CONSTRUCTION - PUBLIC WORKS - NATURAL RESOURCES

Volume 17 • Number 1 • December 2011/January 2012 • English Edition

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Volume 17 Number 1 December 2011/January 2012

> PUBLISHER Jean-François Villard editor@infrastructures.com

CONTRIBUTING EDITOR Rob Holden toronto@infrastructures.com

ADVERTISING SALES Chantal Marquis c.marquis@infrastructures.com 514-816-4798 Mario Robichaud atlantic@infrastructures.com 506-226-2289

TELEPHONE

514-233-1295 613-862-1295 416-795-1295

FAX: 514-528-9932

MAILING ADDRESS 4330 Saint-Hubert Street Montreal (Quebec) H2J 2W7

INTERNET www.infrastructures.com



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A Brief Word...

January, named for the mythical JANUS, the guardian god of doors and beginnings. That could be extended to cover opportunities also. As one door closes another one opens.

Have you identified what trends may be opening up to you and your business? Perhaps a look back now will help you avoid possible peril as complacency can dull the senses and opportunities can be lost.

So how do you spot the door whilst it is still ajar and lead rather than follow your contemporaries? Reading InfraStructures is a good start! After all we're Canada's leading publication, with good reason.

We cover news, developments and events, globally but through a truly Canadian lens. Readers tell us they often suffer "Déjà Vu" months or years after reading about a technology or trend here first. This isn't our job, it's our passion and it drives us to be your premier choice for industry information.

Think of us as you 'Knock' before entering!

1/12



On the cover:

commuters using the Metropolitan Expressway, on Thursday September 15, 2011, must have been surprised to see a brand new Audi A6 seemingly floating in midair.

This spectacular attraction was part of the festivities at Audi Prestige, the Audi dealer in Saint-Laurent, Quebec, for the launch of the new model.

LANDSCAPE ONTARIO SUPPORTS PUSH FOR ONE CALL ACT

Landscape Ontario offers its enthusiastic support and congratulations to PC MPP Bob Bailey (Sarnia-Lambton) and NDP MPP Paul Miller (Hamilton East-Stoney Creek) for demonstrating a clear spirit of cooperation by jointly introducing a Private Member's Bill, The Ontario One Call Act, which aims to create a one-call system for all underground infrastructure location services in Ontario.

"This important legislation is welcome news for our industry members, who want Ontarians to reap the benefit of a system that reduces the regulatory burden for business, offers taxpayers the benefit of cost savings through accident prevention and will improve public and worker safety in Ontario," said Landscape Ontario executive director Tony DiGiovanni.

"Ontario has an urgent need for a



mandatory one-call system," said Mr. Di-Giovanni. "Ontarians sent a clear message during the October provincial election that they want this minority legislature to work together. This One Call initiative is a perfect illustration of the positive impact that cooperation and collaboration between political parties can offer to taxpayers."

The Ontario One Call Act would make it mandatory for all utility asset owners and excavators to use a single one-call system to locate all underground utility lines before digging. If passed, the bill would establish Ontario One Call Ltd., as a not-for-profit call center that would be the single point of contact for all underground utility location services in the province.

Safety is at a serious risk for members of the public and workers alike when utility lines, such as buried pipelines or hydro lines, are struck or damaged because homeowners, building contractors and other excavators do not obtain the precise location of lines before they dig, according to Landscape Ontario.

"Ontario's current, voluntary approach does not leverage the potential of a well-organized one-call system," said Mr. DiGiovanni. "The efficiency of a one-call program will enhance safety, reduce costs and wait times, and will act as a catalyst for continuous improvement. Mandatory One Call systems are in place in all 50 American states. In New York State, they have half the number of incidents than we do in Ontario, even though they have a larger population base. This is an important testimonial to the benefits of a one-call system."

In the coming days, Landscape Ontario will communicate directly with all Ontario MPPs, urging them to work together in a spirit of collaboration and cooperation to ensure that The Ontario One Call Act is passed during this legislative session.

Source: Landscape Ontario

EATON WINS CONTRACT TO MODERNIZE POWER GENERATING FACILITY

Eaton Corporation received a nine-year, \$10.9 million contract award from the New York Power Authority's (NYPA) board of trustees for the Life Extension and Modernization program of the Niagara Power Project's Lewiston Pump Generating Plant (LPGP).

The United States and Canada have shared the Niagara River's water power for

nearly half a century. The Niagara Power Project will continue to produce steady supplies of clean, carbon-free hydroelectricity for another 50 years under a federal operating license.

The agreement will include the design, manufacturing, delivery, installation and commission of 12 unit control boards and governor controls. Eaton will replace the original electro-mechanical devices with modern digital technology, including microprocessing capability, new instrumentation and alarms, and will also upgrade the unit governing system and replace the plant's unit protective relaying system. LPGP modernizations will occur under a schedule providing for the overhaul of a turbine generator every eight to nine months, with the final unit completed in 2020.

The initiative also supports New York State's Renewable Portfolio Standard, which calls for at least 25% of the state's electricity to come from clean, renewable sources such as hydroelectric power by 2013.

"The Niagara Power Project is the largest electricity producer in New York, and one of the largest in the nation," explained Kevin McLean, Eaton senior vice president, Global Marketing, Electrical Sector. "Eaton's expertise in electrical efficiency, reliability and safety help ensure that it will meet the evolving demands of its vast customer base and continue to supply lowcost, sustainable power for years to come."

Pumped-storage facilities like the Lewiston Pump Generating Plant provide a critical energy storage buffer between the ever-changing customer loads and the availability of sustainable hydro power. Eaton's solution will provide a sophisticated level of control for the facility's existing electrical components, some dating back to 1961 when the Niagara Project was first placed into service.

Eaton's electrical business is a global leader in power distribution, power quality, control and automation, power monitoring, and energy management products and services. Eaton is positioned, through its Cutler-Hammer[®], Moeller[®], Powerware[®], Holec[®], MEM[®], and Santak[®] global electrical product series, to answer today's most critical electrical power management challenges.

Source: Eaton Corporation

NORTH AMERICA'S FIRST ISO 50001 CERTIFI-CATION FOR ENERGY MANAGEMENT

On November 15th 2011, St Marys Cement Inc. - Bowmanville Plant, received the first International Organization for Standardization's (ISO) ISO 50001 certification in North America. The ISO 50001 standard is a framework for industrial facilities seeking to manage their energy use.

Cement plants consume significant amounts of energy; plants as large as

Bowmanville operate 24/7 with a rated capacity of over 1.8 million t of product. This responsibility was not taken lightly by Fabio Garcia, manager of Plant Operations, who back in 2005 laid out a strategy for an integrated approach to reducing the plant's energy consumption.

"Employee awareness of the costs of various operations and procedures and training programs paid big dividends," Mr. Garcia observed. "Other important steps



Colours all the way!



InfraStructures English Edition December 2011/January 2012 – page 5

were engaging 360 Energy of Burlington Ontario and establishing an energy management and conservation committee, that we call E=MC2. With representatives from Finance, HR, Environment, Quality Control, Maintenance, Mining and Production departments, the Committee identified and acted upon over 100 separate energy efficiency initiatives. Much of the energy savings required little capital expenditure or were done at no cost." The ISO 50001 certification helps businesses understand and modify their energy consumption and use. It has the added benefit of communicating to customers, regulators and suppliers in a reliable and transparent manner how the St Marys Cement - Bowmanville Plant is reducing its energy use and greenhouse gas emissions.

Jim Storey, Electrical Maintenance manager and E=MC2 co-leader observed, "Since 2005, we have reduced electric-

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Ph: 603.444.2103 rotobec@rotobec.com ity consumption by over 11 million kWh (approximately the same amount of energy used by 1100 Canadian homes in one year) with over \$3 million in savings. We modified our existing systems and developed programs in-house to maximize internal and external opportunities in Energy Management."

Fabio Garcia concluded, "The energy conservation elements of ISO 50001 certification means we are on track for over \$1 million in savings in 2011. The commitment of everyone working at St Marys Bowmanville day-in and day-out is why we are the first North American site to receive this certification. I want to thank each and every one of them."

Source: St Marys Cement Inc.

PTARMIGAN ENERGY SECURES OFFSHORE RIGHTS IN WESTERN NEWFOUNDLAND AND LABRADOR

Ptarmigan Energy Inc. (Ptarmigan) has secured 100% working interest in two new parcels of land offshore Western Newfoundland. The Canada-Newfoundland and Labrador Offshore Petroleum Board has accepted Ptarmigan's bids of \$1,501,000 for Parcel 1 and Parcel 2 in Area "B" - Western Newfoundland and Labrador Offshore Region. Parcel 1 consists of 218,468 ha, and Parcel 2 consists of 135,520 ha. The effective date will be January 2012 for a nine year period.

President and CEO Craig Boland says this reinforces Ptarmigan's commitment to offshore Newfoundland and Labrador. "We are excited about the industry opportunities that exist in the offshore, and with this investment we are committed to moving forward with the acquisition of a 1,000 km² 3D seismic program and the drilling an offshore well within the next two years on prospects already identified."

Ptarmigan currently holds EL 1120 on 140,100 ha north of the Port au Port Peninsula and south of the Bay of Islands. This latest acquisition increases their licence offshore Western Newfoundland to 494,088 ha. The parcels have nearby oil wells and strong hydrocarbon indications.

Leo Power, vice president Business Development, and chair of the Board of Di-

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InfraStructures English Edition December 2011/January 2012 – page 6



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rectors says "Our vision is to be a leading and responsible industry player in facilitating the discovery and production of oil resources in Western Newfoundland. With this acquisition Ptarmigan is strengthening its ties to the province and is pleased to invest in such a highly accessible, industry friendly region."

Source: Ptarmigan Energy Inc.

ARXX RECEIVES CLEANTECH NORTH AWARD

ARXX Corporation, a leading supplier of insulating concrete form (ICF) technology has been recognized for its leadership and innovation by CleanTech North. Ontario Minister of Economic Development and Innovation Brad Duguid presented the award to Gael Mourant, president & CEO of ARXX at the CleanTech North Annual Summit in Toronto.

"We are thrilled to be honored by Clean-Tech North," said Gael Mourant. "Energy efficiency and innovation in building materials and systems are clear priorities being embraced by governments, consumers and builders. Our technology helps to significantly lower the energy costs of homes and buildings, while improving occupancy comfort, safety and security. With more than 105,000 projects representing more than 13 million m² of installed walls

Dutch Customs Deploys AS&E's Z Backscatter Van to Scan Airplanes for Threats and Contraband

American Science and Engineering, Inc. (AS&E) announced recently that the Dutch Customs Administration in the Netherlands will deploy their recently purchased Z Backscatter™ Van (ZBV) mobile X-ray screening system to inspect commercial and cargo

airplanes. The system will scan in real-time a variety of aircraft to reveal organic threats and contraband hidden in the structure of the airplane. This is the second ZBV system deployed by Dutch Customs, the other is currently in use at the Port of Rotterdam.

"Dutch Customs is leveraging the ZBV system's flexible, mobile design to scan airplanes of all sizes for drugs and contraband," said Anthony Fabiano, AS&E's president



and CEO. "Working closely with our clients, we provide creative and innovative solutions for their complex detection requirements. This new application for the ZBV system provides Dutch Customs with a trendsetting solution for their unique inspection needs. Customers around the world continue to find new ways to use the ZBV system to better secure their borders to improve security in their countries."

A breakthrough in X-ray detection technology, AS&E's Z Backscatter Van is the number one selling non-intrusive cargo and vehicle inspection system on the market. The ZBV system is a low-cost, highly effective screening system built into a commercially available delivery van. The ZBV system allows for immediate deployment in response to security threats, and its high throughput capability facilitates rapid inspections. The ZBV system has an unprecedented level of worldwide success with over 560 systems sold to 115 customers in 53 countries.

The ZBV system employs AS&E's innovative Z Backscatter technology, which reveals organic threats and contraband that transmission X-rays miss – such as explosives and drugs – and provides photo-like imaging for rapid analysis. The system can drive by and scan a variety of aircraft sizes and configurations and can reveal organic contraband hidden in the structure of an aircraft.

Source: American Science and Engineering, Inc.

and foundations, ARXX ICFs have proven their value many times over."

"ICF technology is recognized by all major building codes throughout North America and is experiencing significant growth in adoption for large scale projects where speed of construction combined with the operating cost savings, increased fire resistance, improved sound suppression and better structural support compared to conventional construction methods is winning over more and more architects, engineers, contractors and owners," she added.

The CleanTech North Awards recognize promising clean technology companies that have displayed outstanding development and potential.

Source: ARXX Corporation

CARMANAH LAUNCHES NEW RETAIL-READY SUNFILM SOLAR BATTERY CHARGERS

Carmanah Technologies Corporation recently announced the launch of SUNfilm Solar Battery Chargers – a new generation of consumer solar products for the company's propriety Go Power! brand. The new SUNfilm series feature lightweight, thin-film technology geared to maintain a vehicle's battery charge during periods of inactivity or storage. The addition of the SUNfilm solar chargers expands Carmanah's current solar power solutions portfolio to address the needs of new, emerging markets.

The SUNfilm solar series are designed to protect batteries against a vehicle's continuous power draws. Available as a 1.5 W, 5 W or 15 W module, the SUNfilm products will trickle-charge all battery types including 12 V deep cycle, automotive, motorized sports vehicles, RV and fleet vehicle batteries. The SUNfilm products include quick-connect accessories that allow for easy installation and can be modified into portable charging stations for small electronic devices such as cellphones and mp3 players. The SUNfilm battery chargers will operate in overcast conditions and offer a reliable power solution for both indoor and outdoor applications.

The SUNfilm products complement the Go Power! portfolio of consumer mobile power solutions and will provide consumers a complete energy solution. The product suite, which includes pure and modified sine wave inverters, can be combined with the new SUNfilm solar battery





For more than five years, customers like Dennis Allendor f, Randy Gill, Jerry Dalman, Tim McComish, and Brad Jorgensen worked alongside our engineering team to design the D-Series. Along the way, their words and ideas were documented, studied, and transformed into our most productive skid steers yet. From the fuelsaving, noise-reducing auto-idle feature, to a simple switch that allows you to easily shift control patterns, to a host of out standing comfort upgrades, their words are echoed throughout the entire machine. See how their voice was our command at your John Deere deal er or our website.







chargers for access to AC power without the concern of draining the vehicle's battery. The SUNfilm series is available throughout the US and Canada.

Source: Carmanah Technologies Corporation

ONLINE PROJECT MANAGEMENT SYSTEM FOR CONSTRUCTION INDUSTRY

Dow Corning, a leader in silicones, silicon-based technology and innovation for the construction industry, has introduced a first-of-its-kind interactive web-based project management system that enables contractors, designers, and architects to access a global network of building materials experts who together provide fast, efficient service.

"The Dow Corning COOL (COnstruction OnLine) website is one of several innovations we're implementing to better integrate our global support services and ensure that every interaction builders have with us is a positive one," said Ron Fillmore, vice president, Construction Industry, Dow Corning. "COOL helps contractors save time, save money, and stay on the fast track to success by enabling faster, more efficient service than ever before from Dow Corning's sales and technical support team."

By registering at the COOL website, members can quickly and easily request construction services such as print re-

Clariant De-Icer Cuts Carbon Emissions

Recycling aircraft de-icer, as opposed to cleaning it in a wastewater-treatment plant, reduces its carbon footprint by 40-50%.

According to an independent study published in peerreviewed journal, Environmental Impact Assessment Review, the carbon savings are generated in two main ways:

 Displacement: the footprint of recycling is considerably less than that of manufacturing fresh deicer – this accounts



for about two-thirds of the difference to 'no recycling'.

• Avoidance: recycling also avoids significant discharges of de-icer to wastewater, which creates carbon dioxide as one of its 'breakdown' products – this accounts for about one-third of the difference to the 'no recycling' case.

"Carbon savings of 40-50% is a representative figure for a typical airport in northern Europe," comments study author Eric Johnson, managing director of Atlantic Consulting. "In areas where electricity generation is particularly clean – say, Norway, Sweden or Switzerland – carbon savings will be even higher."

Recycling of conventional de-icer is also 15-30% lower-carbon than using so-called 'bio' de-icer without recycling. "The benefits of recycling, namely displacement and avoidance," says Mr. Johnson, "outweigh the benefits of using plant-based feedstocks to make de-icer."

Airports with de-icer recycling plants are still few in number. Munich Airport has run one since 1992, Zurich Airport since 2006, and a new one just opened in Norway's Oslo International Airport. Munich recycles onsite, while Oslo and Zurich recycle offsite.

Regulations in this area are getting stricter. The U.S. Environmental Protection Agency (EPA) recently ruled that airports above a minimum size must collect de-icing effluents and send them to wastewater treatment.

Source: Clariant International Ltd

InfraStructures English Edition December 2011/January 2012 – page 10

views, sample tests, and warranties online; receive real-time progress reports; get recommendation letters and documentation sent directly to them and their partners; and ask questions, get answers, and access information critical to the success of their project 24/7.

"A successful project requires the collective efforts of the design and construction industries to share best practices and new ideas," Mr. Fillmore said. "Expediting service requests and work more collaboratively with your Dow Corning team through COOL is one way to avoid costly design, material and application errors."

Dow Corning materials are incorporated into many products that contribute to building performance, such as structural glazing, weatherproofing and insulating glass building applications, as well as photovoltaic solar panels, and energy efficient LED bulbs and fixtures.

Source: Dow Corning

RIDGELINE OPENS TWO ADDITIONAL GREENFILL FACILITIES

Ridgeline Energy Services Inc. announces that it has commissioned two additional GreenFill Treatment Facilities in Lloydminster, Saskatchewan and Redcliff, Alberta. Ridgeline GreenFill is a whollyowned subsidiary of Ridgeline Energy Services. GreenFill Treatment Sites are approved by Alberta Environment and the Saskatchewan Ministry of Environment for the management, treatment and reuse of oilfield waste.

The new facilities will be used to categorize, treat and reuse impacted soils for landfill cover and other uses. Ridgeline's proprietary technology utilizes biological, mechanical and chemical means to safely break down hydrocarbons into CO₂ and water, enabling once contaminated soil to be reused in landfill operations or other applications.

Source: Ridgeline Energy Services Inc.

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Going Global for the Panama Canal

Putzmeister America, Inc. and its Special Applications Business (SAB) group are providing their complete global systems approach, including their pumping and material placing equipment, to the historic Panama Canal Third Set of Locks project. The locks will create a new third lane of traffic along the Canal, doubling its capacity and allowing more traffic and longer, wider ships to pass through.

THE CANAL'S HISTORY

It was first determined in the 1930s that the most effective and efficient way to increase the Canal's capacity was to construct a third set of locks with larger dimensions than those of the locks built in 1914. The United States initiated the construction of the Third Set of Locks in 1939 to allow the transit of commercial and war ships that exceeded the size of the existing locks. The expansion was halted in 1942 because of the outbreak of World War II.

Interest picked back up again and studies in recent years by the Autoridad del Canal



de Panamá (ACP), the owner/developer of the project, pointed to the same solution as was deemed in the 1930s, that a larger, third set of locks would be the most suitable, profitable and environmentally responsible way to increase Canal capacity and allow the Panamanian maritime route to continue to grow. put forth for this project, and they include: making long-term growing and sustainable contributions to the Panamanian society through the payments the Canal makes to the National Treasury; maintaining the Canal's competitiveness as well as the value of the Panama maritime route to the national economy; increasing the Canal's capacity in order to capture the

There are four objectives the ACP has

BIM Helps Double the Panama Canal's Transit Capacity

Autodesk, Inc. recently announced that MWH Global, a leader in wet infrastructure projects and programs, including water, hydropower and civil infrastructure, has been selected to receive an Autodesk BIM Experience Award. The firm is being honored for using a Building Information Modeling (BIM) process, together with Autodesk BIM software, to help design the Third Set of Locks project for the Panama Canal, intended to double the canal's shipping traffic capacity.

The award specifically recognizes MWH Global for the exemplary use of a BIM process to:

- Improve the quality of design for the Third Set of Locks project of the Panama Canal.
- Increase productivity and profitability by efficiently managing design changes.
- Facilitate communication with clients and builders through visualizations.

"The use of intelligent 3D models on the Third Set of Locks project has brought significant benefit to the design-build delivery team," said Nick Pansic, deputy design engineer for MWH Global. "These

tools have enabled a diverse team of engineers – located in five widely dispersed design offices around the world – to collaborate efficiently, helping them to resolve design conflicts prior to construction and keeping project design and construction documentation better coordinated."

EXPANDING THE PANAMA CANAL

Completed in 1914, the Panama Canal currently handles approximately five percent of the global shipping trade. The purpose of the expansion project, including the Third Set of Locks, is to make it possible for the canal to accommodate today's larger ships, referred to as "Post-Panamax" ships. The Third Set of Locks project includes two massive lock facilities – one on the Atlantic side and another on the Pacific – each with three chambers. Innovative design elements include water



basins that save and reuse 60% of the fresh water used in the lock system and state-of-the-art seismic analysis. New excavation began in 2009, and the project is scheduled for completion in 2014, coinciding with the 100th anniversary of the opening of the original canal.

In 2009, the Panama Canal Authority awarded the \$3.12 billion contract for the Third Set of Locks project to Grupo Unidos por el Canal (GUPC). MWH Global is leadgrowing demand with the appropriate level of service for each market segment; and increasing the Canal's productivity, safety and efficiency.

THERE ARE THREE MAIN COMPONENTS OF THE PROJECT.

1) Construction of two 427 m long by 55 m wide by 18 m deep lock facilities. One will be in the Atlantic side and one will be in the Pacific side of the Canal. Each of the locks will have three chambers, and each chamber will have three water reutilization basins. The basins will allow the locks to reutilize 60% of water in each transit and use 7% less water per transit than each of the existing lock lanes.

2) Construction of access channels for the new locks and widening existing channels.

 Deepening of existing navigation channels and the elevation of Gatun Lake's maximum operating level.

The design-build contract for the project was awarded to the consortium Grupo Unidos por el Canal (GUPC), which is made up of four companies: Sacyr Vallehermoso S.A., Impregilo S.p.A., Jan De Nul n.v.

ing the design team's joint venture called CICP Consultores Internacionales LLC (CICP), and is one of only two U.S. firms in the consortium.

"MWH Global's exemplary work on the Panama Canal demonstrates how Autodesk's comprehensive portfolio of BIM for infrastructure solutions helps civil engineers and designers take advantage of the rich information in intelligent models to improve the way they plan, design, build and manage projects," said Jay Bhatt, senior vice president, Architecture, Engineering and Construction Solutions, Autodesk. "We're proud to see our software playing a critical role in the success of this important infrastructure project."

Autodesk Consulting assisted MWH Global in its transition from a predominantly 2D workflow to the use of intelligent 3D model–based processes for the Panama Canal Expansion project. Autodesk Consulting also provided MWH Global with initial product implementation and training services, and continues to provide product support and mentoring.

Source: Autodesk, Inc.

and Constructora Urbana, S.A.

Construction started in late 2007 and the target date for completion is August 2014 – 100 years after the initial locks on the Canal were opened.

GLOBAL RESOURCES

Bob Weiglein, Telebelt[®] division manager for Putzmeister America, traveled to Milano, Italy, where he was introduced to

Alberto Buffa of Impregilo S.p.A. by the president of Putzmeister Italy, Dr. Rober Abel, to discuss what material placing solutions Putzmeister's SAB unit could offer for the Third Set of Locks.

"SAB is a partnership between Putzmeister America, Inc., Allentown Shotcrete

Technology, Inc., Esser Pipe Technology and Maxon Industries, Incorporated," says Mr. Weiglein. "This partnership offers a complete systems approach that offers all products to all projects around the world, to customers in tunneling and mining, dams and power generation, transportation, and marine and offshore industries."

In the meeting it was expressed that flexible, maneuverable and mobile material placing systems were key because of the job site's unstable terrain.

"Just as the original Canal faced land slides and flooding," explains Mr. Weiglein. "Today's worksites have areas of flooding and unstable banks as well as solid rock."

After the meeting in Italy, SAB and Agreconsa, Putzmeister's local dealer for 24/7 parts, service and support in Panama, worked together to determine what system solutions would be ideal for various components of the project.

"Agreconsa is a well-respected distributor in Panama and takes great pride in the sale and service of Putzmeister equipment," says Mr. Weiglein. "They are committed to Panama, its economy, and work together with us to provide exactly what customers need."

There first was a need to place concrete and gravel for the project's batching and crushing plant's foundation.

SAB and Agreconsa proposed using six Telebelt® TB 130 telescopic belt conveyors for that portion of the project. GUPC accepted the proposal.

The Telebelts do not need to be permanently mounted to the ground or a super-structure. In the event the equipment has to be moved due to changing terrain conditions the TB 130's quick setup and



tear down provides the flexibility required on the jobsite.

"Another benefit of the Telebelt is that multiple types of material can be placed with one piece of equipment, and in the same day," explains Peter Mamopulakos, owner of Agreconsa. "Since both concrete and gravel are being placed on the site this feature is an invaluable asset. The TBs are true multi-taskers."

Don Matthews, Putzmeister's field service technician for Telebelts, went out for the first two weeks the Telebelts were on site to help start up the equipment, train the local operators, and ensure the customer had everything they needed.

The Telebelts will also be instrumental in placing concrete for the water reutilization basins. This portion of the project begins this summer and the Telebelts will convey approximately 500,000 m³ of concrete.

In addition to the Telebelts, SAB and Agreconsa will be delivering a considerable amount of equipment, ranging from Thom-Katt[®] trailer pumps to boom pumps for other portions of the project.

Source: Putzmeister

Powerblanket[®] Multi-Duty Blankets Ideal For Cold Weather Concreting

An independent test confirmed that the Powerblanket[®] Multi-Duty (MD) heating blanket cures concrete 2.8 times faster than concrete covered with a standard curing blanket. After 72 hours, concrete under the MD heating blanket achieved 3,925 PSI, compared to 2,162 PSI under the standard curing blanket.

The test, conducted in February 2011 at an actual construction site, measured how concrete cured under three scenarios: the Powerblanket MD heated blanket with the power on, the Powerblanket MD heated blanket with the power off, and a standard curing blanket.

A sensor embedded in the slab measured that:

- the concrete under the MD blanket with the power on cured almost three times faster than the concrete under the standard curing blanket.
- the concrete under the MD heated blanket with the power off still cured 1.5 times



faster than a standard curing blanket.

The test took place with ambient air temperatures from -5.4°C to 3.7°C, which is consistent with "Cold Weather Concreting" as defined by ACI 306.

In addition to providing heat and preventing freezing on concrete curing projects, the MD blankets retain moisture throughout the natural hydration process

Over \$1 Billion in Annual Online Sales

On December 7, Ritchie Bros. Auctioneers and, the world's largest on-site and online auctioneer of heavy equipment and trucks, reached and exceeded US\$1 billion in online

equipment sales for 2011 alone. Ritchie Bros. introduced its real-time online bidding service in 2002 and now sells more construction, transportation and other equipment over the internet than any other auctioneer – more than US\$5 billion worth since 2002. Today, one in two people bidding at Ritchie Bros. auctions participate online in real time; the others bid in person at the auction



site. Online bidding has made it easier for Ritchie Bros. customers to buy equipment on a global scale; so far in 2011, Ritchie Bros. has attracted more than 190,000 online bidder registrations from people in 118 countries.

Todd Halina, vice president, Construction for Chemco Electrical in Edmonton was the online bidder that purchased the lot that resulted in the US\$1 billion milestone.

Usage of the service has grown steadily since it was launched in 2002, when online bidders at Ritchie Bros. auctions purchased about US\$82 million of equipment. Recent enhancements have added to its global appeal. In April 2010, Ritchie Bros. introduced online bidding in an additional six languages. In July 2011, Ritchie Bros. introduced detailed equipment information in 21 languages on rbauction.com, giving customers the ability to do a virtual equipment inspection before bidding online or on-site.

Source: Ritchie Bros. Auctioneers

to create a wet cure environment that protects against cracking and rapid drying.

Featuring patented GreenHeat® Technology, which uniformly distributes an insulated barrier of heat while consuming low levels of energy, the MD heating blanket provides an environmentally friendly solution for curing concrete, thawing frozen ground and protecting construction materials and machinery from freezing.

The blankets achieve desired PSI levels quicker, speeding up curing time by almost three times. This enables contractors to advance projects faster and save labor costs for bridge decks, tilt-up, precast, block walls, footings, flatwork, and other concrete construction jobs. The MD blankets can also typically thaw frozen ground to a depth of 60 cm.

The MD heating blankets are offered in several standard sizes ranging from 60-by-60 cm to 335-by-700 cm, and custom sizes are available by request. Standard blankets are rated to -23°C while Arctic versions are rated to perform in temperatures as low as -40°C.

Built with a durable outer shell that is winter-proof and water-resistant, blankets are powered by 120 V electricity, thereby eliminating the open flames and hazardous waste associated with common heating products. Non-horizontal versions of the blankets are certified to UL/CSA/ETL safety standards.

Powerblanket® provides superior heating solutions for a multitude of applications, including ground thawing, concrete curing, industrial and manufacturing temperature control, oil field services and many more.

Source: Powerblanket®

Terex[®] Bid-Well Paving Equipment at World of Concrete 2012

Terex Corporation will exhibit Terex® Bid-Well concrete paving equipment at World of Concrete 2012 in Las Vegas, Nevada. The Terex® Bid-Well 4800 bridge paver and Terex® Bid-Well 2418 work bridge are just a sampling of the full line of Terex Bid-Well bridge, airport, highway and canal pavers, which are manufactured at the company's new 7,432 m² facility recently completed in Canton, South Dakota.

With standard paving widths exceeding 51.8 m, the 4800 paver display unit will be set to 11.0 m wide and will highlight several of the latest advancements that make this the preferred paver among bridge contractors. A new style fogging system features all poly tubing to increase up-time and individually controlled spray nozzles to direct the fog to where it is needed. A new skewable power crown adjuster enables operators to automatically make changes to the crown when paving bridge decks at the skew angle. Featuring two new Evaporative Emissions compliant gas engines, the 4800 paver is one of the most flexible pavers on the market, and the show unit will be equipped with several options that tailor-suit the paver to meet jobsite conditions.

Joining the 4800 for the first time in the

exhibit is the Terex Bid-Well 2418 work

tion. The 2418 offers a 61.0 cm wide

required tasks behind the paver. The

bridge, displayed in operating configura-

walkway over its 45.7 cm deep truss frame,

laid concrete surfaces to efficiently perform

allowing crew members to cross freshly

smallest of three model offerings in the

Terex Bid-Well work bridge line, the 2418

provides up to a 32 m standard operating

width, and its telescoping end segments

offer up to 3.0 m of leg travel to each side,



so the work bridge can adapt to varying deck widths.

The show machine will feature two different leg designs: the standard bolttogether, fixed-height leg; and an optional screw-jack design that enables work bridge height to be raised for passing over obstructions. For road work, one side of the machine will exhibit available pneumatic tires, while the other will be equipped with powered concave wheels for riding the rails.

Source: Terex Corporation World of Concrete 2012 booth #C5946



Interactive App Changes The Way Manufacturers Sell Products

An industry-leading application from Eaton Corporation, a global diversified power management company, makes the Apple iPad® as powerful a tool for specifying and selling hydraulics products as it is for education, entertainment and social networking. With the new Eaton app PowerSource™, Eaton sales representatives and distributors can now search, spec and sell smarter and faster than before, fundamentally changing how they interact with customers and where they work.

By providing virtually instant access to in-depth and up-to-date information on Eaton's more than 200,000 hydraulic products, PowerSource gives the Eaton sales and distribution teams a competitive edge and dramatically enhances their ability to respond quickly to customer needs and reduce buying cycle time.

"PowerSource supports customers' speed-to-market initiatives," said Scott Pharis, Eaton channel marketing manager. "It puts everything our customers need onto today's most contemporary platform, reflecting the same commitment to innovation that characterizes the Eaton technologies that help them manage power more efficiently, effectively and safely."



Available exclusively to Eaton sales teams and distributors, PowerSource was introduced at the company's recent fall distributor meeting. The application is among the leading-edge apps included in Apple's new Volume Purchasing Program for business-to-business apps.

"With this exciting new application, we're breaking new ground by demonstrating that the mobile channel can be effective for more than consumer apps," said Eric Stager, Eaton product manager, Web and Mobile, Industrial Sector. "Creating great products is only half the challenge – presenting them in new, engaging ways is the other half."

Apple and iPad are trademarks of Apple Inc.

Source: Eaton Corporation

New Catalog with QR Codes for Access to Training Videos

A new version of Hose Products Division Catalog 4400 is now available from Parker Hannifin Corporation, the global leader in motion and control technologies. The up-to-date guide is the fluid power professional's single best resource for product information and installation assistance for Parker hydraulic hoses, fittings, equipment, accessories and technical information.

The Hose section has been completely redesigned to include extended detail about each hose such as specifications, applicable markets and applications the hose was designed for. Complete dimension data is also listed for all of Parker's hose and fitting offerings. Technical sections include the most current chemical compatibility charts, as well as diagrams demonstrating proper hose routing, and for identifying fitting types.

For the first time, Catalog 4400 is printed with mobile Quick Response (QR) codes – 2D barcodes – that link users to additional content such as crimper training videos, the new ParkerStore Onsite Mobile Work Container Program and further product details, which can be accessed by scanning the QR image with a smart phone.

Abbreviated Hose Products Division information is also now available as a Quick Reference Guide (Bulletin 4400-B13)

or Wall Chart. The **Quick Reference** Guide is an eight-panel foldout directory to Parker's hydraulic, Push-Lok, suction and return, transportation and refrigerant hoses, as well as specialized hoses for low-temperature, ground support and alternative/ marine applications. The Wall Chart also includes Parker's complete

line of hoses in a large, easy-to-read poster format for fluid power professionals.

Additionally, updated Wall Charts for the Parkrimp No-Skive 43 Series and 77 Series

Scan this QR code with your smart phone for Catalog 4400 online.



Crimp Fittings are available immediately for quick and easy hose assembly end connection selection.

Source: Parker Hannifin Corporation

Volvo FMX in Action at the World's Longest Tunnel Worksite

The Volvo FMX has made a major impact on the construction truck market. Since its launch in April last year, almost 5,000 units have been sold. The new construction truck is now being put to the test in extreme working conditions throughout Europe.

The Gotthard Base Tunnel is under construction on the border between Switzerland and Italy. When completed, it will be 57 km in length. The rail tunnel will be an important part of the transport chain linking the railway networks of northern and southern Europe and the large ports of Rotterdam and Genoa. Construction started in the late 1990s, and the tunnel will be opened to traffic in 2017.

One of the project's major challenges is removing the 13.3 million m³ of rubble that is drilled out of the bedrock. Some of it is taken from the tunnel and deposited in terraces for subsequent creation of new mountain contours that will blend in smoothly with the surrounding alpine



landscape.

That is where Beffa Trasporti comes into action. It is also here that the Volvo FMX (6X4) gets to show its mettle.

The trucks operate in two shifts along a 40 km route between the tunnel and the unloading site, encompassing public roads and tough construction sites. This means very demanding operating conditions where the truck's capacity is exploited to the maximum for most of the day. Up to 2,200 t of crushed stone is transported per shift. Loaded with almost 40 t, it is vital that the trucks be able to handle steep gradients on muddy surfaces when rain and snow make transport operations even more difficult.

Renato Beffa has already ordered another Volvo FMX, and he is not the only haulage operator to do so in Switzerland. The Volvo FMX already accounts for more than 15% of total truck sales in the country.

Source: Volvo Trucks



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Nathan Phillips Square Wins 2011 Award of Excellence

Green Roofs for Healthy Cities announced that the Nathan Phillips Square Podium Roof Garden is a winner of the 2011 Green Roof and Wall Awards of Excellence.

"Since 2003, the Awards of Excellence have defined the leading edge of innovation for living architecture," said Jeffrey L. Bruce, chairman of Green Roofs for Healthy Cities. "With an exceptionally competitive program, this year's winners should be proud of their accomplishments in challenging the boundaries of the industry."

The Awards were presented at the CitiesAlive: 9th Annual Green Roof and Wall Conference held November 30 to December 3, 2011 in Philadelphia. CitiesAlive was presented with co-hosts The City of Philadelphia and the Pennsylvania Horticultural Society.

"The 3,400 m² Podium Green Roof at Toronto City Hall is the largest publically accessible extensive green roof in all of

Canada and the flagship green roof installation for the City of Toronto," said Dave MacKenzie, horticulturalist and president, LiveRoof, LLC. "This LiveRoof project stands out as a prominent element in the revitalization of Nathan Phillips Square."

The Podium Roof Garden reconceives the upper level of Nathan Phillips Square as a vast public park integrated with the existing elevated walkway system, reopening it to the public as a truly engaging 21st century space. The project demonstrates that an extensive 10-15 cm deep green roof can create an exciting and successful public space supporting intimacy and gathering. It invites strolling and wandering within a setting of complex, lush and abundant varieties of color and texture that merits repeated visits. The park consists of a sedum and perennial mosaic perimeter garden, a sparkling black granite paved courtyard that frames the Council Chamber, and a café deck that occupies the prow. The project's LiveRoof modular



system allows for easy installation and facilitates future maintenance. The varying depth of the modular trays is concealed to provide a seamless surface of planting. "This project brings new potential to the building and space by offering a garden respite from the harsh concrete downtown environment", said Mary Tremain, partner of PLANT Architect Inc., who will be receiving the award.



5 Attachments and Growing

InfraStructures English Edition December 2011/January 2012 - page 18

The project fulfills the original potential of this space as a public adjunct to the main square, as a place for ceremony, and as a place to get up close to the fine detail of the building. It brings new potential to the building and space by offering a garden respite from the harsh concrete downtown environment with places for intimacy and lingering, for lunch breaks, evening strolls, and art installations. It also technically improves the building and environment by contributing to energy efficiency, roof membrane longevity, sound insulation, filtration, storm water management, and habitat creation.

"Nathan Phillips Square is a showcase for LiveRoof," said Kees Govers, technical manager for LiveRoof Ontario, Inc., LiveRoof's licensed regional grower and distributor in Ontario. "It highlights the design versatility, beauty and performance of the LiveRoof Hybrid Green Roof System."

Designed for immediate success and lasting sustainability, the LiveRoof Hybrid Green Roof System is delivered to project sites with modules full of plants that are already full-grown, hearty, and flourishing. With their technologically advanced and horticulturally refined module design, LiveRoof green roofs establish a healthy, naturally functioning ecosystem on the rooftop.

Source: Green Roofs for Healthy Cities

Safety First: Mercedes-Benz Sprinter with Extended ESP

The introduction of the extended ESP package for the Mercedes-Benz Sprinter from January 2012 will improve brake performance in critical situations and enhance the safety of passengers and other road users. ADAPTIVE ESP 9i replaces the current ADAPTIVE ESP 8.1.

The intelligent ADAPTIVE ESP safety system complements other aspects such as careful driving techniques, effective brakes and sophisticated chassis systems, to achieve the greatest possible active safety. Like the previous system, the new ESP 9i takes the vehicle load into account. Depending on the weight and the position of the vehicle's center of gravity, the ESP sensors ascertain the vehicle load at any given time; this ensures that ESP 9i can stabilize the vehicle with individually modulated intervention action.

This new ESP system will also intervene selectively if a trailer begins to sway, thus helping drivers to stabilize their vehicle and trailer combination.

ADAPTIVE ESP 9i has two important additional functionalities: Brake Disc Wipe and Electronic Brake Prefill.



In wet weather, light braking pressure is applied to the wheel brake at regular intervals to wipe the film of water off the brake disc. If emergency braking occurs, full braking power is immediately available. This gains valuable stopping distance compared with braking with wet brake discs.

If the accelerator pedal is released suddenly and quickly, the brake pads will automatically be gently applied so as to eliminate in advance the air gap between brake pad and disc. If emergency braking then occurs, valuable milliseconds will have been won since the friction surfaces of the pads and discs will already be in contact, facilitating effective deceleration.

This functionality also reduces stopping distance which, depending on the circumstances, will either avoid an accident or diminish its severity.

1 SAL

Source: Mercedes-Benz

China's First Major Highway LED Lighting Project

Helping to further drive the LED lighting revolution, China recently completed its largest highway lighting upgrade with more than 10,000 street lights featuring more than a million Cree XLamp® XP-G and XP-E High Efficiency White (HEW) LEDs. The Shenzhen highway project includes nearly 120 km of roadways, with LED fixtures installed along one tunnel and four highways.

The LED street lighting installation was a key component of the 2011 Summer Universidade, an international multi-sport event, organized for university athletes by the International University Sports Federation (FISU), hosted by Shenzhen in August.

In compliance with China's stringent roadway lighting requirements for light efficacy, brightness, luminance, heat dissipation and service lifespan, Kingsun Optoelectronic Co. Ltd., a leading LED lighting company in China, selected Cree XLamp LEDs to illuminate Jihe highway number G15, Nanguang highway number G9411, Longda highway number S318, Yanba highway as well as the Dameisha Tunnel.

Kingsun installed 270 W and 300 W RL2R Apollo LED luminaires alongside the highways, including three traffic lanes and an emergency lane in each direction. The installation was designed to average more than 20 lux, the national standard for main roads illumination.

In utilizing the combination of Cree XLamp XP-G and XP-E HEW LEDs, which provide high lumen output, unmatched efficacy and compact package size, Kingsun



anticipates a 60% reduction in energy consumption compared to the replaced, high pressure sodium fixtures. According to the Energy Management Contract (EMC) business model implemented by Kingsun, the energy savings associated with the Shenzhen project can be put toward the installation's upfront costs for an estimated return on investment of four years.

Source: Cree, Inc.

Cummins Extends Mining Power Capability to 4000 hp

Cummins Inc. announced recently that the new QSK95 engine will provide a 4000 hp capability for ultra-class mine haul trucks, representing the highest-ever power output introduced by the company for severe duty-cycle operation. The 95 I displacement QSK95 is purpose-designed to provide enhanced strength for 327 t and 363 t (360 - 400 tons) payload-class trucks, with the capability to increase truck speeds for climbing steep-gradient haul roads and boost hauling productivity with reduced operating cycle times.

The QSK95 will be available as a global mining engine platform capable of operating at mine sites anywhere in the world and meeting all emissions standards, including Tier 4 Final in North America by using Cummins proven Selective Catalytic Reduction (SCR) after-treatment.

The 16-cylinder QSK95 reaches the mining power output previously available only from 20-cylinder engines. High power density is achieved with a hardened power cylinder featuring the strongest single-piece forged-steel piston available in the industry. Deep structural strength is provided by an all-new ductile iron skirted block. This increased strength contributes to higher engine uptime availability, extended life-to-overhaul and more cost-effective rebuilds.

The 4000 hp output of the QSK95 engine is well within its design capabilities, with potential power increases available in the future to provide the possibility for the next generation of ultra-class haul trucks to move beyond 360 t payload capacity.

Cummins next-generation Modular Common-Rail System (MCRS) enables the QSK95 to achieve high fuel-efficiency, even when operating at maximum power output. With up to 2200 bar high-pressure



fuel injection, MCRS reduces noise, offers smooth idle stability and eliminates visible smoke across the entire operating range. Source: Cummins Inc.





InfraStructures English Edition December 2011/January 2012 – page 20

Hydrogen Fuel Cell Bus for SunLine Transit

Last November, BAE Systems delivered a zero-emissions bus for SunLine Transit, a Southern California regional transit agency. Under a project aimed at leveraging improvements from previous programs to demonstrate the commercial feasibility of fuel cell technology, BAE Systems has served as the prime integrator to deliver the vehicle to SunLine Transit in an effort funded by the Federal Transit Administration, CALSTART, California Air Resource Board, and California South Coast Air Quality Management District.

The fuel cell bus, which uses no fossil fuel, demonstrates and expands the deployment of technology that eliminates tailpipe emissions and can reduce dependence on diesel fuel and compressed natural gas. The bus program applies advanced design and integration techniques and applies innovations aimed at advancing zero emission bus technology in lifecycle cost, weight, performance and reliability.

"Our partnership with CALSTART,

SunLine Transit Agency, ElDorado National (California) Inc., and Ballard Power Systems has enabled the development of this environmentally friendly, fuel cell-powered

heavy-duty transit bus," said Steve Trichka, general manager of vehicle systems for BAE Systems. "We look forward to continuing our work with SunLine and our other partners, demonstrating innovation in environmentally friendly transportation solutions."

The bus uses a fuel cell module supplied by Ballard Power Systems as the power plant, combined with BAE Systems' HybriDrive propulsion system. As the vehicle prime integrator, BAE Systems also supplied the electric accessory system, power management systems and advanced lithium-ion-based energy storage system. HybriDrive propulsion technology has been in daily revenue service on buses in New York and other cities since 1998. More than 3,500 buses use HybriDrive



technology to carry more than a million passengers daily.

To date, these buses have traveled more than 500 million km, saved 95 million I of diesel fuel, and prevented more than 280,000 t of carbon emissions.

Source: BAE Systems



Hilti Ranks 15th in International Employer Survey

Hilti achieved a top ranking in the Great Place to Work Institute's international best employer survey. This comes on the heels of Hilti having achieved top rankings in both national and European employer surveys conducted by the Great Place to Work Institute.

For the first time in company history, Hilti is ranked among the best employers worldwide by the international Great Place to Work Institute. The announcement was made at an awards ceremony held in New York at the end of October. Hilti placed 15th in the "multinational workplaces" category and was the second-highest ranked European company on the list. To gualify for participation, companies had to have appeared on at least five national Great Place to Work lists. National rankings are mainly based on interviews carried out with randomly selected employees. Results of these interviews count for two-thirds of the scoring. Questions focus on topics including believability, respect, fairness

and team orientation.

After having achieved numerous top rankings at the national level, Hilti executive board member Jörg Kampmeyer finds Hilti's high ranking on the list of international employers to be a very positive development. "The various good



Cary Evert (second from left), president and CEO of Hilti North America, and William Caporizzo (second from right), New York City division manager, accept the Great Place to Work Award for ranking 15th on the international best employers survey.

rankings achieved by Hilti are largely due to our employees. This solid international ranking is all the more appreciated as a positive signal from our team regarding the course, culture and values pursued by our company." Source: Hilti



InfraStructures English Edition December 2011/January 2012 – page 22

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City of Moscow Places Major Order for Municipal Vehicles

In the international call for tenders put out by the City of Moscow, Bucher Municipal has won a major order worth €51 million (\$70 million) to supply 400 compact sweepers, 245 truck-mounted sweepers and 230 spreaders for winter maintenance.

Sweepers and winter maintenance equipment from Bucher Municipal have been keeping Moscow's streets, squares and pavements safe and clean for decades now. Key factors in the City's decision to purchase from Bucher Municipal, besides the attractive price/ performance ratio, were the many years of good experience with its products, in particular their reliability, simple operation and manoeuvrability, its efficient service and the capability to deliver the large order in a short time before the end of May 2012.

Another strong competitive advantage was the opportunity for the sales partners to generate considerable local added value. In addition to purchasing locally made chassis for the truck-mounted sweepers and spreaders as well as plows and other components manufactured in Russia, the sales partners are also responsible for final assembly of the truck-mounted sweepers and spreaders. The machinery will be delivered to the City of Moscow in several phases. Bucher Municipal will provide specialized personnel on site to support and supervise all work on the large-scale project. About 20% of this major order will already impact sales in the fourth quarter of 2011 and 80% in the first half of 2012.

At the Swiss plant in Niederweningen, it has been agreed with employee representatives that the longer working week, increased from 40 to 42.5 hours since August 2011, will continue until May 31, 2012. On successful completion of the major order from Moscow, all members of staff who clock in and out for work will be paid a special bonus.

Bucher Municipal is the European and Australian market leader in municipal vehicles, offering a whole range of compact and truckmounted sweepers, winter maintenance equipment and refuse collection vehicles.

Source: Bucher Industries AG

Peter Binney Receives Distinguished Award

Merrick & Company's Peter Binney, PE, national director of Sustainable Infrastructure, recently received the American Society of Civil Engineers (ASCE) national President's Medal for his dedicated leadership and influence in developing the national sustainable infrastructure project



rating system and its accreditation program. Mr. Binney was a lead contributor in the development of the sustainable infrastructure rating systems that will further promote sustainable infrastructure design and construction practices. The development of this program was supported by ASCE as well as the American Consulting Engineers Council and American Public Works Association.

Source: Merrick & Company

Appointments

Dumas Contracting Ltd. is pleased to announce the appointment of Burger Greeff as CEO, commencing in 2012. Daniel Dumas, the founder and current CEO, will remain a director of Dumas and will continue to play an active role in the company's continued growth.

Mr. Greeff is a seasoned mining executive, bringing over 18 years of management experience in mining and contract mining. He joins Dumas from De Beers where he has held a number of senior management roles, most recently as CEO of De Beers Marine, the in-house mining contractor for De Beers marine mining operations. Prior to this Mr. Greeff was a general manager in De Beers Group Services, where he was responsible for De Beers' strategic business planning, supply-side strategy, business optimization and process improvements.

Source: Dumas Contracting Ltd.

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The board of directors of Merrick & Company announces that David G. Huelskamp has been selected as president of the firm, effective January 3, 2012. Merrick & Company is a global, employeeowned, multidisciplinary professional services firm specializing in the energy, national security, life sciences, and sustainable infrastructure markets. The firm



provides engineering, architecture, design-build, surveying, and geospatial technologies services.

Mr. Huelskamp will report to Ralph W. Christie, Jr., PE, who has been Merrick's chairman, president and CEO for nearly 15 years. As part of this transition, Mr. Christie will continue as chairman and CEO.

As president, Mr. Huelskamp will be responsible for the operations of the company and several corporate support functions within the organization. Mr. Huelskamp has been with Merrick for more than 15 years, and most recently he held the role of senior vice president, Business Development. He holds an engineering degree from the U.S. Air Force Academy and an MBA from Arizona State University.

Source: Merrick & Company



InfraStructures English Edition December 2011/January 2012 – page 24



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Join the Cintas & Carhartt Cold Crew

In conjunction with the release of the new Carhartt Rental Active Jacket, Cintas has launched its search for the "Cintas & Carhartt Cold Crew". Contestants can enter the contest by submitting a short essay and photo at www.cintas.com/carharttcoldcrew.

Contest organizers are looking for workers in the U.S. and Canada whose jobs require them to withstand tough conditions in cold temperatures. These individuals are encouraged to share their stories and explain why Carhartt workwear is essential to their jobs.

Entries will be accepted through February 29, 2012, at which time Cintas and Carhartt will select its Cold Crew finalists and begin public voting at the contest website. The grand prize winner will be announced in March, and he or she will receive an all-expenses-paid trip for two to the 2012 STIHL® TIMBERSPORTS® Series in Pigeon Forge, Tennessee, on June 15 - 17.

The Carhartt Rental Active Jacket is available through Cintas in Carhartt brown and features a quilted flannel lining for warmth, an attached hood, two large lower outside front pockets and secure inside pockets, triplestitched seams for added durability and a heavy-duty zipper. It is available in sizes small through 5XL.

The entire Carhartt Rental Workwear line was developed exclusively for Cintas, North America's largest uniform supplier. Workers will appreciate the styling, durability and rugged performance one would expect from Carhartt with the added benefits of laundering, repair and replacement that accompany a Cintas Rental Program. Businesses can now supply Carhartt, a brand that workers recognize and trust, in a cost effective manner, while increasing morale and exuding a professional company image.

Source: Cintas Corporation

InfraStructures English Edition December 2011/January 2012 - page 26

Agenda

Landscape Ontario CONGRESS 2012 January 10 - 12, 2012 Toronto, ON Canada

World of Concrete 2012 January 24 - 27, 2012 – Seminars: January 23 - 27, 2012 Las Vegas, Nevada USA

The Rental Show 2012 February 5 - 8, 2012 New Orleans, LA USA

YugBuild February 29 - March 3, 2012 Krasnodar, Russia

NASTT's No-Dig Show March 11-15, 2012 Nashville, TN USA

World of Asphalt Show & Conference + AGG1 Aggregates Forum & Expo March 13 - 15, 2012 Charlotte, NC USA

CANADA BLOOMS 2012 March 16 - 25, 2012 Toronto, ON Canada

CEMENTTECH 2012 March 28 - 30, 2012 Beijing, China

Atlantic Heavy Equipment Show March 29 - 30, 2012 Moncton, NB Canada

HEAVY EQUIPMENT SHOW

BRIDGELIFE™ 2012 - Bridge Safety & Longevity Conference & Expo April 10 - 12, 2012 Ottawa, Canada

EXPO Grands Travaux 2012 April 13 - 14, 2012 Montreal, QC Canada

INTERMAT 2012 April 16 - 21, 2012 Paris, France

Panama Canal 2012 International Engineering & Infrastructure Congress April 18 - 20, 2012 Panama City, Panama

The Steel Conference & World Steel Bridge Symposium April 18 - 21, 2012 Dallas, TX USA

The Global Africa Infrastructure Exhibition May 8 - 11, 2012 Johannesburg, South Africa

AUTOSTRADA-POLSKA May 8 - 11, 2012 Kielce, Poland

CONEXPO Russia at CTT 2012 May 29 - June 2, 2012 Moscow, Russia

Hillhead 2012 June 19 - 21, 2012 Hillhead Quarry, Buxton, United Kingdom

DEMO International® 2012 September 20 - 22, 2012 Saint-Raymond, QC Canada

INTEROUTE&VILLE October 2 - 4, 2012 Lyon, France

INTERMAT Middle East October 8 - 10, 2012 Abu Dhabi, United Arab Emirates

Bauma China 2012 November 27 - 30, 2012 Shanghai, China

BAUMA CONEXPO SHOW - bC India February 5 - 8, 2013 Mumbai, India

bauma 2013 April 15 - 21, 2013 Munich, Germany

CONEXPO-CON/AGG and IFPE expositions March 4 - 8, 2014 Las Vegas, NV USA



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