling was misunderstood and mistrusted to today where everyone wants a 'Greener' scorecard, extra effort has gone into securing Fielding's place of respect as a crusader for environmental reform and best practices in chemical use, reuse and resource management. Today Fielding, located in the heart of Mississauga city centre, is a respected part of one of the most financially and socially successful cities in the world. At this site an average of 25 million litres of liquid chemical waste are processed safely every year. We provide chemical and refrigerant repurposing, global procurement and logistics and customized sustainability solutions to Fortune 500 companies, national and international business, governments, institutions and medium and small business across the country and just around the corner.

Fielding supports the sustainability goals of industries as diverse as paint and coatings, adhesives, printing, pharmaceutical, aviation, automotive, construction, refining, mining and more.

Ellen McGregor, Jack's daughter, as CEO and President, guards the company vision and sets objectives for a staff of 54 in Mississauga and three business development offices in the United States. Paul Haskins, Executive Vice President, oversees the daily operation of the three key business units; Process Chemicals, Procurement and Refrigerants. Isabel Alexander Banerjee, as Vice Chair, is responsible for product marketing and business development. Igor Aronov, Plant Manager, ensures peak performance, safety and security from the Fielding plant and equipment on six acres of prime Mississauga land.

Perhaps the most sophisticated solvent recycling plant in North America, Fielding applies the principles of fractionation, distillation, esterification, chemical reaction and blending organic chemicals to produce products to stringent, consistent specifications while minimizing the use of natural resources and waste residue.

Alcohols, Ketones, Glycols and Acetates, Aliphatics and Aromatics are the daily program at Fielding. Custom formulations, such as lacquer thinners, gunwash, printing and process solvents are second nature. Fielding toll processes clients spent material and returns a finished product to a prescribed specification. If a generator does not or cannot take back their reclaimed material, Fielding repurposes the material for alternate use. The focus in on maximum recovery of valuable resources and minimal impact on the environment.

The plant operates 5 days per week, 24 hours per day and can flex to emergency on call service. The Fielding site is permitted to receive a wide variety of chemical waste and has over three million litres of on site storage capacity. Fielding continually invests in equipment and technology and adds new capabilities for specific customer needs. On a tour of Fielding site, you would see fractionation towers, thin film evaporators, refrigerant reclaimers and a refrigerant separation tower. Unique to Fielding, the Drystill[™], Membrane Dehydrating Technology and a pilot plant for removing

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water from solvents and alcohols are also located at the Mavis Road site.

Equipped with a library containing over 200, 000 compounds and capable of identifying unknown compounds at trace levels, Fielding specializes in solvent identification and quantification and refrigerant gas analysis. Samples that are analyzed include volatile and semi-volatile compounds, refrigerant gases, polychlorinated biphenyls (PCBs) and pesticides. Instrumentation is used to quickly classify organic samples, perform pH analyses, water concentration, Chemical Oxygen Demand (COD) on water samples, flash point determination, low-level airborne contaminants, metals analysis. State of the art equipment and an experienced staff of PhD level chemists and certified technicians work around the clock performing process analytical tasks and conducting such work. The Montreal Protocol defined the opportunity for a refrigerant reclamation business and Fielding innovatively embraced the challenge. In the mid-90's Fielding became the first solvent recycler in Canada to build a fractionation column capable of separating mixed refrigerants. Today Fielding is Refrigerant Management Canada (RMC)'s largest service provider and handles over 60 per cent of the total annual volume of spent refrigerant gases collected in Canada under RMC's mandate.

In their industry Fielding was also the first in North America to become registered to ISO 9002 (now ISO 9001), the first in the World to become registered to ISO 14001 and the first in the World to become a verified member of Responsible Care® and the first only recycling company in Ontario approved by MOEE for Man-



Fielding's recycling plant.

research and business development projects. Basic and specialized testing, lab trials and quality control work is done with state of the art equipment such as volumetric and coulomteric Karl Fischer pH, Inductive Coupled Plasma (ICP), Gas Chromatography/Mass Spectroscopy identification, Gas Chromatography (GC-ECD) and a microwave digestor capable of simultaneously preparing 14 samples at one time. Fielding continues to rack up "Firsts" in the sustainability arena. Jack McGregor was the first in Ontario to establish a company for the purpose of recycling chemicals and was first in Canada to convince an automotive giant to have their spent solvents recovered rather than disposed of. Fielding used a custom designed distillation system to recover solvents used by the Ford Motor Company.

ifest Exemption.

Fielding was first in Canada to trademark a phrase that has become their vision – Providing... Cradle to Cradle® Care of Chemicals. Today many companies and individuals around the world use that term to explain a full life cycle philosophy of chemical stewardship."

ITW has a program that reduces the amount of solvent needed with the



Fielding's recycling plant.

explains, "We recycle paint. Paint is collected throughout Ontario and some paint is received from other provinces and USA. Our established manual sorting process determines which paints are eligible for recycling and which are to be managed for disposal. Paints are then segregated by type and colour. The paint is evacuated from the container and sent through a series of filtration processes, dispersed and packaged according to the customers end needs and specifications."

Hotz's recycling program has grown steadily over the past two decades. "With the implementation of Stewardship Ontario's "Do what you can" program, we have experienced a significant increase in the volume of paint coming through the program," says McAuley. "This means that paint that was previously sent for disposal is now being recycled, which of course is good news for our common environment."

Hotz is in compliance with all applicable regulations and their collection, transportation and recycling operations are all governed by the Ontario Ministry of the Environment.

"Hotz is proud to say that the purpose of our recycling program is to recycle paint back into a usable paint product," says McAuley. "We do not recycle the paint into an ingredient for some other product."

"Hotz does not market our products in North America so we do not compete with local paint manufacturers," explains McAuley. "We supply this top quality product to international markets where a high quality low cost product is in great demand. The ingredients in North American paint make it one of the best paint products in the world and our repeat customers have learned this first hand." Meanwhile, Laurentide ReSource based in Springhill, NS and Victoriaville, QC bills itself as "the paint recycling company." paint and coatings industry, Laurentide provides manufacturers with quality processed post-consumer paint that can be used as a raw material at a low cost. And allows manufacturers to promote environmental stewardship and avoids the need for industry stakeholders to develop their own recycling program.

Also, the Boomerang brand of recycled paint or Peintures récupérées du Québec inc., Trois-Rivières and Victoriaville, QC. Boomerang products are made from unused portions of recovered domestic paint and stain remains. About 1 per cent of new material is added to the remains to guarantee quality, good and consistent luster levels, viscosity and drying time.

When it comes to Paint and Solvent Recycling, the paint and coatings industry is setting a prime example for the nation.





In the 70's the company researched the economic and technical viability of reclaiming refrigerants. Fielding was the first solvent recycler in Canada to conduct

Solvent Saver.

It doesn't recycle solvent; it uses an air/solvent mix process that actually reduces the amount of solvent needed. The Solvent Saver lowers solvent costs by up to 80 per cent because it scrubs both lines and guns more efficiently than shooting straight solvent or water.

PAINT RECYCLING

Hotz Environmental Services recycles latex and alkyd architectural paint and markets it out of the country. Pamela McAuley, Vice President Business Development, Hotz Environmental Services Inc.

The company says its approach to resource management must be environmentally responsible, socially acceptable and economically feasible. Within the



Examples of international buildings that have been renovated and painted with Hotz paint.

The Challenges of Good Product Stewardship

By Jim Quick, President, CPCA

A year ago at this time I wrote an article for CFCM where I stated that 2009 would be a very interesting year for product stewardship in Canada. I was not wrong. As governments move to establish their sustainability credentials, they have made industry-led stewardship programs a top priority.

The Ontario Ministry of the Environment released its long-awaited review of the Waste Diversion Act entitled From Waste to Worth: The Role of Waste Diversion in the Green Economy in 2009. The report lays out the policy framework for upcoming legislation designed to overhaul waste management policy in Ontario. In the report the Government announces its intention to transition all programs to full EPR (industry pays 100 per cent of all program costs) for all wastes; broaden diversion from residential to IC&I for packaging and paper within two years; higher material-specific diversion targets, supported by penalties for failure; and place legal onus on companies for meeting performance. They are also recommending disposal bans and higher disposal costs to make alternatives to recycling more costly. They will also broaden the oversight and compliance

role for Waste Diversion Ontario (WDO) whose directors are to be selected by government.

The Quebec government has tabled legislation to begin the process of implementing EPR in that province. Bill 88, introduced in March will require industry to pay 80 per cent of the costs of municipal recycling. Those costs will be determined by Recyc Quebec according to an efficiency formula set out in the Act. The Bill does not allow industry compliance schemes to have a role the cost determination/verification process or the management of materials. Industry will pay Recyc Quebec more than 4 per cent of total recycling costs in year 1 for administration, this decreases to just over 3 per cent in subsequent years.

Initiatives like these will result in a significant shift in the product stewardship landscape in Canada. Industry's hold on the development, management and oversight of programs is quickly slipping away.

The question then becomes – what do we do about it?

First, we need to accept that the stewardship world is changing and industry needs to take a leadership role in defining and shaping what EPR will look like in Canada. At the moment, we have conceded that role to governments and others who are rapidly moving forward. Industry needs to come together to carve out positions and policies on EPR and ensure they are part of the EPR discussion.

Second, industry needs to consider the development of a national organization to help manage our stewardship issues. In the case of the paint industry we have programs in 7 provinces with an eighth being developed this year. All these programs have different fees, rules and oversight bodies. A national approach would help us create some program harmonization and synergies.

So why should we take this approach? Marketing safe products and taking responsibility for their life-cycle is not only the responsible thing to do. It makes good business sense. How we work with governments on these critical public policy matters is part of how we market and brand the sector with consumers, the public and governments. The paint and coatings industry has made significant investments over many decades in the quality of our products and the reputation of our brands. It only makes good business sense to ensure continued consumer and public trust in the products they have come to use and enjoy.

Claims of the impact of humans on the global climate are now supported by

sound science. New generations of Canadians see a direct link between environmental sustainability and quality-of-life, and they demand that governments develop strong public policy frameworks to protect it.

CPCA and its members take our stewardship responsibilities very seriously. We have been extremely proactive on the advocacy front and with other coalition partners presenting alternative solutions and approaches to government. Governments will go to EPR with or without industry (which is the case now). Industry needs to come together and make the fundamental decision to be proactive – to work with governments on the development and implementation of EPR. While we will not get all that we want, it is our single best chance to frame EPR structures, policies and outcomes.

The consumer products industry in Canada has a reputation as a sector committed to the development of consumer and environmental friendly products. Let's use that reputation to further position ourselves as a national product stewardship leader.

Jim Quick is President of the Canadian Paint and Coatings Association.

American Coatings Conference and Show 2010

The stage is set to welcome 285 exhibitors to 63,500 sq. ft. of exhibit space at Charlotte Convention Center, Charlotte, NC, April 12 to 15, 2010.

Show Hours

Tuesday, April 13 and Wednesday, April 14, 2010 from 9:00 am - 5:00 pm Thursday, April 15, 2010 from 9:00 am - 3:00 pm

Conference Hours

Monday, April 12, 2010 from 8:30 am - 7:00 pm Tuesday, April 13, 2010 from 8:30 am - 7:00 pm **Testing and Measuring Equipment:** Quality Control and Laboratory Testing Equipment, Production and Process Control.

Environmental Protection and Safety at Work: Occupational Safety, Container Washing Equipment, Emission Treatment, Effluent Treatment, Solvent Recycling.

Services: Software, Hardware, E-Commerce, Training and Education, Qualification, Technical Information and Publication, Consultancy, Research & Development, Contract Manufacturing.

American Coatings Conference

Session 4: Wood Coatings 5:30 pm - 7:00 pm Poster Session, Networking: After Work Party

Tuesday, April 13, 2010

8:30 am Presentation of the Innovation Management Maturity Assessment 9:00 am - 12:30 pm Session 5: Protective Coatings I (by SSPC) Session 6: Architectural Coatings Session 7: Functional Coatings & Functional Materials Session 8: Waterborne Coatings I 12:30 pm - 2:00 pm Networking: Conference Lunch 2:00 pm - 5:30 pm Session 9: Waterborne Coatings II

Wednesday, April 14, 2010 from 9:00 am - 12:30 pm

Products

Coating Raw Materials: Binders, Solvents, Pigments, Fillers, Additives.

Laboratory, Production Equipment and Packaging Equipment: Mixers, Extruders, Kneaders, Mills, Triple Roller Mills and Accessories, Engineering, Filters and Filtration, Pumps, Metering Devices, Balances, Conveying Systems, Filling Systems, Packaging and Packaging Materials, Labelling Machines, Logistics, Tinting Systems, Screening Machines and Sintering Plants, Coolers, Pipe Technology.

2010 at a Glance

Monday, April 12, 2010

8:30 am - 10:00 am Pre-Conference Tutorials 1-4 10:30 am - 12:00 pm Pre-Conference Tutorials 5-7 11:30 am - 12:15 pm Networking: Welcome Lunch 12:15 pm - 1:30 pm Plenary Session Welcome Address and Conference Introduction, Keynote Presentations, Award Ceremonies 1:30 pm - 2:00 pm Networking: Coffee Break 2:00 pm - 5:30 pm Session 1: Science Today-Coatings Tomorrow Session 2: Radiation Curing Session 3: Measuring & Testing Session 10: Smart Coatings Session 11: Protective Coatings II Session 12: Novel Materials 5:30 pm - 7:00 pm Poster Session

Wednesday, April 14, 2010 9:00 am - 12:30 pm Session 13: Biobased Coatings Session 14: Nanotechnology Session 15: Polyurethanes Session 16: Automotive Coatings 12:30 pm End of Conference

www.american-coatings-show.com

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Choosing the Dispersion Blade



hose in Paint Manufacturing are looking for high quality and highly efficient dispersion equipment. When it comes to mixing, you can't underestimate the quality and proper maintenance of the dispersion blades.

"In these tough economic times, consumers have been asking how they can make their current dispersion equipment more efficient or effective," says Tim Delong of Quickblades.

"Most coatings manufacturers have dispersion blades that are worn out or bent, the wrong size, the wrong style or even installed incorrectly," continues Delong. "A very simple and inexpensive way to improve dispersion is to change the dispersion blade."

"It is important to use the correct dispersion blade for different products and batch sizes; one blade doesn't fit all dispersing applications," says DeLong. www.quickblades.net

Meanwhile, Conn and Co., has been supplying Industrial Mixing Equipment since 1948. "Conn recognized the need for blades that provide true downward pumping action for complete and thorough batch turn over," says Richard C. Freeman, of Conn & Co., LLC.

Conn has brought four patented blades to the market under the trade name The CONN Blade. The ITT style is a high pumping/high shear dispersion blade and is the most efficient and aggressive dispersion blade available. The IT style is a high pumping/low shear blending blade excellent for mixing micro spheres, flakes or fillers without destroying them. The ITC style is more aggressive than the IT but not as aggressive as the ITT." "Our customers have expressed a need for longer lasting blades with the CONN Blade technology so we have introduced our 4th patented blade, the PITT CONN Blade, of UHMW Polyethylene which is a high pumping/high shear poly blade and is the most efficient and aggressive poly blade available," says Richard C. Freeman of Conn & Co., LLC. "It gives much longer life and reduces the expense and downtime for changing blades." www.connblade.com

IT'S TIME TO CHANGE Your blade

Delong outlines the following information on changing blades.

"The most neglected part of a high speed disperser is typically the dispersion blade. This relatively inexpensive part could be the difference between making and losing profits on every batch produced. When the dispersion blade is in new condition and operating at peak performance, batch times will be shorter than using a worn or damaged blade. Shorter batch times will allow the machinery to make more batches in a given time frame and will use less energy per batch, saving the company both time and money.

Replace a dispersion blade before becoming worn or right after being damaged, to add to your bottom line. An impeller that is damaged will be out of balance and will cause premature wear of the bearings and belt. Determining the time to change a damaged blade is easy. If one or more of the teeth are bent or deformed in any way, it is time to change the blade. Determining when to change a worn blade can be a little more difficult. Following are some examples of how to determine when it is time to change an impeller.

If we also also the stand of a more

CHECK THE AMPS

When installing a new impeller, run a standard batch of material and record the amps required to run the impeller in the said batch. Check the amp draw of the machine in the same type of batch, maybe once a week or month depending on the abrasiveness of your products. When there is a noticeable decrease in the amp draw for the same batch, the impeller is losing its effectiveness and should be replaced.

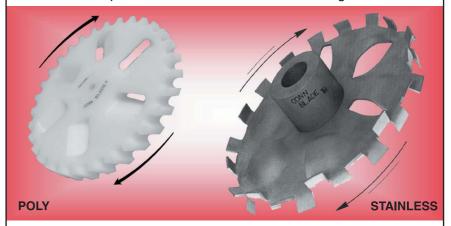
Every batch of material has a specific recipe including a dispersion time. After installing a new impeller, check the batch several times during the dispersion phase and record how long it takes to bring the batch to spec. This recorded time should be the guideline of how long it takes to make a batch properly. As the blade starts to wear, it will take longer to produce the desired results, costing the company time and money. The dispersion blade should be replaced when you can no longer achieve a proper dispersion in the same amount of time as when using a new blade.

COAT THE BLADES

If you experience excessive wear on your impellers and are changing them out often, there are coatings available to make blades last longer. Tungsten carbide is a coating that is spray welded to the tips of the impeller to give them extra abrasion resistance. A typical tungsten carbide coated blade will last up to four times longer than a non coated blade. These coated blades are usually used while dispersing highly abrasive materials.

Remember, impellers are relatively inexpensive to replace but could be the difference between making and losing profit. You should check the blade often for worn or damaged teeth, check the amp draw of similar batches of material on a periodic schedule and check to make sure that your batches are being produced in the right amount of time. If the teeth are worn or damaged, amps have dropped or it is taking longer to make batches to spec., it is time to replace your impeller."

THE CONN BLADE ® Patented blending/dispersing blade design makes radical improvement over old saw tooth designs



- * Most efficient and aggressive blending/dispersing blade available.
- * Provides proper combination of pumping action and shear/ dispersion essential for fast consistent results.
- ^{*} Built in pumping action cuts processing time.
- * Longer life due to heavier gauge construction.

If you check the teeth of a new impeller, you will see that the edges of a well made dispersion blade are crisp, clean and squared off. These squared off edges are designed to give the impeller the most efficient grind. You should start a regiment of checking the blade for signs of wear in a periodic manor. As the blade begins to wear, the teeth will start to round off and in time will eventually erode away until there are no teeth left. Such rounding of the corners decreases the effectiveness of the dispersion blade and it should be replaced.

- * Less heat due to shorter required running time.
- * Excellent for high or low speed and high or low viscosity.
- * Supplied with hubs or mounting holes required to retrofit and upgrade present equipment.
- * Pumping blades without teeth are available and are excellent for gentle blending and agitation.



Customers Want Low VOC and **High Performance**

Compiled by Sandy Anderson

When asked about what's new in resins in the Canadian Marketplace, what customers ask for and any trends that seem to be occurring, manufacturers were unanimous in saying that it is high performance and low Volatile Organic Compounds (VOCs).

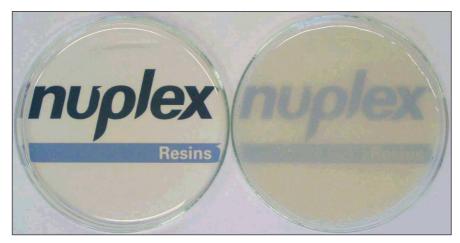
Trevor Cook, Marketing Manager of Inortech Chimie Inc. says, "Our supplier, Nuplex Resins, has been very active in bringing to market some new and improved technologies for the waterbased paint and coatings market." He adds, "We find that our customers are asking for low VOC solutions which still have high performance."

"Low VOC options have been around for awhile, but only recently are we seeing some products, which give the formulator the kinds of performance properties required and therefore allowing the traditional solvent borne technologies to be replaced," says Cook.

NUPLEX RESINS SELF-CROSSLINKING WATER-**BASED ACRYLIC RESINS**

A range of proprietary acrylic dispersions with controlled polymer morphology enables us to combine very low MFFT and hence good film formation combined with high hardness and good anti blocking properties.

Varnishes prepared with these dispersions have excellent chemical resistance properties making these products ideally suited as binders for high performance coatings.



Laguer based on Setagua 6756

Besides morphology control, crosslinking chemistry is the other key parameter in improving the properties and increasing the performance of waterborne resins.

With this in mind, Setaqua® 6756 has been developed for use in industrial wood coatings.

The main features of the product are that it is self-crosslinking and surfactantfree.

Due to its unique particle morphology, drying and hardness build-up proceed very rapidly, making this binder very much suited for use in both clear and pigmented industrial applications, for example furniture and parquet coatings.

The main use is for indoor applications but it has also been used successfully in certain outdoor applications.

Chemical and (early) water resistance properties are on a high level, the sandability, even immediately after drying has been improved significantly over conventional lacquers.



Laquer based on conventional acrylic

Furthermore, Setaqua® 6756 exhibits outstanding wood wetting properties, transparency and flow properties. The incan clarity is illustrated in the picture below.

It is well documented that surfactant free systems offer an additional advantage over surfactant containing systems. They enable the resin manufacturer to develop binders that come even closer to the performance of conventional solvent-borne binders.

There is no surfactant migration to the surface of the coating, which can result in a worsening of properties such as chemical resistance and mechanical.

1K-furniture binders, which use a combination of gradient morphology, and complementary crosslinking mechanisms, yield excellent film clarity and low haze, similar to what is achieved with solvent-borne systems.

www.inortech.com

Bert Papenburg, Director of Marketing, Speciality Chemicals for DEBRO says customers are demanding:

- Options to replace solvent borne paints specially for Architectural paints
- Waterborne alkyds to have the feel and performance of alkyd based paints
- Superior performance
- Low VOC
- Low odor
- Renewability and sustainability

enable formulators to use one resin for multiple applications with extremely low VOC levels, allowing chemists to build formulation experience while at the same time reducing inventory needs.

Uradil® AZ-790 is an Acrylic modified alkyd, specifically designed with the best properties of alkyds and acrylics. It possesses the penetration and adhesion properties of an alkyd with the excellent UV resistance of an acrylic. This combination makes it an excellent choice for exterior stains, where long life on horizontal decking is required. Uradil AZ-790 can be formulated at very low VOC levels (<50 g/l), and can be formulated with minimal usage of costly UV absorbers. www.debro.com



One of the lines from L.V. Lomas, Reichhold is pleased to announce the expansion of the Beckosol AQ® product line, a low VOC and renewable resource based family of alkyd latex resins.

The newest products, AQ 206 and AQ 210 provide premium performing alkyd latex resins mixed with environmental responsibility. AQ 206 is a medium oil alkyd latex that features high gloss and color stability designed for enamel applications. AQ 210 is a medium oil alkyd latex resin that provides excellent adhesion and corrosion resistance designed for metal primers. These exciting new resins will be commercially available in April 2010. www.reichhold.com

Receive a free copy of our popular Wood Finishing Selection Guide by calling 1-800-573-5554 today!



In response there is:

Uradil® XP-7600, a waterborne, medium oil alkyd that possesses the key properties expected of traditional solvent based alkyds without the associated VOCs. It provides an excellent brush feel that professional painters expect of traditional solvent based alkyds, while exhibiting the lower odor and yellowing characteristics compared to solvent borne paints, as required by homeowners. It is an excellent resin that can be used to formulate topcoats, primers, stains, and brushable maintenance coatings. This versatility will

So as paint and coatings manufacturers are requesting resins with high performance and low VOC, manufacturers are stepping up to the plate.

Editor's Note: The links in this article are live in our online version. Go to www.cfcm.ca for more information.

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continued from front cover

high-end shop to their advantage in building the new company and taking it on a different direction as a frameless high end product. The goal was to make it modular and put it in catalogue form, so it could be sold through dealers across North America.

The company has expanded to about 30 dealers in North America of which a handful are exclusive to the Irpinia brand only and employs just over 100 people.

The current principal owners are as follows Joseph Marcantonio, president; Marcello Marcantonio, vice president and Nick Rossi, director sales.

The company has made major strides in the past eight years in entering the multi unit project sector. It has produced cabinetry in some very exclusive high rise buildings from Los Angles to Arizona to New York to Toronto. During the next 3 to 5 years the company will be supplying cabinetry to a handful of new high rise buildings in the Toronto market as well as US cities.

www.irpinia.com



Ha Cao and Frank Luis blow off a panel before it automatically loads into the Superfici flatline finishing system.



Mohamad Ayyad applies a waterborne coating to wood panels.



Frank Luis programs the finishing system.



Fraidon Badar sprays white lacquer onto MDF panels.

High Quality/Low VOC

By Sandy Anderson

anufacturers of wood finishes have met the government regulations and consumer demand and have plenty of new and high quality products featuring Low Volatile Organic Compounds (VOCs).

According to a recent Freedonia Group study, demand for US wood protection coatings and preservatives is forecast to increase 2.2 per cent per year to \$3 billion in 2013. This increase is attributed to a rebound in the housing market and remodeling. The results will be similar in Canada.

Along with this increase comes the demand for low VOC and water-bourne products.

CFCM asked manufacturers and suppliers of wood finishes in Canada to comment on current trends.

such as LEED and Greenguard." Snyder says the US market has been developing low VOC solvent base products for several years and they have been well accepted there. "These technologies are available to Canada but at this point the water base has been more of the direction taken by companies doing finishing."

He says coating raw material suppliers continue to improve the base materials, which in turn help both performance and application.

"The application has been the toughest to improve as these products tend to spray differently requiring adaptation in both technique and equipment," says Snyder.

When discussing low VOC products, Ultra Violet (UV) is only one class of products to look at. According to Snyder, "They can be based on acrylated esters or be a waterbase UV." The biggest improvements in UV acrylates has been the development of lower irritating monomers and affordability of waterbase UV has improved, says Snyder. "Water base products have been improving, but still demand the use of coalescing solvents; they have a low nonvolatile content (25 to 35 per cent) and if any significant amount of coalescent aid is added, then its VOC amount is quickly increased," says Snyder, "they tend to also have amines that add to the VOC as these are needed to keep the emulsion stable."



so they can be better controlled at the formula source," says Snyder. "Developments in additives have attempted to address the issues in the changing polarity of the solvent blends used and to deal with the chaos of solvent evaporation during the film formation step." He adds, replaced by CO2 at application to obtain the same low viscosities during spray. "I don't' believe it ever met with any commercial success."

Akzo Nobel Wood Coatings Ltd. has been spending the majority of its research and development (R&D) time on low VOC and water borne coating systems. The company is in the final stages of launching its next generation of water borne coating systems, which will include both conventional and UV cured for both clear and opaque finishes. "This will be a complete line that will surpass the current systems in the market for application and performance," says Snyder. "The line will include all the products necessary for simple wiping and sprain stain to multistep systems."

Jeff Snyder, Sales and Marketing Manager Akzo Nobel Wood Coatings Ltd. Industrial Finishes, Port Hope, ON, and Western Canada Operations, Wood Coatings Canada explains, "The Canadian Industrial Wood coatings market has been more accepting to looking at waterborne products to lower their VOCs rather then looking at conventional solvent based lower VOC products." He adds, "The companies that are looking at VOC reduction see this as an opportunity to take the bigger step and move to water base and meet other marketing and third party requirements

"Suppliers have attempted to strip away or use VOC exempt solvents to replace the VOC portions of their products "Typical problems encountered are air entrapment and poor flow."

Snyder explains, "Resin suppliers have attempted to better control their molecular weight distribution. In eliminating the higher end shoulder, the solvent demand can be lowered slightly."

"Some waterborne suppliers have changed the typical process used to make polyurethane dispersion so that n-methyl pyrolidone isn't required," says Snyder. "The first methods were just to strip it away at additional expense." He says other attempts such as equipment have been the Unicarb system where solvents can be

www.akzonobel.com

Jean Marc Lavoie, Sales and Marketing

Director of Peinture CanLak says, "Low VOC finish is a real demand on the market now." He adds, "The government regulation is pretty strict for some manufacturers." He says the demand for low VOC finishes at Canlak is steadily increasing and he sees this trend continuing. "Low VOC product is now as good as the regular VOC product," says Lavoie. www.canlak.csssom

ICA Group, based in Civitanova Marche, Italy, has been designing water-based coating products that combine cuttingedge technological research with a tangible commitment to environmental protection. Over the past 20 years, ICA Group has been engaged in an ongoing research process geared towards the development of coating products that combine low levels of environmental impact with high levels of performance in terms of yield and quality. The waterbased cycles designed by ICA Group are capable of delivering the same levels of chemical and physical performance as solvent-based cycles – actually surpassing solvent-based coatings for pigmented cycles – while also optimizing the cost/benefit ratio.

A fundamental role is played by the studies and product tests that ICA Group conducts on a daily basis in its two research laboratories, where 28 qualified professionals work to ensure that the company's products deploy state-of-theart technology and deliver excellent chemical/physical performance.

ICA Group's mission to combine high levels of quality with low levels of environmental impact is an objective that it has been actively pursuing since 1983, the year in which it released its first waterbased coating products. The decision to concentrate more closely on water-based coatings, which was the result of a rejection of the widespread and deep-rooted conviction that solvents were indispensable to coating performance, has proved to be a challenge that is very much in synch with the increasing awareness of the public vis-à-vis environmental issues. Moreover, limiting solvent emissions is not just a sign of ICA Group's respect for nature, but also of the company's respect for people - i.e. those who live and work in contact with products onto which ICA-brand coatings have been applied.

The company's bicomponent waterbased coatings was awarded the LIFE mark by the European Union in recognition of the "sustainable long-term development" demonstrated by the company in its endeavors to lower atmospheric pollution.

ICA's research in this field was presented to the European Commission as one of the leading practical examples of the LIFE (l'Instrument Financier pour l'Environnement) program, an initiative launched for the purpose of giving financial incentives to organizations involved in "sustainable long-term development". ICA Group's project was the only initiative in the coating-products sector to receive an award:



We Bring All the Pieces to the Table

For over thirty years, Chemcraft[®] has been proudly setting standards for industrial wood finishes. We've earned a reputation for innovative technologies and cost efficient systems; a reputation that will only grow stronger now that we're part of the AkzoNobel family. Our access to a worldwide network of technology and innovation experts will take our products and systems to a whole new level. A large part of that innovation is our eco-strategy; sustainability is a deeply embedded part of our philosophy, and the Chemcraft[®] brand of products embraces this vision fully. Our eco-friendly products give you lower Volatile Organic Compound (VOC) emissions without sacrificing performance properties and proves that there doesn't have to be a trade off for sustainability. Combine all that with our commitment to superior customer service and support, and you'll see that we have all the pieces in place to continue in our role as the industry leader for years to come. Chemcraft[®] is the *obvious* choice for industrial wood finishes. Visit www.chemcraft.com to locate your nearest distributor.

the products developed by ICA Group were shown to work effectively towards a reduction in atmospheric emissions of Volatile Organic Solvents (VOCs).

ICA Group's products, sold globally, are intended for use by professional users in interior design, carpentry, boatbuilding, exterior fixtures, door and window frames, garden furniture, parquet flooring and musical instruments.

www.icaspa.com

Sansin Corporation with offices in Knoxville, TN and Strathroy, ON, has recently introduced its new Purity Interior Zero VOC Penetrating Stain (0-VOC), the first water-based interior wood stain with a base free from any harmful volatile organic compounds (VOCs) that penetrates both soft and hard woods with consistent, uniform coverage.

Sansin has been a leader in researching and developing environmentally friendly interior and exterior wood stains for a quarter century. The Sansin Purity Interior Zero VOC Stain is available at participating dealers or can be shipped direct from a nearby dealer location.

"Our new Purity Interior Stain product line shows that you don't have to compromise performance in a zero base VOC stain," said Sjoerd Bos, Vice President of Sansin Corporation. "We are proud to offer consumers and dealers a penetrating wood stain that delivers the beauty, clarity and long lasting protection that discriminating homeowners, architects and builders expect, but without the toxic indoor fumes."

With Purity Interior Zero VOC stain, customers can apply the stain directly to any wood without purchasing and applying wood conditioners, requiring less stain to deliver vibrant and even wood saturation with little to no odor and zero VOCs. Purity Interior Zero VOC stain is now part of Sansin's flagship interior stain product line.

Sansin's unique non-filming, 'waterborne' alkyd formulas combine the benefits of both oil and water-based coatings, using water as the vehicle to get oil penetration deep into the wood, leading to long-lasting durability and easier maintenance. Traditional film-build coatings don't truly penetrate and can crack or peel. With a range of more than 80 colors with rich, deep hues, Sansin offers stains that naturally protect our greatest renewable resource, wood. For 25 years, Sansin has been focused exclusively on researching, developing, and introducing environmentally-friendly, 'water-borne' interior and exterior wood products and technologies that deliver outstanding color, durability and performance without the toxicity found in conventional stains. Sansin Enviro Stains use water, not oil, to deeply penetrate and protect wood naturally, from within. Sansin has dealer networks in both Canada and the U.S.



Sjoerd Bos, Vice President of Sansin

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Corporation says, "The response for our zero VOC wood stain has been excellent, since there isn't really a downside from a performance point of view." He adds, "Dealers particularly have been very interested. And after judging our zero VOC Purity Interior Stain for all its performance characteristics, dealers are happy to put it on their shelves.'

"The manufacturers we visit with are, by far, open to green alternatives," says Bos. "Some may be forced into it by environmental regulatory agencies or by consumers themselves that are asking 'how green is this product?' Low to zero VOC finishes for wood are now price competitive and they simply perform equal or better than toxic alternatives. So again, no downside."

When asked how low VOC products have improved over the years Bos says, "In our case, for OVOC stains, we see that the workability (how it applies, how it spreads, how it maintains) and beauty have improved." He adds, "You can avoid overlap. You can re-wet the surface. So, the application characteristics have really improved."

"In a stain, workability and uniformity is how you measure performance. And now, you can get a zero VOC wood finish that delivers on performance," says Bos. "Another area of improvement has been in reducing the toxicity of colors added to a zero VOC base." Sansin has developed a way, for example, to make pigments so small that colors can penetrate wood as evenly as a dye – but without the toxic chemicals typically associated with dyes. Also, these new type of pigments offer significantly more color-fastness and longterm performance than dyes.

"This gives the market more options for retailers that want to offer stains with vibrant, dye-like colors yet still keep the VOC level down as far as possible," says Bos.

www.sansin.com

Meanwhile, Schwartz Chemical Corporation offers a specially formulated selection of Waterborne Coatings and Finishes for the wood substrates. Schwartz has a complete line of LEED compliant coatings, finishes and sealers for applications including millwork, furniture, kitchen cabinets and Rebound coatings and sealers for hardwood floors for residential and demanding gymnasium applications. Terry Butryn of Schwartz Chemical Corporation says, "The response from customers and applicators has been excellent once they try the product." He adds, "One of the biggest hurdles has been misperceptions of product performance and application based on the early history of waterborne coatings for wood applications."

issues and provides an excellent alternative to traditional oil based coatings while offering Low VOC, low odor, superior abrasion resistance and a friendlier product for the environment."

"Better resins and technology has evolved to address issues such as grain raising, tannin blocking and abrasion," concludes Butryn.

Schwartz waterborne coatings exceed the most demanding requirements for VOC compliance and offer the benefits of single component, safe handling, low odour, outstanding wear and durability, and ease of application similar to traditional oil based coatings. All products are available in gloss, semi gloss and satin finishes that can be sprayed, rolled or brushed onto any wood substrate. www.schwartzchem.com

David Kennedy, Market Director for Kitchen Cabinets at Sherwin-Williams, Chemical Coatings Division says Sherwin-Williams continues to focus on low VOC products, utilizing new technologies and improving existing technologies.

"Two newer low VOC products we are excited about include two waterborne systems," says Kennedy. "Our clear and pigmented Kem Aqua Plus is a low VOC product that is formaldehyde hazard free. Our clear and pigmented UltraCure Waterborne Sprayable UV is super low VOC and formaldehyde hazard free with unbeatable performance."

Kennedy adds, "Low VOC finishes, utilizing both waterborne and solvent-based technologies, are a predominant focus for new product development. Waterborne UV has been one of the fastest growing technologies; it provides a far superior finish with excellent chemical and physical properties, but with the added advantages of being a near-zero VOC, formaldehyde-free product, and easy reclaim / reuse."

"Ever increasing demands to lower VOCs and the various green initiatives (LEED, NAHB Green, etc.) are the primary drivers, and we can expect that VOCs will be continually targeted for reduction throughout North America." Kennedy continues, "The ongoing implementation of VOC reductions of AIM (architectural and industrial maintenance) coatings and the regulations related to the automotive industry in Canada are indicative of the reductions expected in other markets. He says customers are also insisting on the use of environmentally friendly finishes on the products they buy, and manufacturers are going to need to have green offerings or risk losing customers. "The green revolution, led by the USGBC LEED Ratings, will continue to expand and increase the demand for more products and finishes that offer better indoor air quality benefits to end users," predicts Kennedy. "The overall benefits with waterborne coatings are hard to ignore, and include low VOC, soap-and-water clean up, potentially

lower insurance rates, employee safety, formaldehyde hazard free and greatly improved performance properties."

David Kennedy of Sherwin-Williams sums it up when he says, "Expect continued growth in waterborne finishes - manufacturers are more readily choosing waterborne technology, and more importantly their customers are increasingly interested in green finishing options." www.sherwin-williams.com

Superior Finishes based in Winnipeg, MB, has been producing ultra durable W/B coatings for over 13 years and has invested over \$5 million into research and development of its niche products.

Their newest products include:

• An ultra low VOC clear coating that passes Green Guard and is rated by two of the top office furniture manufacturers in the world as having the best hardness and finished look on an

air dry system.

- A W/B texture system that is rated by one of the largest office furniture manufacturers in the world as having the best performance and ease of application.
- A WB/UV curable coating with under 10°/L VOC that is proven to have better clarity, hardness and chemical resistance than those commonly found in the market today.

Superior finishes says response to its low VOC products in the wood industry has been very good with comments from some of the largest office furniture manufacturers such as:

- "This is the only water base that has the appearance of a solvent base finish."
- "This is the only ISO free water base air dry that we can pass Green Guard and still achieve the hardness an scratch resistance needed." Successful application of the company's



Water Base Coatings

<u>vw.superiorfinis</u>

Butryn says some finishers may have tried early versions and had issues with abrasion resistance, application, grain raising, adhesion and tannin blocking. "New technology addresses all these SEQUO A

We have water based coatings that "really" work! Our coatings will solve any issues you have encountered in the past.

• Melamine	• Fiberglass	• Windows
 Urethane 	• PVC	Doors
• KynarAquatec®	• MDF	 Kitchen Cupboard
• Epoxy	• Metal	 Office Furniture
• UV Cure	• Wood	 Fine Furniture
• Alkyd		 Racking
• Acrylic		• Construction Equipment
		 Farm Machinery
	Resistance to):
 Water*Boilir 	ng water • Taber a	brasion • Chemicals
۰F	Freeze Thaw • Wea	athering
Kynar A	Aquatec [®] is the trademar	k of Arkema Inc.

INDUSTRIAL FINISHING: LOW VOC WOOD FINISHES

low VOC products using traditional solvent base equipment, (manual and automated), displays the improvements made to coatings over the years. Major kitchen manufacturers have been impressed using Superior's low VOC products. They offer a smooth finish with little grain raise and low amount of sanding.

www.superiorfinishesinc.com

Valspar is another company that has stepped up to the plate with high quality low VOC products.

Rob Penfold, Product & Marketing Manager, Wood Distribution – Canada says,

As for products, Penfold says, "At the forefront of Valspar's assortment of low VOC products is our new Zenith Waterborne line, which offers a full complement of Green Guard certified coatings all of which are less than 100 g/l VOC." A new addition to the Zenith line is the Green Guard certified solvent-base G1 varnish. The company also has a full assortment of 275 and 250 VOC solvent-based products, including the Valtec Pre-cat and Global Ultra Conversion Varnish lines that were engineered to meet the SCAQMD standards in California. "Valspar's clear and opaque water-based UV products andour 100 per cent solids UV rollercoat sealers and topcoats provide our OEM customers with industry leading low VOC products," says Penfold.

"The response to low VOC wood finishes has been very good in the last couple years," explains Penfold. "As the concern for the environment increases among wood products manufacturers, they are looking for alternatives to their traditional finishing products." "While some are eager to consider water-based coatings, some finishers are somewhat reluctant as there is a fear that water-based products will not meet their performance expectations," says Penfold. "That is where our 275 / 250 products can provide excellent options." He says the products have been field proven in California, and offer the finishing characteristics customers are used to, while at the same time being more health and environmentally responsible than traditional solvent-based wood coatings.

"The greatest improvement in low VOC products has certainly been with respect to waterborne coatings," says Penfold. "Early waterborne products were notoriously slow to dry, tended to cause a lot of grain raise and were generally not that user friendly." He says today's waterborne wood coatings are vastly superior to those of even five years ago. "The technology has reached a point that waterborne products are not too dissimilar to their solventbased counterparts in terms of application and performance." Penfold adds, "The difficulty now is convincing finishers to look past the stigma of waterborne and give the current generation of waterborne coatings an unbiased assessment."

Manufacturers of wood finishes have stepped up to the plate when it comes to water-based, low VOC alternatives. Customers have been skeptical over the years, but the environmentally friendly waterbased products are now on the market offering high quality in a low VOC finish that is comparable to solventbased products.

New and Easy

Manual liquid paint spray gun customers are looking for easy efficiency that will give them a superior end product

Compiled by Sandy Anderson

CFCM asked distributors and manufacturers of manual liquid Paint Spray Guns to provide descriptions of their newest products and to answer one question:

What are the features customers are requesting when it comes to Manual liquid spray guns...what are their key concerns?

Exel's Market Development Manager, Steve Romer says that when it comes to Manual liquid spray guns customers want:

- Repeatability
- Uptime
- Mileage

• Can their people operate the system at a given level.

"They need ongoing training to keep the systems operating at high levels," says Romer. "There are often changes in personnel, which result in loss of an operational understanding of the best operational conditions. And, due to environmental pressures, the coatings change." He continues, "The way that I look at a paint system is a three sided triangle. The three sides are the coating company, the user, and the equipment supplier. If you remove one side, a triangle, which is very strong, fails. All three parties must work together all the time."

SAMES by EXEL North America is



pleased to announce the release of the new Spraymium Airmix Electrostatic Spraygun.

The Spraymium is ideal for high and low pressure applications that are spray-



ing solvent and water-based paints. It is connected to the Spraybox control module with an electro- pneumatic coupling. The Airmix version delivers an adjustable flat spray pattern.

Airmix performance delivers a fine finish, which provides a significant reduction in overspray and bounce-back compared to other brands.

Customer benefits include:

- · Unsurpassed finish quality
- \cdot Cuts paint costs
- · Cuts waste & filter costs
- · Cuts production costs
- · Ergonomically balanced
- \cdot Easy to operate

Target markets for the new Spraymium Airmix Electrostatic spraygun include Military, Rolling Vehicles, Construction Equipment, Job Shops and Automotive – Tier 1.

www.exel-na.com

Anthony Sheng, National Sales Manager of Canadian company Lemmer Spray Systems Ltd. says some of the most common questions asked by customers regarding manual-liquid spray products are:



Important partner in the woodworking industry, Canlak provides a wide selection of industrial finishing products that allow its' customers to distinguish themselves:

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- Polyurethane
- Polyester

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- Is it easy to use? (i.e. steep learning curve that employees will waste time on?)
- Will it work with this/that/or the

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other product? (i.e. wide range of compatability?)

If there is a problem, is there someone we can call to get help? (i.e. strong after sales support for the product?)

The new Lemmer 3033 wall mounted air assisted airless system is an ideal choice for fine finishing applications using a wide variety of liquid products.

By using a premium quality Wiwa 33:1 pump, this system has more pressure available to greatly improve the atomization with products such as waterborne and low VOC. Full stainless fluid passages in the spray gun and a nylon suction system eliminate concerns of corrosion and discoloration experienced with some waterborne products.

The lightweight and ergonomic GM3600 air assist gun offers reduced overspray and high output for maximum productivity.

A908_air-gun.jpg

The new A-908 conventional spray gun from Lemmer is a general purpose unit offering the fit and finish of a higher end gun at an entry level price.

This handy spray gun can be ordered with either a 1.8 mm nozzle for thin materials or a 2.5 mm nozzle for thicker materials; both are equipped with a 1 litre suction container. A 1.2 mm nozzle set is available separately for very thin products or smaller piece work. The A-908 can also be pressure fed via typical pot systems using ¼" air and 3/8" fluid connections. www.lemmer.com

Lanny Hypes of Nordson Corporation says, "When it comes to manual liquid spray guns, the lighter the better for the customers." Hypes adds, "Lightweight guns ensure operator comfort and better productivity. In addition, the ability to get into Farraday cage area with electrostatics is also a key customer concern.



day cage effects."

Trilogy Manual Electrostatic Spray Guns feature two atomization technologies - air spray and high volume, low pressure (HVLP) - for superior application performance with a variety of substrates, coatings and part profiles. Trilogy manual guns provide the highest kV in the industry - 93 kV - for superior transfer efficiency, reduced material costs and improved part finish. In addition, equipped with Nordson's exclusive auto current limiting, Trilogy guns overcome the effects of Farraday cage areas for superior coating performance. One of the lightest guns on the market, Trilogy guns are well balanced with a handle-forward gun design to ensure operator comfort for better productivity.

www.nordson.com

Mike Hornbaker of Wagner Systems, Inc. says, "Customers are looking for a manual gun that is easy to use. They look at how



comfortable it is, how well it performs, weight, cost and durability." He adds, "Some concerns are getting repair parts, cost, and durability. As long as it is priced well, their painters can "abuse it" and if something does break, they are able to get repair parts quick, they are usually a happy customer."

The WAGNER 4600 AirCoat manual spray gun was designed to produce perfect coating results and save material. The AirCoat process is unique in its ability to uniformly atomize the coating material at relatively low pressure using a piston or diaphragm pump. This is achieved by means of a central air cap that is mounted directly on the nozzle bore and surrounds the sprayed medium on all sides resulting in a considerable reduction in overspray. AirCoat guns are ergonomically designed to reduce operator fatigue, require less trigger force and are very light, yet are made to last under the roughest conditions.

WAGNER's electrostatic manual guns have been specially developed for day-today painting and for increased transfer efficiency over AirCoat guns. The GM 2000EAC electrostatic AirCoat gun is a precisely balanced gun with a light weight trigger pull for low operator fatigue and exceptional performance. Robust and corrosion resistant, this gun is suitable for solvent-based paints and primers that exhibit a specific paint resistance of more than 150kOhm. The benefits of the GM 2000EAC include perfect surface finish, simple operation, and an extensive range of round and flat jet nozzles that are easy to change and clean.

www.wagnersystemsinc.com

Pat Johnesee of Walther Pilot North America says, "Ergonomic, easy to maintain, cleanliness of operation are some important features of manual liquid spray guns." Johnesee Adds, "The customer's key concerns are transfer efficiency and end product appearance."

The Pilot Premium is not only a new paint spray gun with a dynamic, ergonomic design; it also represents an exciting development in paint spraying technology. The innovative HVLP-Plus nozzle/air cap system guarantees high material savings while providing an outstanding surface



finish. Tests have confirmed transfer efficiencies of up to 88 per cent, far higher than the 65 per cent required for HVLP applications. As a result, by combining the advantages of the HVLP with those of conventional spraying technology, this Green Gun not only protects the environment but also saves a significant amount of expensive material, while producing excellent surface finishes.

www.waltherpilotna.com

Editor's Note: CFCM magazine is now online and the web site information contained in this article will appear as active links. Visit http://cfcm.dgtlpub.com and contact brian.jones@cfcm.ca to register



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Increase Transfer Efficiency and Spray Performance with AirPro!

Graco's AirPro guns offer *exceptional* performance in metal finishing applications. The cutting edge aircap and nozzle design means you get great coverage. AirPro guns are lightweight, ergonomic and have an ultra-light trigger pull to reduce operator fatigue.

For professional spray performance, choose AirPro.



Reaching those tough areas and getting consistent, reliable coverage is very important to today's liquid finisher." Hypes says, "Nordson's Trilogy guns are ideal for meeting both requirements – it is one of the lightest guns on the market and also features Nordson's exclusive auto current limiting to overcome Farra-



A New Green Technology Drying System

By Mike Bunnell

One company has found a solution to competition from low wage paying countries realizing that cutting wages is not the answer. Green technology inventions are the answer.

Can-Am Engineered Products, Inc.'s latest technology achievement is called the TurboAirTM drying system, for low cure waterborne and solvent based paints.

It has been estimated that the US energy savings of natural gas and electricity usage could be reduced by \$300 million per year in the automotive collision shop market in the US alone. Now multiply that by the wood industry, industrial, automotive OEM and military markets. The TurboAir 'green technology system' is designed for drying low temperature waterborne or solvent-based coatings. This technology has been tested and confirmed by the PPG and Sherwin-Williams paint companies plus a few other coating manufacturers.

The TurboAir drying system is a selfcontained mass air delivery system that supplies warm, dry air to your present spray booth without needing to use your air compressor or booth mechanicals.

The turbine is powered by our custom manufactured UL and CSA certified 50 or 60 hertz, multi-voltage, 3 phase, explosion proof, 7.5 horse power electric motor.

The inside building air is pulled into a special air intake filter system, which then





continues its passage though several expansion and drying stages until it exits at over 600 cfm and over 36,000 cfh, into a central piping configuration to our strategically placed air knives, which exits the conditioned air to the spray booth thus achieving a rapid curing atmosphere.

Documented conditioned air in a 25 foot enclosed spray booth:

- Air exiting air knives: in excess of 15,000 fpm
- Air flow at the center of the side wall: 1,100 fpm
- Cabine temperature: summer 88°F, winter 75°F
- Humidity: summer 15-25 per cent rh
- Winter 7-15 per cent rh

If this same TurboAir turbine is powering (2) 25 foot enclosed booths:

• Air exiting air knives: in excess of 15,000 fpm



Stainless steel components secure

- Air flow at the center of the side wall: 600 fpm
- Cabine temperature: summer 82°F, winter 72°F
- Humidity: summer 20-25 per cent rh
- Winter 9-12 per cent rh

Summation of the TurboAir drying system benefits:

- Dries waterborne and solvent-based paints quickly
- Flash-off time between coats is 2-5 minutes
- Save on electricity costs
- Save on natural gas costs
- Cuts spray times by 50 per cent
- Cuts bake cycles by 15-20 minutes
- Increases productivity by 50 per cent
- Only costs 0.45-0.65 cents per hour to operate
- Return-on-investment can be less than one year

Note: This information assumes your spray booth meets all requirements for construction, ventilation and safety as required by nfpa 33 and other local laws. Since fresh air is used by our turbines to supply the drying air, it makes our system inherently safe. We in fact assist the ventilation system of the booth. In no case can we exceed the 200 degree F limit described in the nfpa 33 code. Since our turbine supplies air into the booth at the rate of 600 cfm (minimum) it also provides for the forced exhaust at the same rate. This rate equals 36,000 cfh. Since the nfpa 86 code requires 10,000 cfh for each gallon of solvent use per hour thus we have a very generous safety margin. Also, always adjust your exhaust damper slightly so as to exhaust even when the booth is turned off.



100% waterborne compatability

- Provides top quality finishes with high or low viscosities
- Low overspray due to the specially designed air cap and pre-selected carbide nozzle

SATA

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Mike Bunnell is president of Can-Am Engineered Products, Inc. based in Livonia, MI.

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Back to Basics

What are the basic principles of Process Control? Well, in a very simple system, we may be concerned about the temperature of a process tank. So, we put in a heater and a controller and we're done. We now have the main components of an Automated Control Loop. We have Control over the heater, but do we have an understanding the Process?

Is the heater sized to heat the tank to the desired temperature even on the coldest day we can expect at our plant or processing the largest parts? Is the sensor for the controller located far enough away from the heater to ensure heating the entire tank uniformly? How much agitation can we use to keep the temperature uniform from top to bottom and side to side without damaging our parts? Is the temperature (watts per square centimeter) at the surface of the heater too hot for our tank's ingredients, will they thermally breakdown? Well, you get the idea. We need a little engineering to go with the control.

CLEANING

Process Control, where should we start? Well, as every surface finisher knows, it starts with CLEANING! Let's start with a brand new soak cleaner, can we use Process Control to improve its performance and service life?

Many rejects in surface finishing are traceable to inadequate or inappropriate cleaning. What are the effects of poor cleaning? Cleaning rejects display a wide range of symptoms. Wholesale peeling of the finish is one extreme of poor cleaning. While the other extreme maybe demonstrated by electronic parts that have great adhesion but still exhibit poor solderability because of poor surface preparation. If the part's soils are not uniformly removed, the finished surface can exhibit skips or steps in the deposit and these defects can usually be detected by observing bare or very thinly covered areas by touch or observation. Micro roughness caused by the cleaner's failure to remove surface particles. Micro roughness can often be detected by lightly rubbing a finger or pulling a piece of tissue gently over the area to be tested. Often these particles consist of loose magnetic iron oxides, abrasive polishing materials, or soils forced into the metal surface during rolling, stamping, or other forming operations. Poor cleaning is one cause of pitting. Dirt on the surface of the part can hold onto a tiny bubble of gas that prevents any deposition, which creates the pit.

of cleanliness required for quality work. Our Process Control knowledge can include testing, operator training, and the effects of process/technology changes.

TESTING

Analytical testing methods are simple and quick ways to control the solution's constituent's concentrations. The tests for the soak cleaner can be as simple as the dropper kits supplied by the distributor of the cleaner all the way up to ion chromatography to control the impurities. Acid base titration is a great place to start your control of the soak cleaner. The analysis method can often be found in the Technical Data Sheet or industry handbooks. Controlling the working strength of the soak cleaner has a high priority in our process control system. The size of the tank and the square footage and dirt loading of the customer's parts controls how long the initial chemical makeup will last before the tank needs chemical replenishment. The bath should be analyzed often enough to ensure the soak cleaner chemical additions are small.

The oil holding capacity of our soak cleaning is not unlimited. Analytical testing for the oil content is possible. Check with your supplier for methods or outside labs to do the testing.

You can make your own oily coupons to test the effectiveness of the cleaner. Select oil similar to the oil your customers use on their parts. Dip some test panels into the oil and let them drip dry. The viscosity of the oil controls the thickness of the film on the test panels. After air drying for some time, the panels can be lightly baked to "age" the test panels. You'll need some trial and error to find the right recipe of oil, drip time, and oven temp and time to find the coupon that works for your conditions. Running the coupon with the customer's parts gives you control over the conditions of the soak cleaner that gives you consistent cleaning results. You can gauge the results of any changes to the bath: chemical concentration, temperature, time, mechanical or ultrasonic agitation.

bic Surface Film by the Water Break Test," ASTM Method F 22 found at www.astm.org because it is part of the checklist. The water break test is suitable for observing films of process oils and heavy fingerprints on your customer's parts, but is not suited to detect any non-oily residues. This test is not sensitive enough for precision cleaning applications.

PROCESS/TECHNOLOGY CHANGES

Filtering the cleaner is gaining in popularity. Using a suitable coarse media you can maximize the solids-holding capacity of the filter and lengthen the cleaner's active service life. Additionally, oil may be removed with some filtering media that then can be recycled.

Subsequent process solutions or rinses can be protected from oil drag-out from the soak cleaner by adding a chamber of carbon to adsorb oil in the rinses following the alkaline cleaning process. When you are using Process Control, oils from your customer's parts should never reach your plating solution.

One method of bringing agitation to the soak cleaning solution uses a high flow centrifugal pump to draw the solution from the tank and re-deliver it through a sparger system (comparable to the pipes used for air agitation). Eductors spaced along the pipe can then direct cleaning solution at the parts. Eductors can create without additional horsepower at the pump a flow of up to four times what you would get from just the pump and sparger system.

In surface finishing today it is not uncommon to use a computerized control device called a programmable logic controller, or a PLC. A PLC is programmed to read a set of digital and/or analog inputs from things like the temperature controller sited at the beginning of this article. The PLC, by applying a set of logic statements, can generate a series of analog and digital outputs that can be used to turn on and off the heater. A PLC can be used to control the chemistry in our soak cleaner. The logic statements would compare the upper and lower setpoints to the input from a conductive probe and determine whether more or less chemistry was necessary to keep the soak cleaner concentration constant. A PLC output would then either start or stop a chemical feed pump.

Networking with other finishers can increase our process knowledge. Talk with your supplier about his data sheets and discuss the process with the product's Sales Engineers. Don't forget about our educational finishing societies, as they are excellent sources of process knowledge.

Compact[®] Gravity Guns with DeKups[®] Disposable Cup System

Using DeVilbiss' latest advances in atomization technology, Compact guns save on coatings, increase application rates and reduce overall costs.

Now fit the cup to the job with the DeKups disposable system using your choice of:

- Compact HVLP gravity gun and 24oz DeKups package, or
- Compact Mini HVLP gravity Touch-Up gun, SRI-510 gravity cup and 9oz DeKups packge.
- Combines the Compact's ultimate fine finish, ergonomic comfort and energy savings with
- DeKups' increased productivity and reduces waste; refill without opening lid using self-venting patented funnel system.

Process Control of the soak cleaner begins with us growing our knowledge of the process and its relationship to the soils we want to remove to reach the level

OPERATOR TRAINING

The Water-break Test can be used by your operators as a quick measure of the soak cleaner's ability to remove the oily soils on the parts within the process times you are setting. After an acid rinse the operator views the part in the air for up to one minute. If the water stays sheeted across the surface and does not "jump back" in areas the part is free of oils and greases on the surface. Breaks in the water indicate the presence of hydrophobic (waterfearing) residues. If your Nadcap Certified you all ready know about "The Hydropho-



• They are

What are the features customers are requesting when it comes to testing equipment... What are Their Key Concerns?

CFCM asked testing equipment manufacturers who do business in Canada this question as well as features of their newest products.

Susan Lofgren Marketing Coordinator of Fischer Technology, Inc., Windsor, CT says, "Some concerns our customers inquire about are how they can measure different types of surfaces." She adds, "Fischer has many coating thickness measurement instruments that are portable and easy to use." She says the company offers a wide selection of eddy current, magnetic induction and dual probes for expanded measurement ranges, complex shapes, probes that can compensate for curved surfaces, surface roughness, edge effect and parts that may still be wet from the anodizing process.

Fischer's ISOSCOPE® FMP30 is used for the measurement of electrically nonconductive coatings such as anodic, paint or plastic coatings applied to non-ferromagnetic metal substrates with either a USB port or Bluetooth® for data transfer



A Revolutionary Chloride Zinc Electroplating Process Surpasses all Current Chloride Zinc Technologies.

Dynaplate CLZ is the newest generation, extremely bright and ductile chloride zinc system for rack and barrel plating. It is designed for use in nonammonium, ammonium or mixed chloride zinc plating baths and the additives are water-soluble, which promotes better rinsing, eliminates oiling out, and improves iron removal.

Over 100 Acid Zinc production lines are benefiting from the advantages of Dynaplate CLZ!

- Unmatched Plate Distribution Drastically reducing zinc-plating cost.
- No Cloud Point Reducing/Eliminating cooling cost.
- Low Additive Consumption Reducing operating cost.
- Unrivalled High Current Density Wetting Substantial increase in productivity.
- $\boldsymbol{\cdot}$ Low Organic Content Low stress and ductile deposit.

LOWEST OPERATING COST

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- Anodizing Black Oxide and Antiquing
- Conversion Coatings Corrosion Preventatives/

to a PC or printer. It is compatible with a wide selection of separate probes for easy adaptation to the shape of the specimen. The FTD3.3 probe compensates for curved surfaces. The FTA3.3FG probe is especially suited for anodized coatings with acidic contamination of the test surface since the probe and cable connector are protected from moisture infiltration. In addition, Fischer's FMP series instruments include measurement specifications in accordance with industry standards, such as SSPC-PA2 and IMO PSPC.

www.fischer-technology.com

Kocour Co., Chicago IL has available the Coulometric Tester Model K6000. Recognized as the developer of the first commercial coulometric tester, more Kocour testers are in use today than all other competitive makes combined. Fischer Isoscope FMP30

"More experience equals more versatility," says the company. The 6000 is a compact, easy-to-use, quick-learning instrument.

While all Kocour systems are designed to the same standards, they don't all deliver the same performance. The 6000's microprocessor based circuitry offers access to over 300 coating/substrate applications. From parts as small as a #2 screw to as large as an electro-galvanized coil, or from multilayer coatings to alloy layers formed during or after manufacturing, the 6000 meets the demands of modern industry with unmatched precision.

Product Features include:Accuracy, 98 per cent +

Topcoats • Electroless Nickel Plating Processes

- Electroplating Processes Electropolishing
- Phosphating Pretreatment/Cleaners
- Metal and Paint Strippers Waste treatment.

BLENDING TECHNOLOGY, SERVICE AND VALUE.





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- Direct Readout
- Print Capability
- Evaluation of Inter-metallic Layers
- Digital Calibration
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- RS232 Interface to PC
- Dimensions: 8"W x 10"D x 14"H (20.3cm x 25.4cm x 35.6cm)
- Net Weight: 8 Lbs (3.6kg).
- Measures almost all electro-deposited metals on metallic or nonmetallic substrates.
- Measures multiple coatings and gives individual readings.
- Measures plating thickness on wire.
- Measures very thin coatings such as decorative chromium and gold. Readings in millionths.
- Measures the electro-chemical potential difference between duplex and triplex nickel layers (STEP).
- Measures electroless nickel.

The Kocour 6000 digital Thickness Tester utilizes the coulometric principle. A small test area is anodically deplated with an electrolytic solution applied at a constant current. Because the testing solution is selective, it removes only the plating. Thickness is determined by the current and time required to remove the plating. When the substrate is exposed, the 6000 turns off automatically and displays the thickness on the instrument panel.

The 6000 meets the requirements of ASTM Specifications B504, B298, B355 and ISO Standard 2177.

Kocour Testers offer the ultimate in versatility. Regardless of the number of plated layers, each can be individually measured. Base material, shape, surface roughness, electrical or magnetic properties do not affect results. Measure anything from 0.002 mil (0.05 microns) to 2 mils (50 microns).

It takes 30-60 Seconds per test. Operation is six simple steps. Accurate and repeatable measurement even by the most inexperienced operator.

Built to operate reliably under all conditions, shop or lab. Heavy gauge corrosion-resistant steel case resists occupational wear and tear.

The company also offers Stalagmometers used to measure surface tension for control of wetting agents in nickel, acid copper, acid zinc, acid dips, acid pickles and chromic acid Electroplating Baths.

Product Features:

- (0-75-920) Stalagmometer for Nickel, Acid Copper, Acid Zinc, Acid Dips and Pickles (5 ml)
- (0-75-922) Stalagmometer for Chromium (2.5 ml)
- (0-75-921) Stalagmometer Kit (includes: stand, filler bulb, beaker and counter) for Nickel, Acid Copper, Acid Zinc, Acid Dips
- (0-75-924) Stalagmometer Kit (includes, same as above) for Chromium www.kocour.net

When it comes to testing equipment and the plating and anodizing industries, the market has available something for every need.



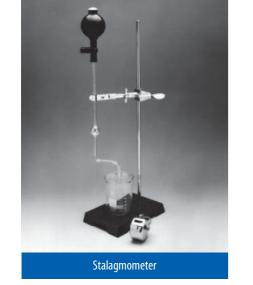
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Run, Don't Walk To your Choice of Convention

Water Fact:

"Between 2004 and 2005, the Arctic lost 14 percent of its perennial ice - the dense, thick ice that is the main obstacle to shipping. In the last 23 years, 41 per cent of this hard, multiyear ice has vanished. The decomposition of this ice means that the Arctic will become like the Baltic Sea, covered by only a thin layer of seasonal ice in the winter and therefore fully navigable year-round¹"

INTRODUCTION

I went to a convention this past September 2009. Not just any conference either. It was entitled the 5th Canadian Residuals and Biosolids Conference Technical Program, manna from heaven for a fellow like me who works in waste water treatment and who regularly deals with biosludges. Not your cup of tea? That's OK. Sponsored by the Water Environment Association of Ontario (WEAO), it was held at the Hilton Fallsview Hotel in Niagara Falls, Ontario. Topic and location – two good reasons for attending. But there is much more to it than that.

CONVENTIONEERING

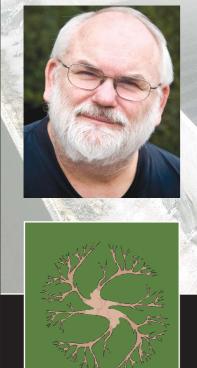
Timing: Convention schedules are commonly set a minimum of a year ahead of time and often associations have scheduled dates established two to three years in advance. When one annual conference ends, the date, location and focus for the next year's gathering are announced. There is always lots of lead time for planning to attend and when there is an annual selection of conferences from which to

choose, prioritize them for certain but decide in good time the one you most wish to attend. Also, where funds permit, a number of individuals from a firm may attend a variety of conventions so that any number of topics or specialties may be addressed in any one year by different members. In earlier days, an employer may require a person who attended a convention to deliver a summary of the topics he was able to attend to colleagues who remained at the office. This remains, in the writer's view, a very good practice.

Topic and Papers: A convention topic

for a convention is determined a year(s) ahead of time. But the scope can still be quite broad. When the organizing committee advertises an invitation to submit an abstract for delivering a paper, seriously consider doing just that. The September 2009 conference that I attended was a "Specialty" biannual conference (addressing biosolids every two years). I submitted an abstract on how to determine the amount of biosolids in a water-filled lagoon and then how to estimate the processing rate for those solids across a belt filter press. This was submitted to the organizing committ¶ee for review early in February 2009. If you are a little late in deciding whether or not to submit an abstract, call the person on the organizing committee responsible for collection and distribution of the abstracts and ask for an extension. This is worth a try, especially if you have a topic that you really wish to address with your colleagues. But. If you get the extension - get it done and submitted as soon as possible. Better yet, have it in on the original submission date. In time, the organizing committee will announce whose topics were selected for giving a paper and you will be notified; for me it was in April 2009. Often accompanying the offer to do a paper is a request for a number of materials required by the organizing committee. Among these will be a speaker's biographical information, a confidentiality agreement, identification of an alternate speaker in the event you can not attend, information regarding registration and an initial schedule for when each paper is to be presented. Do the





John Seldon, RPP, C.E.T., CCEP Waste Sludges: Collection, Concentration, Conditioning - Mechanical Dewatering

Wastewater: Audits, Optimization, Mass Balance, Training



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Biosolids Storage Lagoon

organizing members a great favour and respond to these requests for information right away. The major request will be for submitting the paper itself. Note the deadline date provided and stick to it. Discipline yourself to have this completed on time and you will be more at ease and the committee can continue to do their work. I was to submit in May 2009.

The Paper: Here is an opportunity to draft a paper on a topic you know well and wish to present to your peers. You can pass on useful information, demonstrate your depth of knowledge on the topic and generally have a good time speaking to colleagues about your work venue. This is an opportunity, not a burden. Those who hear you present a well prepared speech with a personal touch will appreciate your effort and when they disagree, get the opportunity to challenge your views and promote their own. Fair game. Papers are typically drafted to very specific formats which are provided to you when you receive acceptance for giving your paper. Follow these directions as if they were statutes. If they are confusing at times clarify them as soon as possible with a committee member. By keeping to the required format, the papers can more easily be compiled into either a hard copy or electronic copy of the proceedings for the conference. This is not a time to be sloppy or a radical. The instructions I received were both comprehensive and very well drafted; they had the feel of someone having consolidated previous experience with papers to make a productive standard. I still ended up asking about a couple of minor issues but overall the mechanics of a paper's format were clearly laid out.

instead of speaking our own thoughts directly to the audience. Worst of all, we fill individual slides with too many words or worse, data. I adapted my paper to a Power Point format with an emphasis on pictures or images about specific points but with a minimum of words or none at all. The audience has come to listen to me - I will provide the data in my discussion. Often the electronically stored presentation format will also be requested by the organizing committee as well as the paper itself. This ensures that a copy of it is available for the presentation in case the author has lost his. I submitted mine by email before the delivery day. I also took two flash drives, stored separately, each with a copy of just the presentation.

Delivering the Paper: Practice the paper so that you present it to your audience instead of reading it or keying off the electronic slides. That means you have the

content memorized and you can deliver it in a balanced, paced manner. You will have only so much time for presenting with some time allowed for questions and the moderators these days work very hard to keep you on track. I did practice, I was ready and I was looking forward to delivering the material. But, I let myself get sidetracked with a couple of side bars (that seemed appropriate as I was giving the speech) and ended in a bit of a hurry without fully covering the means of addressing through put rate - a topic I particularly like. Regardless, I enjoyed myself and felt the audience responded well to my suggestions on this topic. What happens if you are all set to attend and circumstances conspire to stop you from attending? A few years ago I had a paper accepted for a industrial wastewater convention in Rhode Island addressing handling mud solids from potato crops. As the

time approached, my father became very ill. So ill, that close to a month before the conference, I contacted the organizing committee cautioning them that I may not be able to attend. I kept them up to date and in the end, cancelled. My Dad died a few minutes before midnight of the day before I was to present the paper. I was focused on my personal loss and the organizing committee had lots of time to deal with my not being able to attend. The paper has never been presented.

The Extras: Networking, Food, Geography, Spouse's Program: However, the conference is more than presenting a paper. It is an age old opportunity to "network". And it is a good one. Forget email, facebook, twittering and any of those other current social electronic networking charades. Nothing, but nothing, matches meeting your colleagues, suppli-



11 7 follow the road to

Preparing the Presentation: Time and again I read about Power Point2 presentations. There are ubiquitous, we can't escape them. They are often used as a crutch or substitute for presenting a topic

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www.CanadianFinishing.ca

WATER WISE: WITH JOHN SELDON

ers - and often honourable competitors and hopefully many potential clients, than in person. I had forgotten how enjoyable it was to meet with old friends and discuss work before moving on to family issues and solving the waste management problems of the world until I attended this last convention. Once again I met with friends who admonished me for being absent from conventions so long and forgave my straying to sideline issues when they listened to my presentation. For many of us, conventions are so very much about discussing work with fellow professionals and feeling the sense of community that reminds us that we are not alone when performing our work. With this particularly well-organized conference came some excellent meals served in restaurants with views of the Falls that just could not be better. I never tire of the Falls, with water cascading over them, a portion of which was entering Lake Superior a hundred years before. The hotel accommodations and personnel were excellent - you



BFP Cake Discharge 6" stands for - "Belt Filter Press, biosolids cake.



The turnaround starts here

Just as the economy is resetting in anticipation of a robust recovery, SUR/FIN is also retooling to provide a superior experience for attendees and exhibitors alike. Among the upgrades for 2010:

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e-mail: cclark@nasf.org

www.sur-fin.net

June 14-17

DeVos Place Grand Rapids, Mich. are away from home and all your needs were taken care of without a worry.

And finally, the spouse's program. Dianne attended this conference with me although this is something she typically does not care to do. While I was mostly at the conference, she and two other women she met - one from Ontario the other from Nova Scotia took a winery tour of the Niagara Peninsula, had lunches and breakfasts together and enjoyed walking and riding around Niagara Falls including a ride on the Maid of the Mist. She has never had such a good time at a conference.

SUMMARY

Attend a minimum of one conference annually. And if you are in a position to hire employees, ensure they attend conferences annually and submit abstracts in order to present papers. Give them the time to prepare, attend and if a spouse can attend – male or female in this day and age - do your best to ensure the partner is provided with the opportunity of enjoying this opportunity as well. And make sure they know that it is OK to have some fun.

Now. Get that abstract written and submitted. But stay on topic when making your presentation!

- DoD track in collaboration with the U.S. Military
- High-level speakers from the automotive industry, courtesy of the United States Council for Automotive Research (USCAR) & the Center for Automotive Research (CAR)
- Keynote presentation by Dr. Ken Mayland, president of **Clearview Economics**
- Finisher exhibits
- Plant tours to Alticor/Amway facilities
- Ramped-up efforts targeting OEM/engineer participation Today's SUR/FIN—delivering added value, while paving the way for the future.

SUR/FIN 2010: Reset. Reinvent. Recover.



John Seldon, is a Wastewater Contractor, Public Speaker and owner of Temporary **Operations & Maintenance Inc. Port** Burwell, Ontario.

REFERENCES:

"The Scramble for the Arctic" FOR-EIGN AFFAIRS March/April 2008, Volume 87 Number 2, Scott Borgerson, pages 63-77. page 66. "Power Point" software, a product of the MicroSoft Corporation.

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NEW PRODUCTS AND TECHNOLOGIES

Kremlin A28 Automatic Spraygun

Kremlin by EXEL North America is pleased to announce performance upgrades for the A28 automatic gun designed for the application of water-based ceramic coatings.

The fluid needle incorporates an easily replaceable polyurethane tip that resists wear and is less expensive to replace than our competitor's standard needle/ fluid tip design.

Kremlin has developed a new configuration that delivers finely atomized, high viscosity ceramic coatings with a uniform spray pattern of up to 32 inches wide at a spray distance of only 12 inches.

New Stainless Steel Circulation Kit

Kremlin also introduces the Stainless Steel Circulation kit is used with heated paint systems to

maintain consistent temperatures. It can also be used to keep

high solids and pigmented materials in suspension. The purpose of the valve is to allow material circulation and reclaim.

Unlike competitive units, the Kremlin version utilizes a carbide gate valve which results in better wear resistance compared to a needle and seat configuration.

www.exel-na.com

Atlas Copco presents its energy-efficient screw technology blowers

Atlas Copco announces its new and proven energy-efficient technology for air blowing applications: the ZS screw blower. Screw technology on average is 30 per cent more energy-efficient compared to lobe technology. Atlas Copco is convinced that the

lobe technology, widely used at present, no longer meets the needs of today's low carbon economy. Industries and applications such as wastewater treatment, pneumatic conveying, power generation, food and beverage, pharmaceuticals, chemicals, pulp & paper, textiles, cement, and general manufacturing will highly benefit from energy savings through replacing the conventional lobe with the leading screw technology. The ZS screw blower will replace the company's entire range of 'Roots' type rotary lobe blowers.

In a typical biological wastewater treatment plant, the aeration blower system accounts for up to 70 percent of the energy usage. Today the majority of these plants use less efficient lobe technology, a technology that has had little development since its introduction in the late 19th century. By reducing the energy usage of their aeration blower system, these plants will decrease their energy costs while operating in a more environmentally friendly manner.

Other important features that secure increased efficiency and reliability are the integrated gearbox, the oil system and the innovative design that integrates all individual components into a plug-and-run solution.

New High-Performance Pigment From Cabot

Cabot Corporation has added a new product to its EMPEROR® range of high-performance black pigments, developed specifically for water-borne coating systems.

EMPEROR 1800 provides formulators of base-coats for automotive and other high-colour applica-

tions with high black colour performance, rapid and economical dispersion and long-term performance stability.

Cabot was the first carbon black supplier to develop black pigments specifically for water-borne applications, and the new product underlines the company's commitment to remain the leader in this sector. Like the existing EMPEROR 2000 pigment, the new product consists of small-particle carbon black that is chemically modified in order to attach specific functional groups to the pigment surface. As a result, the pigment is fully compatible with water-borne systems and delivers better performance than conventional oxidised carbon black pigments. EMPEROR 1800 disperses quickly and easily as a result of electro-static stabilisation in aqueous solutions, which causes the pigment particles to automatically separate during production and remain separated afterwards.



Due to the stability of the pigment, shelf life of mill-bases and final formulations in which it is used is greatly extended and final film properties are consistently maintained. www.cabot-corp.com

New Hosco Pressure Relief Valve

Hosco Finishing Systems Components, Livonia, MI, has introduced the new Hosco BPV-150 Mechanical Pressure Relief Valve that relieves paint and solvent circulating system pressure in the event of



system over-pressurization. This cavity-free and silicone-free valve can replace expensive "rupture disk" or conventional relief valves. As opposed to the rupture disk system the Hosco valve opens and closes automatically when required and will not shut down and halt production. The Hosco valve is designed to be located directly on the supply line. Should a pressure switch fail to shut off the pump before pressure reaches 300 psi, the pressurized fluid will push the face of the valve causing its spring to compress, allowing the fluid to pass through to the by-pass return line thereby relieving the pressure in the supply line. The by-pass return is connected to the supply tank or drum. When the supply line

pressure drops below 300 psi the valve will close returning the system to normal operation.

There are several key features of the Hosco valve. First, the top of the valve is equipped with a vent stone that allows it to move back and forth freely without fighting compression or vacuum. Second, being positioned close to the circulating main line area, Hosco's cavity-free design of the valve/seat eliminates any dead flow areas as found in conventional mechanical valves where paint could settle and produce paint finish dirt defects. In addition, because it is a mechanical valve that requires no service, over-pressurization will not result in system shut downs as is necessary with servicing ruptured valves. The Hosco BPV-150 Valve assembly comes complete with a BPV-150-A 1.50 adapter and installation manual. A 2 main line adapter is also available as an option in lieu of the 1-1/2 tee.

www.hosco.net

Pocket Size Coating Thickness Measurement Gauge

ElektroPhysik announces the introduction of the MiniTest 70 Series pocket size coating thickness

measurement gauge with SIDSP® 32-Bit-signal processing technology. SIDSP® is an exclusive ElektroPhysik development.

The MiniTest 70 Series will be available in two models, the MiniTest 70 F is intended for measuring non-magnetic coatings over ferrous substrates and the MiniTest 70 FN will additionally measure insulating coatings over non-ferrous metals.

The measuring range on the ferrous model is 120 mils and the non-ferrous range is 100 mils.

The accuracy statement is +(.006 mils + 2% of the reading) following a two point setup. Single point setup add 1%. Gauge repeatability is +(0.04 mils + 1% of the reading) The minimum substrate thickness for ferrous applications is .020" thick and the non-ferrous substrate requirements are .0016" of material thickness.

All units include a "Stats" function that displays how many readings have been accumulated, the mean value, standard deviation as well as the high and low readings in the group. www.ElektroPhysikUSA.com





As a result, grinding times are shortened and the quantity of dispersion additives required to achieve optimum performance can be considerably reduced – typically by more than 50 per cent compared with conventional oxidised carbon black.

Paint Manufacturing Software to be Demonstrated

Deacom, Inc. will offer personal demonstrations of its DEACOM Integrated Accounting and Enterprise Resource Planning (ERP) Software System at booth #1845 at the 2010 American Coatings SHOW, to be held April 13-15 in Charlotte, NC.

As a product designed specifically for paint and coatings manufacturers, DEACOM paint manufacturing software simplifies complex business process issues by seamlessly managing all areas, including formulation, regulatory reporting, QC/QA, inventory control, production, sales order entry, accounting, purchasing, and retail Point-of-Sale (POS) in one, easy-to-use system. www.deacom.net

The BC-40E TRU TEMP® Process Line

Birchwood Casey Introduces a seven-tank process line, with full black oxide capabilities. The new BC-40E TRU TEMP system is pre-engineered to set up quickly and operate safely. It utilizes seven individual tanks, each measuring 16 x 24 x 24 inches deep, and occupies a footprint of just 3 x 12 feet. The tanks are rugged and unbreakable. They are rotomolded of heavy weight, high-density

NEW PRODUCTS AND TECHNOLOGIES



polyethylene or polypropylene, and are supplied with all the necessary components: heaters, plumbing connections, tank lids and chemical products.

Using the patented Birchwood Casey TRU TEMP black oxide process, the new BC-40E tank line provides the owner with all of the advantages of an in-house system — a high quality, Mil-Spec compliant, black oxide capability with a 25-minute turnaround time. It provides ultimate control of quality, scheduling, and cost of finishing operations that is not available with outside black oxide services.

The TRU TEMP process contains no EPA regulated chemicals, so there is no need for waste treatment. The rinse waters are sewerable as non-hazardous discharge. The initial capital investment is a small price for all the benefits this system offers.

www.birchwoodcasey.com

Union Process Redesigns Mini Tank to Add Versatility

Union Process, Inc., known globally as a manufacturer of particle size reduction and dispersing

equipment as well as related services for a broad range of research and industrial applications, has developed a new 110cc mini tank for its laboratory Attritors.

The redesigned mini tank allows customers to process batches as small as 20-30cc of material. The tank is now compatible with the Union Process model 01-HD/HDDM Attritor, a high-speed laboratory Attritor that combines benefits of the company's standard 01-HD heavy duty wet



grinding mill with the advantages of using disks (rather than arms) and media as small as 0.1mm or smaller.

The combination of high speed milling and small media for processing very small batches has never been available from Union Process until now.

Union Process is the inventor and developer of Attritor technology and manufactures wet and dry grinding mills as well as horizontal media mills.

www.unionprocess.com

New line of AVX Automatic Airmix guns

Exel, Manufacturers of Kremlin, Rexson, Sames, and Johnstone Products offer a new line of AVX Automatic Airmix guns, which have been in the field for several months. The company says they have been performing very well with improved atomization and long life before repair. These guns are innovative and have been developed in cooperation with automatic machine builders to help assure their superior performance and ease



IN THE NEWS

Good News for

models, General Motors is implementing a unique plan to add a third shift at its award-winning Oshawa Assembly Plant to support new Equinox production there. of installation. AVX Automatic Airmix guns are also proving themselves when stationary mounted or when mounted on EXEL's SAMES line of RFV reciprocators.

The guns use Airmix technology, have a smaller & lighter design, side and rear entry base plates, less fan pattern turbulence, optimized design for water-based applications and superior atomization.

www.exel-na.com

DuPont Introduces New Line of Architectural Powder Coatings Designed to Meet Stringent Performance and Environmental Guidelines

DuPont's new line of premium architectural powder coatings offers an environmentally friendly solution for architectural environments. With no solvents and virtually no VOCs, the powder coating process results in a cleaner, safer finishing operation. High transfer efficiencies (up to 98 per cent), achieved through reclamation, and fewer rejects, make it one of the most efficient coating solutions on the market. These powder coatings are formulated to meet the rigorous specifications of the American Architectural Manufacturers Association (AAMA) and also qualify for LEED Green Building credits.

DuPont Alesta AR architectural coatings provide a high level of design freedom and are easily matched to glass, plastic, wood or virtually any other building material. Colors can be adjusted to suit individual aesthetic preferences without compromising essential functional properties such as weatherability or impact and abrasion resistance.

The DuPont Alesta standard product line includes products that meet AAMA 2603 specifications. DuPont Alesta AR400 is a TGIC-free premium weathering polyester that meets AAMA 2604 specifications, aids in obtaining LEED Green Building certification, and is backed by 5- and 10-year warranties.

DuPont Alesta AR500 is an ultra-premium fluoropolymer that meets AAMA 2605 specifications, aids in obtaining LEED Green Building certification, and is backed by 10- and 20-year warranties. **www.powder.dupont.com**

Latex Coatings Based on Unique Resin Can Adhere to Substrates Previously Coated with Solvent Based Product

ELIOKEM, a leading global specialty chemical provider has introduced Hydro Pliolite 040. This water based acrylic copolymer emulsion is designed specifically for high performance masonry coatings. Hydro Pliolite 040 utilizes an emulsified binding system (EBS) that is unique to Eliokem. This resin system is designed to penetrate into the substrate to allow better adhesion than conventional latex polymers.

The EBS technology consists of a dissolved, solvent borne polymer emulsified in water. This resin is ideal for concrete cure and seal products and can be formulated to comply with ASTM 1315. Unlike traditional latex products currently on the market, this product forms a film while the water evaporates and leaves a dissolved polymer to penetrate and adhere to previously coated substrates that used a solvent based or water based sealer. This product has excellent adhesion and superior pene-tration to multiple substrates including previously coated surfaces as well as fresh concrete.

Hydro Pliolite 040 imparts excellent UV resistance and is recommended for use in primers, exterior masonry coatings, tilt up and horizontal concrete membranes.

Eliokem is a concerned supplier and is committed to developing new products that not only meet the market demands, but are also environmentally friendly. Eliokem offers a full line of dry solventbased resins along with their waterborne line. www.eliokem.com

avoiding a potential production over-capacity situation by creatively using our assets and facilities," said Mark Reuss, president of GM North America."This innovative approach enables us to ramp up in a timely and cost-effective way and highlights the importance of these plants and communities in our North American plans." The third shift to support Equinox production in Oshawa will be added on the Consolidated Line in October and is expected to return approximately 600 employees to the plant. At CAMI, all laid off employees will soon be recalled and the additional body shop volume required to support the Equinox build in Oshawa is expected to result in the need for approximately 70 new jobs, at CAMI by August of this year.

"This is the latest in a series of very positive growth initiatives and new product mandates for our Canadian facilities," said Kevin Williams, president of GM Canada."By the end of this year, we expect to recall all laid-off production employees in Oshawa to support the new Equinox, Regal and Camaro convertible production planned there and, at CAMI, we will even be hiring some new workers - truly great news for the employees, dealers, suppliers and communities affected." General Motors of Canada (GMCL) is headquartered in Oshawa, Ontario and employs 9,000 people nationwide. GM of Canada manufactures vehicles and powertrains, and markets the full range of Chevrolet, Buick, GMC and Cadillac vehicles and related services through the largest

Automotive Industry

Additional Production planned for Chevrolet Equinox and GMC Terrain

- Equinox/Terrain combined sales up 100 per cent in Canada and 128 per cent in US over last quarter
- Oshawa Plant to add third shift to begin producing Chevrolet Equinox
- CAMI Plant further expanding Body Shop capacity and increasing GMC Terrain volume
- Plan results in return of almost 700 Canadian jobs
- In order to meet growing customer demand for hot-selling Chevrolet Equinox and GMC Terrain

The Equinox and Terrain are currently produced at GM's CAMI Automotive plant in Ingersoll, Ontario. Under the plan, CAMI's Body Shop capacity will be expanded to produce extra Chevrolet Equinox units beyond the plant's existing capacity to paint and assemble them. These Equinox body assemblies will then be shipped to the Oshawa plant for paint and final assembly alongside the current Chevrolet Impala production. The plan also enables CAMI to increase GMC Terrain volumes. "This plan for CAMI and Oshawa allows us to meet customer demand for hot products while

automotive dealer network in the country. *www.gmc.com*.

First Canadian program will test the all-new Prius Plug-In Hybrid under realworld operating and climate conditions as part of Toyota's global trials

The need for sustainable transportation is greater than ever, and as Toyota continues to prepare for transportation that relies on less fossil fuel, today it announced the first phase of a national Canadian partnership for real-world demonstrations of the all-new Toyota Prius Plug-In Hybrid vehicle (Prius PHV).

Compared to traditional hybrids, the Prius PHV has the ability to recharge its newly developed lithium-ion battery from the electrical grid and travel longer distances and at faster speeds on electric-power alone. For consumers, this technology means fuel savings and lower emissions, bringing us closer than ever before to the ultimate eco-car.

Toyota Canada Inc. (TCI) is working with 13 partners on the first phase of this national trial, including academics, provincial government departments, municipalities and provincial power authorities. Partnerships in four provinces – British Columbia, Manitoba, Ontario and Québec – make this the first Canadian trial of advanced technology vehicles.

"We're encouraged to be joined by partners, from across the stakeholder spectrum, to ensure a successful introduction of plug-in vehicles to Canada," noted Sandy Di Felice, Director, External Affairs at TCI."Each province that is a part of this national trial has already shown great vision in planning for plug-in vehicles."

TCI will provide each province with a Prius PHV to conduct their local test program, and a fifth Prius PHV will remain with TCI for its own technical and marketing tests. Trials will begin shortly and continue through next winter to assess Prius PHV performance under a range of driving and climate conditions.

Each test vehicle will be fitted with a telematics device to capture performance data, and partners are encouraged to drive their Prius PHV in as many road, traffic and weather conditions as possible.

Based on the world's most popular hybrid vehicle, the Toyota Prius PHV is designed to deliver a range of more than 20 KM and top speed of almost 100 KPH on battery alone. In addition, a small onboard Atkinson-cycle gasoline engine enables the vehicle to revert to hybrid mode and operate like a regular Prius – giving the vehicle the driving range and performance Canadians demand from today's automobiles.

WW to the data of the last state of the

da in early 2011 as the first dedicated hybrid vehicle in the premium compact segment.

The sporty five-door was on display March 31 through April 11 at the 2010 New York International Auto Show. The new CT 200h debuted at the 2010 Geneva Auto Show in early March and will join the HS 250h as Lexus' second dedicated hybrid.

"The Lexus CT 200h hybrid will not only deliver the full hybrid ownership experience in terms exceptional fuel economy and reduced emissions, it will also inject new style and excitement to the luxury marketplace," says Larry Hutchinson, Director of Lexus. "With new levels of attitude and personality, the CT 200h will appeal to a younger group of urban, environmentallyminded Canadian luxury drivers."

Ford Is Winning More New Customers From Competing Brands, Fueling Market Share Gains

Ford Motor Company is increasingly attracting customers who are trading in vehicles from

competing brands, one of the keys to Ford's recent market share gains in U.S.

For the Ford brand, the rate of customers who traded in competitive brand vehicles rose 18 per cent from 2005 to 2009. The conquest rate for Lincoln rose 61 per cent, while Mercury saw a 12 per cent increase from the 2005 to 2009 model year.

"We're finding that when customers of competing brands check out our new lineup and understand the quality, fuel efficiency and value we offer, they are increasingly becoming Ford owners," said Ken Czubay, Ford vice president of Marketing, Sales and Service."The strength of our new products is making the difference in a very competitive marketplace."

Among Ford vehicles, the Fusion Hybrid, Escape Hybrid and Mustang attract the most customers who trade in competing brands. For example, more than 60 per cent of trade-ins for the Fusion Hybrid were non-Ford vehicles. More than 50 per cent of trade-ins for the Ford Mustang were competitive brands.

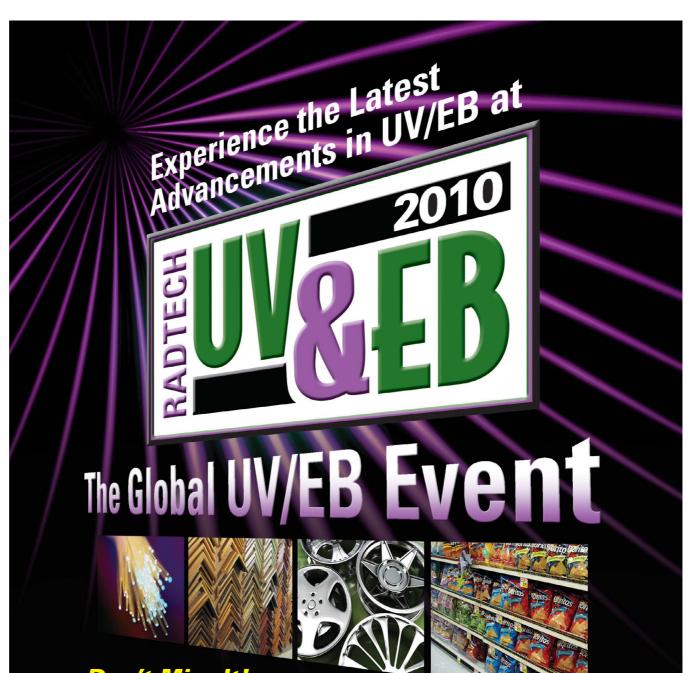
The redesigned Ford Taurus showed the

biggest increase in attracting new customers to the Ford brand between 2005 and 2009.

For the Lincoln and Mercury brands, the Mercury Mariner Hybrid and Lincoln MKX attracted the most customers from competing brands.

"We're seeing customers from competing brands in the showroom that we haven't seen in a long time, if ever," said Kevin Collins, president and owner of the Bill Collins Ford, Lincoln and Mercury dealership in Louisville, Ky. "Customers have been looking at our products for two reasons. They are impressed with Ford products' quality improvement, and they are pleasantly surprised with our entire lineup. Ford is back on their shopping list."

Winning new customers from competing brands has been a key to Ford's ability to gain market share in the U.S. Ford gained U.S. market share in 2009, its first full-year market share gain since 1995. Ford has now gained market share for 16 of the past 17 months.



"We're pleased that Canada has been selected as one of the participating countries for Toyota's global test of the Prius PHV. This enables us to conduct technical and market acceptance tests unique to Canada's driving experiences and climatic conditions," Ms. Di Felice concluded. "Moreover, feedback from the Canadian tests will help ensure the Prius PHV performs well in any country where drivers encounter cold temperatures, ice and snow."

Lexus Announces CT 200h Premium Compact Hybrid for Canadian Market Lexus has announced that the all-new CT 200h premium compact hybrid will go on sale in Cana-

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