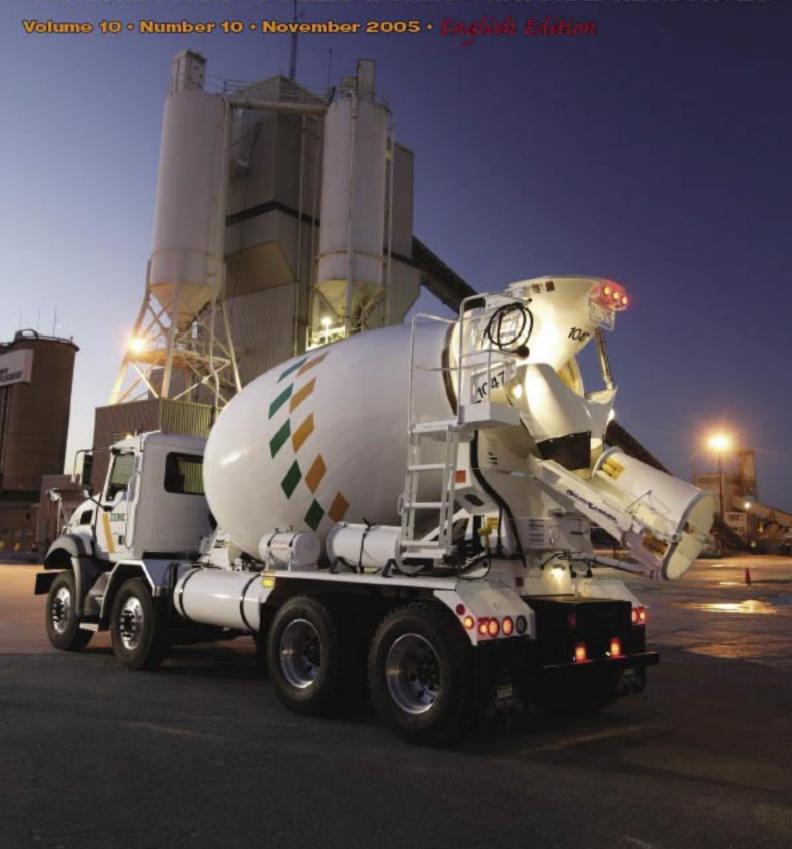
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A Word From the Publisher

After ten issues of InfraStructures in English, we can say that a single bilingual magazine covering the whole spectrum of the industry is a success.

The concept of InfraStructures gives us the opportunity to publish stories and articles on diverse subjects that more specialized media cannot easily cover. As more advertisers join in, we will offer our readers even more content.

Our advertisers tell us that they appreciate the possibility of reaching most of the end-users of their products with a single magazine. It makes the planning of their marketing strategy that much easier. Before InfraStructures, they often had to choose between advertising in multiple magazines or focus on only a part of their target market.

InfraStructures also has a readership spread throughout Canada. With its mailing list constantly evolving, InfraStructures will soon have unbeatable coverage in all regions of the country.

Please send us your comments and suggestions, we understand that there is always room for improvement and, making a better magazine is our only objective...

Editor/Publisher



On the cover:

a new composite concrete mixer from London Machinery in use at a Demix plant near Montreal.

CUMMINS HAS BIG PLANS FOR CHINA

Dongfeng Cummins Engine Company (DCEC), a 50-50 joint venture of Cummins Inc. and Dongfeng Motor Company, has begun development of a 13-liter heavy-duty truck engine designed to serve the high-end of the truck market in China.

The fully electronic engine, which is expected to be ready for production in 2009, will feature a power range from 400 to 545 hp and is designed to be used in heavy-duty trucks above 40 t gross weight. The engine will take advantage of Cummins industry-

leading technology that will make it capable of meeting future emission standards in global Heavy Duty markets.

The development agreement is a further expansion of the longstanding Cummins-Dongfeng partnership. It also marks a departure from the traditional joint venture model in China. Typically, Chinese joint venture partners have imported existing product technology from their international partners and used that technology as the basis for manufacturing products to meet the China market.

This is the first time that a Cummins heavy-duty engine platform has been developed outside the United States. Likewise, it is the first time that Dongfeng has worked with an international partner to design a new engine platform.

Initial development work on the engine platform has started at the Cummins Technical Center in Columbus, Ind. Development will be shared with the Cummins East Asia Research and Development Center in Wuhan, China, when the center opens in the third quarter of 2006. The Cummins East Asia



Inco Launches Friendly Take-Over Offer to Acquire Falconbridge

Inco Limited and Falconbridge Limited announced recently that their respective Boards of Directors have approved the acquisition of all the outstanding common shares of Falconbridge by Inco by way of a friendly take-over bid. The combined organization, which will be known as Inco Limited, will be one of the world's premier mining and metals companies in both nickel and copper, with one of the mining industry's most attractive portfolios of low-cost, profitable growth projects.

"We're bringing together two great companies, with excellent assets, to create a great Canadian player in the global markets," said Scott M. Hand, Chairman and CEO of Inco Limited, who will continue to serve in that role following the acquisition. "This combination will create a mining and metals powerhouse, with outstanding growth prospects and a truly unique opportunity to create significant value for shareholders going forward."

Mr. Hand added, "Given the excellent growth prospects for both nickel and copper, driven in large part by continuing strong demand from China, the combined company will be positioned to generate very strong cash flow and earnings both in the near and long term, and will have the size and financial strength to take advantage of new growth opportunities as they emerge."

The combined company expects to immediately achieve significant synergies and cost savings and currently estimates that these will total US\$350 million per year by the end of 2007. These synergies and cost savings will come from realizing efficiencies in overlapping operations, better use of mining and processing facilities in Canada, improving procurement practices, building a common information technology base, incorporating best practices, and capital expenditure savings.

"We believe that this combination will be unique in the mining industry in terms of securing synergies of this magnitude and breadth, and will represent an extraordinary opportunity to add shareholder value," said Derek Pannell, Chief Executive Officer of Falconbridge, who will serve as President of the combined company following the acquisition. "In addition to the obvious and immediate synergies, there will be opportunities for years to come to generate value by focusing the combined expertise of our world-class employee groups on optimizing our businesses."

Source: Falconbridge Limited, Inco Limited

center is a joint venture between Cummins and DCEC.

Cummins does not currently have a product in this displacement range, and this new platform is designed to take advantage of the expected strong growth in demand at the higher end of the heavy-duty tuck market in China over the next several years. The engine platform also is being designed so that it can be readily modified to meet future U.S. EPA and Euro IV/V emission standards.

China is in the midst of the largest highway-building effort in its history and is expected to have an interstate highway system second only to the United States by 2010. The expansion of the interstate system will allow larger trucks to carry more goods across more of China, fueling the demand for increasingly powerful heavy-duty trucks.

The Cummins-Dongfeng relationship dates back nearly 20 years and the two companies have been joint venture partners since DCEC was formed in 1996. DCEC currently makes Cummins ISB, ISC and ISL mid-range engines (3,9 - 9.0 liters) and is in the midst of an expansion that will increase capacity from 160 000 to 200 000 engines a year in 2007. The two companies also are partners in a filter manufacturing plant in Shanghai.

Also, Cummins Inc. and China's Shaanxi Automobile Group Company Ltd. have signed an agreement to form a 50/50 joint venture company, Xi'an Cummins Engine Company (XCEC), to produce the Cummins ISM 11-liter heavy-duty engine in Xi'an, the capital city of western China's Shaanxi Province.

The companies initially will invest \$24 million in capital into the joint venture company, which will have access to the most advanced Cummins 11-liter, full-electronic ISM engine platform from 305 to 440 hp. Construction of the plant could begin as soon as the fourth quarter of 2005 and production could start as early as the third quarter of 2006. The market for heavy-duty trucks with payloads greater than 15 t is expected to be around 200 000 units by 2010. The joint venture's projected production is 50 000 units by 2010.

Shaanqi Group, headquartered in Xi'an, is the leading producer of heavy-duty trucks (payload above 15 t) in China. Shaanqi, which has been buying a small number of imported ISM engines from Cummins for several years, will be the largest customer for the engines produced by the joint venture. Cummins East Asia marketing organization will handle non-Shaanqi sales of ISM engine

made at the new plant. Source: Cummins Inc.

SNC-LAVALIN JOINT VENTURE AWARDED FIVE CONTRACTS IN ABU DHABI

SNC-Lavalin is pleased to announce that SNC-Lavalin Gulf Contractors LLC (SLGC) has been awarded five contracts, worth a total of over \$ 97 million, by National Central Cooling Company (PJSC) (Tabreed) in Abu Dhabi to build two new water cooling plants

and expand three others in the United Arab Emirates (UAE).

SLGC, a joint venture between SNC-Lavalin International Inc. and Tabreed, will provide engineering services and will execute the procurement and construction works for the five projects, located respectively at Sheikh Zayed Sports City, Al Dhafrah, Sheikh Zayed Road, Ajman and Abu Dhabi Khalifa University. Once completed, the water cooling projects are expected to provide the UAE



with an additional 62 400 t of chilled water per year.

"This is the fifteenth water cooling contract we've carried out together in the last five years, which gives a good indication of the strength of this partnership and the confidence Tabreed and its clients have in our expertise," said Sami Bébawi, Executive Vice-President, SNC-Lavalin Group Inc.

Work is already underway on the cooling plants, which will be completed at different

times between April and December 2006.

"District cooling will continue to be a thriving business, particularly with energy costs rising so much," said Hubert Lafortune, General Manager, SNC-Lavalin Gulf Contractors. "SLGC's innovative approach and cost-effective solutions are designed specifically to meet the needs of Tabreed's clients."

SLGC was formed early in 2004, following completion of major turnkey engineering, procurement and construction contracts in

Abu Dhabi, awarded to SNC-Lavalin between 2000 and 2003, for four large chilled water plants for district cooling systems with a yearly capacity of 40 000 t of chilled water.

Source: SNC-Lavalin Group Inc.

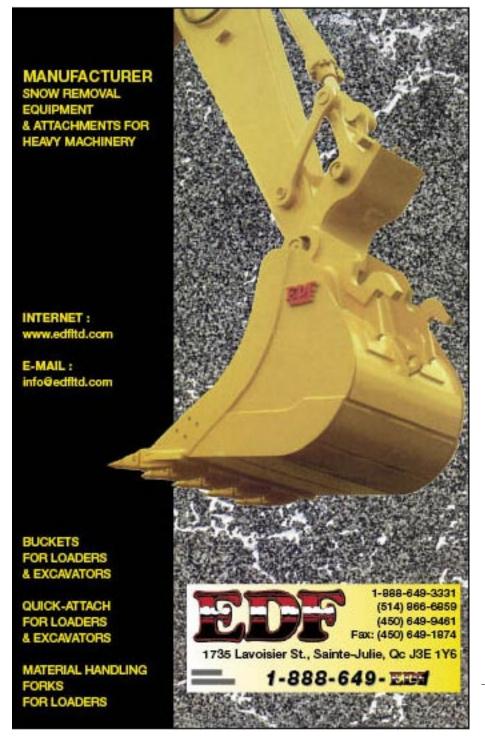
NEW CONTRACTOR SUPPLIES CENTER IN EDMONTON

United Rentals, Inc. announced the grand opening of its newest contractor supplies distribution center in Edmonton, Alberta. The 24 000 ft² facility is the second in Canada. "Our contractor supplies infrastructure is now fully established in support of the growing demand from customers," said Michael DeCata, Vice-President, contractor supplies, who noted that the Edmonton opening completes the company's plan for nine regional distribution centers in North America.

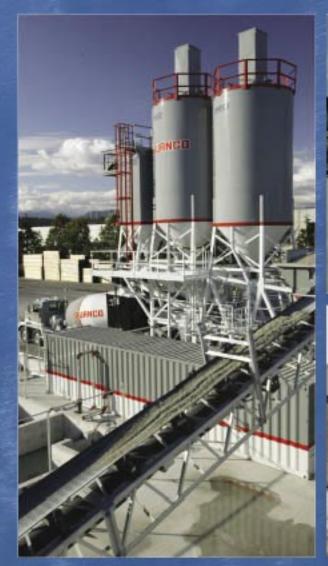
The new distribution center expects to stock 5000 contractor supply line items, including saw blades, power tools and safety gear. "This facility, integrated with our extensive branch network, is another example of how United Rentals responds to our customers' every jobsite need," said Peter Hofbauer, Director, logistics and distribution for United Rentals. "Customers who place orders before 4 p.m. can expect same-day shipment of their supplies."

The Edmonton center will fulfill orders placed through approximately 40 United Rentals branches. "We now have an ideal hub in Alberta from which to service our rental locations in western Canada," said Mr. Hofbauer. The company previously established a similar contractor supplies distribution center in Ontario, with additional centers in the United States in Georgia, Pennsylvania, Illinois, California, Texas, Oregon and Colorado. United Rentals expects to stock 10 000 contractor supply line items at each of its distribution centers by year-end.

Source: United Rentals, Inc.



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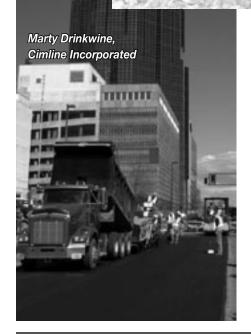
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MTO Researches Saw and Seal



Recently the Ontario Ministry of Transport (MTO) began a series of field evaluations on the benefits of the Saw & Seal method of cracksealing.

This evaluation began about two years ago when the MTO initiated investigation into alternatives to Routing & Sealing, which is the current provincial standard. Discussions with agencies outside of Ontario revealed that many were having great success with the sawing process. This indicated to The Ministry that some further research and physical study could be worthwhile in evaluating ways to possibly improve their cracksealing specifications.

Cracksealing has long been recognized by the MTO as a very cost and results beneficial practice to pursue in prolonging provincial infrastructure. Generally it is executed at 1/6th the cost of conventional pavement rehabilitation and reconstruction methods. It does, however, lack the profile of more costly and complex processes and tends to get overlooked by most agencies and contractors. This, juxtaposed with its incredible reliability at pennies per metre. Like any process this dependability is reflective of the practices, materials and overall commitment to quality.

Earlier this year, Chris Raymond – Senior Bituminous Engineer, began to co-ordinate a plan to test the comparative benefits of the various practices with the emphasis on Sawing versus Routing. With the assistance of Gord Start – S/W Region Technical Services Supervisor and Steed & Evans the

Aecon Group Acquires 4 "PicBucket" Units From PowerTech

Carol Murray, President and Chief Executive Officer of Power Tech Corporation Inc. is pleased to announce that the Aecon Group, one of the largest construction companies in Canada, has just placed a firm order to purchase four "PicBucket" units from the Company's 2000 Series.

"We are very proud and honored that a company of Aecon's size and reputation, a leader in Canada's construction industry, has chosen to buy our products. We are even happier that before purchasing our "PicBucket" units, Aecon had the opportunity to try out our technology for several weeks as part of our V.I.PIC program. This testing period allowed Aecon to verify and validate for itself the significant benefits of our innovative technology," said Mr. Murray. In recent weeks, Aecon used a "PicBucket" at various construction sites in the Toronto region.

"We are very satisfied with the results we have realized while using the 'PicBucket' and its accessories. It has helped us perform our contracts more efficiently and effectively by allowing us to complete several functions and tasks without changing equipment. We look forward to working with PowerTech in the future and enjoying a competitive advantage thanks to the benefits of the PicBucket", said Paul Pastirik, Aecon Vice-President of Corporate Development.

"This firm order from a major player is strong recognition of the value of PowerTech's technology. This marks an important milestone for our Company. In addition, this agreement with Aecon demonstrates the success of the V.I.PIC program. In the coming weeks, we intend to carry out the next steps of our business development strategy. These include, notably, the closing of a distribution agreement with a major industry player," stated Richard Hélie, PowerTech's Vice-President of Sales and Marketing.

"This program is a mutually advantageous partnership proposal between PowerTech and select players in the construction industry. Through this initiative, PowerTech allows participating entrepreneurs to use the 'PicBucket' at a reduced fee for a set period. If they are satisfied, they can then purchase



it at a preferential price. In addition, they can benefit from an excellent guarantee and financing conditions. In return, participants would accept that the results of their experience using the 'PicBucket' and their name be used in PowerTech's marketing efforts. Several other entrepreneurs are currently participating in the V.I.PIC program. We are confident that this dynamic marketing program will soon generate other sales for PowerTech," added Mr. Hélie.

The "PicBucket", developed by PowerTech using patented technology, is a flexible, multifunctional percussion bucket that combines the power of a hydraulic hammer with the stripping strength and maneuverability of a conventional bucket.

Source: Power Tech Corporation Inc. Richard Hélie, (450) 419-5400

primary maintenance contractor, a suitable test area was chosen. The route selected was along Highway #3 between Tillsonburg and St. Thomas. This route was divided into several sections; each detailed to provide comparative data.

These detailed sections would each comprise several examples of a specified series of preparation and application steps. As an example, one section may require a 25 X 20 mm saw joint in HL3 with a 190 sealant and no over-banding. Another section may be identical but with sandblasting and over-banding steps included. To ensure reliable comparisons could be made, one section would adhere to the current provincial Routing & Sealing specification.

With the information laid-out and organized, attention to selecting an experienced contractor and equipment was required.

After some deliberation, The Bridge Tite Group from Schomberg, Ontario was chosen. This company specializes in waterproofing, sandblasting, joint preparation and sealing.

Discussions between MTO and their Michigan counterparts revealed that equipment selection also had some bearing on the suc-

cess they had achieved with the Saw & Seal process. After speaking to contractors, and in order to make a more accurate comparison, MTO chose to specify the same saws and blades as used in Michigan. This led to a call to CIMLINE Incorporated of Plymouth, Minnesota the leading manufacturer of cracksealing equipment in North America. Cimline and Heat Design, the Ontario authorized dealer, agreed to make a PCS-25 Saw, PCR-25 Router and support personnel available at no charge for the purposes of the tests. All that remained was to schedule the project, and after some adjustment the work was completed between September 27 – 28, 2005.

The most significant difference between the Sawing and Routing processes is the accuracy of the cut. The saw blade, with multiple teeth rotating at high speed ensures a clean, almost surgical cut. This provides for smooth, well-defined walls and base to the cut groove. Such precision limits peripheral damage and makes for a more verifiable sealant reservoir. By contrast, routing makes a less precise cut with a 'Star' shaped cutter, which permits easier chasing of meandering cracks.

Regardless of the desired cut, it is

universally agreed that removing contamination and moisture is critical to joint life. During these tests a sandblasting process was employed to remove dirt and contaminant from the cracks. As a comparison, a number of cracks were blasted and sealed without the use of cutting equipment. A Heat-Lance was also used in one test section to examine the effectiveness of pre-drying to gather comparative data.

With the successful completion of documenting and sealing the various test sections, a monitoring phase was initiated. During the following months and years (possibly 2 or 3), these various cracks will be observed and measured to determine the effectiveness of the processes employed. As that data is gathered, the MTO will analyze and interpret it according to a predetermined set of criteria. According to Raymond, the MTO wants to provide contractors with a reasonable application criterion to improve overall reliability of the process. It is also hoped that when the data has been reviewed that the findings could be presented to the Canadian Technical Asphalt Association (CTAA) for broader consideration and discussion.



Lafarge Tetouan Plant First to Use Wind Power

The wind farm that provides 50% of the electrical needs of the Lafarge cement plant in Tetouan, Northern Morocco, was officially registered as a Clean Development Mechanism (CDM) by the CDM Executive Committee in Bonn on September 23, 2005. The wind farm in Tetouan has benefited from the support of the Moroccan and French authorities: it's the first project ever approved by the French "Mission Interministérielle de l'Effet de Serre". It is the first CDM project registered to the CDM Executive Board for Morocco and France.

The 1997 Kyoto Protocol sets quantitative targets for industrialized countries to limit or reduce greenhouse gas emissions: by 2008-2012, emissions must be reduced by 5,2% from 1990 levels. The protocol authorizes three flexibility mechanisms to help industrialized countries meet their quantified targets for reducing greenhouse gas emissions and help emerging countries achieve sustainable development goals, including emissions credits.

Registration of the wind farm is the final step in the CDM process. The project will generate emissions credits after certification that emissions have actually been reduced after one year of operation.

The twelve wind turbines started operating

in May 2005. With an output of 850 KW each, together they will generate total output of 10 MW (in compliance with Moroccan legislation limiting the amount of private electrical power generation). The turbines are located on the site of the cement plant, particularly exposed to the wind. The average wind speed exceeds 9 m/s. At the world level, wind speeds of 7 to 8 m/s are

considered to offer strong potential for the development of wind farms.

The location was carefully studied before erecting the wind turbines. Lafarge invited the neighbouring communities – who were not at

all familiar with wind power – to visit another wind farm in Northern Morocco to judge the visual impact and low audible nuisance for themselves. After reassuring local residents, Lafarge also investigated the flight corridors of migratory birds. In the end, the wind



turbines were carefully integrated within the landscape. They were installed on the crest of a hill, 250 m from the nearest residences (surpassing French standards, which call for 80 m).

The New Go-Tract 1200 HY Multi-Terrain Vehicle From Camoplast

Camoplast is pleased to announce the introduction of a new multi-terrain tracked vehicle to its utility vehicle line-up.

The Go-Tract™ 1200 with its powerful 155 hp turbo diesel engine, 5448 kg (12 000 lbs) carrying capacity, 15,6 km/h (9,6 mph) top speed and very low ground pressure is the tracked carrier of choice in difficult ground conditions. Its versatility as a personnel transporter, aerial device / digger derrick platform or general-purpose carrier makes it a proud addition to Camoplast's extensive fully hydrostatic utility vehicle portfolio.

"The new Go-Tract 1200 was brought from concept to finished product by our newest division, Camoplast (formerly the Industrial Division of Bombardier). We are really proud of this new vehicle. As with all of our tracked machines, it will prominently display the new sub-brand Camo on the grille. We confidently look forward to seeing the Go-Tract 1200 exceeding our customers' expectations in this popular payload class", stated Christian Martin, Sales and Marketing Director, Camoplast.



The microprocessor equipped Go-Tract 1200 delivers safety features like automatic parking brake application when the vehicle stops, when the door is opened, or the outriggers are deployed. The microprocessor also protects the vehicle from overload by optimizing power output to the final drives. The Go-Tract 1200 may be equipped with either 71 cm (28 in.) or 84 cm (33 in.) tracks based on required width.

Camoplast and their tracked vehicles division, employs 350 people in its manufacturing facility in Granby, Quebec, Canada. The utility vehicle line-up includes multi-terrain personnel and equipment transport vehicles, the legendary Muskeg® and the multi-pur-



pose Trooper™ and Patrol™. The vehicle portfolio also includes a new hydrostatic version of the J5 with optional fire fighting kit as well as the SW 48® HY, the high-speed, blower equipped snow clearing vehicle. In addition Camoplast manufactures alpine and snowmobile trail groomers.

Camoplast has now six specialized service centres where pre-owned vehicles are reconditioned and sold. Camoplast provides best-in-class warranty coverage and the biggest used rubber/steel tracked vehicle selection in North America.

Source: Camoplast Industrial Inc. www.camoplast.com

The cost of the wind farm is estimated at about €10 million.

When the cement plant is undergoing maintenance, any surplus electrical power generated by the wind farm will be resold to the Moroccan Office National d'Électricité (ONE), according to a buyback contract signed with ONE.

The wind farm will help curtail climate change by reducing greenhouse gas emissions (by 30 000 t/year). The annual environmental benefit for the planet is equivalent to planting 2 million trees.

As part of its firm commitment to sustainable development, Lafarge is implementing different forms of renewable energy depending on locally available resources, such as rice husks in the Philippines, coffee husks in Uganda...

The Group currently has two other CDM projects: in Malaysia, palm kernel shells are used as an alternative to fossil fuels; in Brazil, industrial wastes are substituted for limestone, which is a non-renewable natural resource, to manufacture cement.

Source: Lafarge

Intermat 2006

Intermat 2006 will be the key event of the year in construction and civil engineering, bringing together all the major global players in the sector at the Paris-Nord Exhibition Centre from 24 to 29 April 2006.

This is France's biggest trade exhibition in terms of size, with a gross exhibition area of $350\ 000\ m^2$, and all the world's leading manufacturers and suppliers of equipment and services for civil engineering, construction and the building materials industry have already signed up.

Intermat is a truly international event with more than 65% of the exhibitors coming from all around the world. This strong international representation reflects the crucial importance of the French market with its global influence and its special relationship with the markets of Southern Europe, French-speaking Africa and the Middle East.

All the major players in the construction and civil engineering sector will be at Intermat 2006.

All sectors – from earthmoving to new technologies, including materials processing, construction, roads and recycling, lifting and handling – will be fully represented.

The organizers of Intermat 2006 have enhanced the exhibition's offering by building on its sector-based approach, introducing new sectors and special events that will offer visitors concrete solutions for their specific business needs, taking an international perspective of the sector involved. For the first time, a Technological Innovation Area, will provide information and present the various tests components have to undergo for the benefit of design, production development and prototyping units, and purchasing managers from manufacturers and OEMs.

Special events and discussions at Intermat 2006 will focus on risk prevention, health and safety and other issues.

NAPA Publishes History Book Paving the Way: Asphalt in America

The National Asphalt Pavement Association announces the publication of its new

book about the history of hot-mix asphalt, Paving the Way: Asphalt in America by Dan Mc-Nichol, author of The Big Dig and The Roads That Built America.

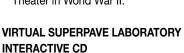
As the celebration of the 50th anniversary of the Interstate System approaches in 2006, this lavishly illustrated, engagingly written book would make a timely gift for anyone involved in the transportation industry.

The book starts where hard-surfaced roads started – with the Romans. After Rome, the narrative moves to 18th century Britain and France, where McAdam and Trésaguet left their marks on the art and science of road building. The reader learns how early experiments in building roads from iron, granite, bricks, cobblestones, and wood pointed up

the excellence of asphalt as a surfacing material.

Figures from asphalt history including the Asphalt Tycoon, the Warren family, and Sheldon G. Hayes come to life in the book's pages. The book sings the praises of roads such as Route 66 and the Interstate System, and it celebrates the achievements of heroes such as the Navy Seabees who paved the way to victory in the Pacific

Theater in World War II.



The National Asphalt Pavement Association also offers the Virtual Superpave Laboratory, a computer-based learning tool for training engineering students, practicing engineers, and technicians in the laboratory procedures and data analysis of Hot Mix

Asphalt (HMA) testing. This interactive CD will increase the expertise of agency, consultant, and contractor personnel responsible for making decisions concerning HMA mix design, quality control, and acceptance.

The VSL gives a highly visual introduction

to Superpave laboratory
tests. Users will learn
about the theoretical
concepts behind the
tests and will be
able to conduct
hands-on
manipulation
of the data.
Using the VSL

provides a basic level of understanding of Superpave for all who specify, design, and build asphalt pavements. Material testers can become familiar with laboratory testing procedures before going into the lab. Use of the CD can also increase understanding of testing procedures, reduce time lost to misunderstanding, and increase confidence of lab personnel.

Source: National Asphalt Pavement Association, www.hotmix.org

Maintaining Equipment in Cold Weather Can Boost Year-Roudn Productivity



If you're like most people, you've experienced those dark, chilly winter mornings when your body just does not want to get going. Everything seems to move more slowly and require more effort.

In cold weather, the same can be said about machines and the liquids in their systems, such as oil and antifreeze. It's especially true with hydraulic fluids. Hydraulic equipment is affected by low temperatures because the fluid turns thicker and then the pumping mechanisms have to work harder to push it though the lines. That slows down the equipment and puts a lot of extra strain on it, which increases the unit's chances of giving out.

"Everyone involved in construction work in Northern climates knows there's always going to be cold weather to deal with, but there is still work to be done and schedules to maintain," says Orrin Knapp, Fleet Manager for RSC Equipment Rental in Alberta, Canada. "On the other hand, as long as proper precautions are taken, equipment can still be utilized in cold conditions."

A RANGE OF OPTIONS

There are many ways to help maintain equipment's productivity in cold weather. On some job sites, an obvious solution is to bring pieces of equipment indoors if possible, or to plug them into electric heaters. There are also various types of portable heaters that can be mounted onto the side of an engine to protect it from freezing, and heated blankets or jackets can be wrapped around equipment to warm it and keep oil flowing. Another critical concern is to make sure the antifreeze in every radiator is maintained at proper levels and temperature ratings to minimize the risk of freezing up.

In some instances, contractors will even wrap unfinished buildings in plastic sheeting and warm the interiors with portable gas heaters and blowers. That makes it safer and more comfortable for workers on the site – frostbite is always a threat – but it also improves the way equipment functions when it is cold.

Rental companies such as RSC, that specialize in providing equipment solutions for particular or unusual project needs, have a vested interest in keeping those machines running well on a customer's job site.

"At RSC, one of the services we provide for our larger jobs is to go on a courtesy trip with our mechanic in the morning, to make sure our customers' equipment in the field is starting and running the way it should," explains Larry Reeves, RSC's district manager in Kansas City, Mo.

"That just makes sense for everybody, because if there is a problem with that machine when it is cold starting out, the equipment will not be doing its job, and we would be running around on maintenance calls all day."

One serious, but common, danger with cold equipment is when a cold engine will not turn over and somebody will try to start it with ether.

"That process can really tear up your equipment," Mr. Reeves adds.

WORKING WITH FROZEN GROUND

Even when equipment is running perfectly well, cold weather may cause other problems for machinery. Trying to excavate frozen



ground can tear up buckets and blades, and it gets even worse if icy surfaces make the equipment lose traction.

Thawing frozen ground with insulated tarps, special heaters or warm-air blowers can be a smart investment in productivity. That is especially applicable for situations where the rest of a project is held up as a



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result of the freezing – like plumbing installations in a building's foundation.

Supplemental heat is essential when pouring concrete in freezing temperatures, and fortunately there are many options available. Large ground heaters or radiators can be used to thaw out surfaces where the concrete is to be poured, and then it helps to cover excavated soil with straw to retain more of that added heat before pouring.

After the concrete is poured, cover it with special insulated blankets to protect it from freezing. Be sure all edges and corners are covered well, as they may be most vulnerable to cold air and wind. Also remember that concrete setting times are slower in cold weather.

To further ensure successful concrete work in low temperatures, it helps to order the mix with less water than usual, because the more water that is in the concrete, the greater the risk of problems with freezing.

"Road crews cannot do their job when the ground is frozen," adds Mr. Reeves, "but other than that, if you make the right arrangements you can do whatever you need to do."

ADDITIONAL CONSIDERATIONS

When attempting to heat up a piece of equipment, always follow the manufacturers' recommended procedures and use only the correct tools for the job. Keep in mind that tools, belts, hoses and other parts get more brittle when they are frozen, so be careful when working with them.

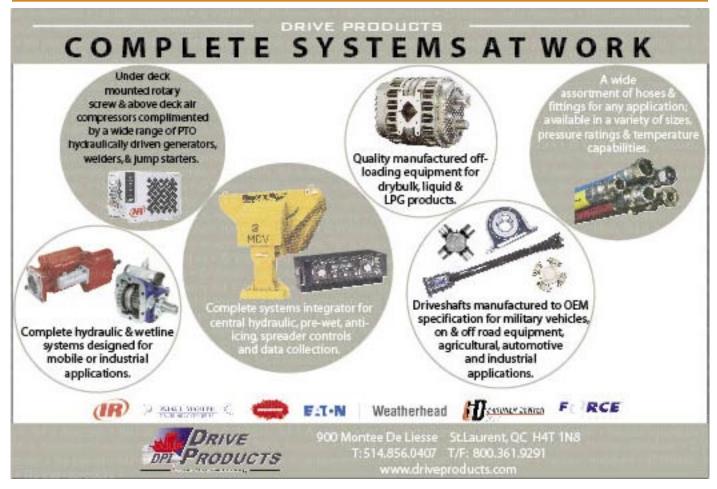
Another aspect to consider is the effect of extremely cold metal on bare skin: you will want to keep your gloves on until the equipment has warmed up somewhat.

When assessing your equipment needs for cold-weather projects, think about light towers or other portable light sources as well. If the site has some heat, and your crews and equipment are adequately dealing with the conditions, you do not want to have to stop working just because it gets dark early. Additional light in the winter is also an important safety factor.

"Even though there is usually a drastic slowdown from December to April, a lot of contractors cannot afford to shut down



during winter," says Mr. Reeves. "It's good to know that there are cost-effective ways to deal with the cold and support your productivity when you need to."



Compact Asphalt



During the past several years, the Erfurt University of Applied Sciences in Germany has been developing a new technology

that makes it possible to apply two layers of paving simultaneously. Currently in the testing phase, this new technology offers advantages deserving our attention.

A key obstacle in the compaction of asphalt is the loss of heat sustained by the surface layer once it is applied to the cooled mat or base layer. This heat loss has

a serious effect on the compaction desired. The smaller the degree of compaction, the larger the percentage of void content potentially affecting the waterproof qualities of the top layer. A porous layer allows for water to seep in, contributing to the deterioration of the pavement during the freezing and thawing cycles.

The new method developed by professor Elk Richter's team has, as its primary objective, to improve the degree of compaction at the time of paving by utilizing the heat released by the base coat. During preliminary tests, the research team used a first paver followed immediately with a second, rolling directly on the base coat. Since this method created a number of problems, Hermann Kirchner, the contractor collaborating on the project, decided to build a prototype paver which would allow for simultaneous paving. This modular paver can be attached to a conventional paver thus making it possible to use two storage bins, two conveyors and two asphalt screw-type conveyors with independent systems of compaction. Another advantage is that this module can be easily removed, making it possible to use the basic paver in a conventional manner.

The objectives set by this new method are:

A superior degree of compaction while

- To create a thin, dense, and waterproof surface. This layer is only 2 cm thick.
- To minimize the risks of quality loss at the time of spreading during cold weather.
- To improve the bond between the base coat and the surface.
 - A reduction in application time.

Test strips were carried out throughout Germany on several types of road surfaces, including highways, which demonstrated an increase of 3% in the degree of compaction compared to the standard method. For example, wheel tracking tests were carried out and results of 9,6 mm were reached after 19 200 passes with this method contrary to 3500 passes with the standard method.

This new German technology, called compact asphalt (kompakt asphalt) is currently the subject of a study by the BAST (federal institute of road research in Germany). The study should validate whether the results meet the designer's expectations in the



using the same method of compaction. By using the heat emanating from the base coat, the period of compaction is increased.

 An increase in the structural properties of asphalt. Studies have shown that increasing compaction by 1% results in an increase of 15% of the mechanical properties of asphalt. medium and long term.

While this new technology is still in the developmental stage, it is obvious that it has already generated a lot of interest from people of the industry.

With a circulation that reaches buyers and users of heavy machinery and specialized equipment all over Canada and a content that catches the attention of readers in both French and English,

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Super-Portable Plant Packs a More Powerful Production Punch

The new Terex E225P portable counter-flow plant, the latest addition to Terex Roadbuilding's line of super-portable asphalt plants, features 204 t/h (225 tons/h) production capacities. Built for quick, low-cost portability, the plant's base configuration can be moved in only five loads: 1) counter-flow drum mixer; 2) baghouse; 3) self-erect silo; 4) four cold-feed bins with scalping screen; and 5) liquid AC tank/control house/fuel tank. "Building on producer feedback, we designed each self-contained load for quick set-up and tear-down," says Ed Montgomery, Director of engineering.

At the heart of this super-portable design lies a new counter-flow drum mixer that blends the technologies of more than 100 years of asphalt production experience from the former CMI and Cedarapids brands. The drum's new flight arrangement offers more efficient aggregate heating and asphalt mixing. The new E225P drum is capable of making a wide variety of mix designs, including Stone Matrix Asphalts and Superpave.

The drum is pitched at operating angle on its triple-axle chassis and has all ductwork pre installed, significantly reducing set-up and tear-down times. A powerful SJ-360

Hauck burner delivers 75 million BTUs of energy for dependable, efficient aggregate heating. Its patented adjustable slinger increases/decreases drum length to tailor drying and mixing time to the producer's needs.

The base plant includes the necessary electronic connections to accept recycled asphalt, and its counter-flow technology enables the E225P drum to run higher percentages of RAP than parallel flow designs, while still meeting tough environmental regulations. With its 1981 mm diameter and 12,3 m length, the self-contained drum can be quickly moved with standard "O.D." permits.

Featuring a 40 000 CFM capacity and a 4.5:1 air-to-cloth ratio, the plant's field-proven, Roto-Aire RA218 baghouse has ample capacity to match drum mixer production. Integral to the baghouse, the fines return auger hydraulically pivots into position to interconnect the baghouse to the drum.

A self-contained 45 t self-erect and self-weighing silo comes standard in the base plant configuration. Complete with on-board air compressor and gas tank, the silo quickly sets into operating position hydraulically. For ticketing purposes, the silo is suspended on



load cells that accurately weigh the amount of stored asphalt before and after a truck is loaded.

Plant operation and asphalt mix designs are managed by the field-proven Terex Impulse X control system. Featuring big plant operation in a smaller plant controls package, Impulse X is capable of making any mix design for which the plant is configured.

The foundation of the E225P plant concept is portability. "The E225P has only 20 plug-and-play cable connections, which is significantly less than traditional portable plants," says Mark Spicer, Director of asphalt plant sales for Terex Roadbuilding's Asphalt Plant Group. The plant is set-up without the aid of a crane. All the plant's components fit together with as little hand work as possible and most major connections are completed with the aid of hydraulics. This super-portable plant is designed to be transported and completely set up over a weekend.

Source: Terex

Wastech Chooses Identec Solutions For Competitive Advantage in RFID Asset Management

Waste management companies and associated industries face one of the most competitive markets in North America. To stay competitive in the face of Government Regulations and inflationary pressures, prudent companies like Wastech Services Ltd. (a member of the Belkorp Group of Companies) are finding new ways to lower operational costs while improving visibility of trucks, routes and sites. Not only can high fuel and maintenance costs hurt bottom-line profitability, but also insurance and safety premiums continue to rise. RFID Asset Management and site access will be integral in optimizing logistics and operations for Wastech with the obvious aim of improving customer service and eliminating waste.

After an extensive search of RFID solution providers and integrators, Wastech, one of Western Canada's largest waste management

companies, chose Identec Solutions Inc. to provide a turnkey solution including support agreements for all their sites. "We are very pleased with the results. Our search had us looking at different technologies and the associated Return on Investment (ROI). Identec Solutions clearly had the experience based on their Fortune 500 clients and their ability to provide a total solution. We are amazed at the potential of RFID and the post sales support we have received!", said Sandy Lawson of Wastech.

"Wastech represents a trend we are seeing, particularly with the Fortune 1000 businesses, in the use of RFID to gain competitive advantage in their industry by lowering operation costs and/or creating a more valuable experience for their customers. We are very pleased to be involved with this project, as Wastech is a forward-looking company that

is one of the industry's largest in Western Canada", said Roderick O'Keefe of Identec Solutions Inc.

Identec Solutions Inc. specializes in active long-range RFID systems that help customers improve asset utilization to save millions of dollars in operational costs related to their supply chain processes. Identec Solutions' RFID system – Intelligent Long Range (ILR) – can identify, locate and track assets at a distance of 100 m (300 ft) to deliver superior real-time visibility in dynamic, demanding environments. ILR is used to streamline business operations in a variety of areas including production tack times, inventory accuracy and asset optimization.

Source: Identec Solutions Inc. www.identecsolutions.com









Agenda

Landscape Ontario Congress 2006 / Fencecraft 2006 January 10 - 12, 2006 Toronto, ON Canada

UCT ATLANTA

January 24 - 26, 2006 Atlanta, GA USA

AED - 87th Annual Meeting and Condex 2006 January 26 - 28, 2006 San Diego, CA USA

ARA - The Rental Show February 6 - 9, 2006 Orlando, FL USA

National Pavement Expo February 15 - 18, 2006 Charlotte, NC USA

World of Asphalt Show & Conference March 13 - 16, 2006 Orlando, FL USA



XII International Winter Road Cong March 27 - 30, 2006 Torino - Sestriere, Italy

2006 North American Truck Show

April 20 - April 22, 2006 Boston, MA USA

Intermat 2006 April 24 - 29, 2006 Paris, France



11th INTERNATIONAL BUILDING FAIR

April 25 - 29, 2006 Berno, Czech Republic

CONEXPO ASIA

May 16 - 19, 2006 Beijing, China

10th International Conference on Asphalt Pavement August 12-17, 2006 Quebec City, QC Canada

7th International Conference on Short and Medium Span **Bridges**

August 23 - 25, 2006 Montreal, QC Canada

SIVIC 2006 International Industrial Vehicle and Body Trade

August 29 - September 1, 2006 Saint-Jean-sur-Richelieu, QC Canada

EXPO Grands Travaux 2006

September 22 - 23, 2006 Montreal, QC Canada



North American Quarry & Recycling Show October 26 - 28, 2006 Atlanta, GA USA

Bauma China 2006

November 14 - 17, 2006 Shanghai, China

National Heavy Equipment Show 2007 March 22 - 23, 2007

Toronto, ON Canada

Bauma 2007

April 23 - 29, 2007 Munich, Germany





The 8th Edition of the Canadian Waste & Recycling Expo & Canadian Public Works Expo in Vancouver

The 8th edition of the Canadian Waste & Recycling Expo & Canadian Public Works Expo took place at the Vancouver Exhibition & Convention Center in Vancouver, BC. With a total of 1368 attendees representing almost all parts of Canada, several U.S. states and a total of 6 countries, the overall participation met and exceeded the expectations of exhibitors and the endorsing industry associations.

The Canadian Waste & Recycling and the Canadian Public Works Expo were presented in one integrated hall. The combined events presented a wide spectrum of industry products, including collection, hauling, processing and disposal of waste, materials recycling and municipal recycling programs. Products represented on the showfloor included some of the latest industry developments and innovations.

A series of seminars held in conjunction with the events covered topics on new technologies, industry trends and the latest market developments.

The Canadian Waste & Recycling show along with its sister event, the Canadian Public Works Expo, were held in Vancouver for the first time. The event served to provide a much needed meeting platform for the industry on the West Coast.

The BC Trucking Association - Waste Management Division - held their Annual General Meeting, industry reception and networking dinner in conjunction with the trade show at the Vancouver Convention Center.

The Solid Waste Association of North America, BC Pacific Chapter held a regional certification testing centre for Bioreactor Landfill, C&D, Collection, Composting, Landfill, MSW Management, Recycling, and Transfer including a four-hour certification testing program.

The combined shows were supported by leading industry associations, including the BC Trucking Association - Waste Management

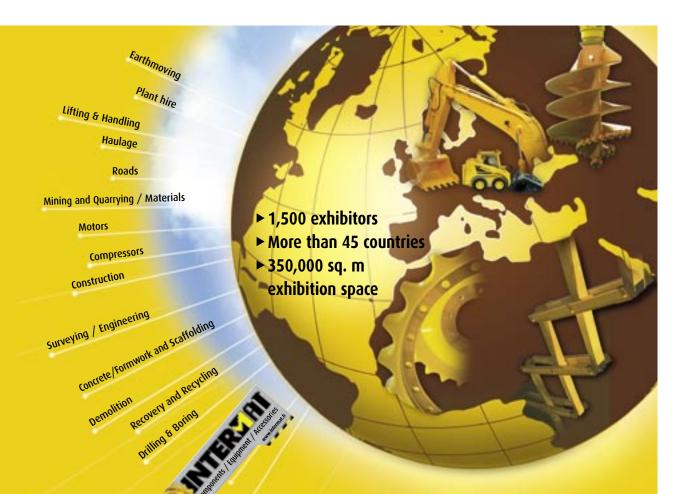


Division, British Columbia Environmental Industry Association, Coast Waste Management Association, Composting Council of Canada, Recycling Council of Alberta, Recycling Council of BC, Saskatchewan Waste Reduction Council and SWANA - BC Pacific Chapter.

The next Canadian Waste & Recycling and Canadian Public Works Expo will take place from November 29 - 30, 2006 at the International Center in Toronto, Ontario.

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