CONSTRUCTION • PUBLIC WORKS • NATURAL RESOURCES

Volume 18 . Number 10 . November 2008 . English Edition



The Professionals Choice For Specialized Equipment



High capacity LARUE D55 & D65 de-tachable loader-mounted, 300 hp or 350 hp, telescopic loading chute.

production and reliability.



LARUE T60 self-propelled, hydrostatic drive, Cat 375 hp engine, ribbon or dual auger configuration, available all wheel steer and telescopic chute.



LARUE 7480 dual engines, 775 HP, 4,400 tons/hour capacity, all wheel drive, available with the Larue A.R.S. (automatic rear steering all wheel etenders surface) steering system).



LARUE 7060 single engine 550 HP, hydrostatic drive, 4,000 tons/hour ca-pacity, available with the Lanue A.R.S. (automatic rear steering all wheel steering system).



Manufacturer of Heavy Duty Snowblowers

Distributor of products for Ontario, Quebec and the Maritimes





Rosco Challenger III Heavy-Duty broom for the most demanding jobs. Quick change brush core (less than 5 minutes to change, 80 hp Cat power, hydrostatic drive, R.O.P.S. pressurized air conditioned cab.





MONCTON • QUEBEC • MONTREAL • LAVAL • TORONTO

Head Office • 680 Lenoir Street, Quebec City (Quebec) • Fax: (418) 658-6799 Toronto: 3320 American Drive, Mississauga (Ontario) 14.6.1 Phone: (905) 673-3013 • Fax: (905) 673-3015

SALES · SERVICE · RENTALS · FINANCING AVAILABLE



LeeBoy 785 Grader All-gear Dana tandem drive, 130 HP Cummins engine, 25,300 bs sizild weight, 6 speed forward /3 speed reverse powershift transmission, 12 tootsiding moldboard, articulated frame 40P

Emergency Parts-Service 24/7 • www.jalarue.com

ntrastructures

When to Not 1940

Volume 13 Number 10 November 2008

EDITOR / PUBLISHER Jean-François Villard editor@infrastructures.com

CONTRIBUTING EDITOR Rob Holden

ADVERTISING SALES MONTREAL (514) 233-1295 montreal@infrastructures.com TORONTO Jean-Philippe Charron Julie Turcotte (416) 795-1295 toronto@infrastructures.com

TELEPHONE (514) 233-1295 (613) 862-1295 FAX: (514) 528-9932

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

E-Mail editor@infrastructures.com

INTERNET www.infrastructures.com

InfraStructures is circulated free of charge to qualified users of heavy machinery and specialized equipment in construction, public works, and natural resources across Canada in both French and English.

The cost of a subscription for either edition for one year is \$20 for Canadian residents and US\$50 or \in 50 for U.S. and overseas. The content of InfraStructures is available for conducting on the updates of the second

The content of InfraStructures is available for consultation on the website www.infrastructures.com. It may not be reproduced or transmitted in any form, either in part or in full, without the written consent of the copyright owner.

LEGAL DEPOSIT Bibliothèque Nationale du Québec, 2008

DISTRIBUTED BY CANADA POST Publications Mail Agreement #40052183

A Brief Word...

Again we approach the traditional end of what has been an eventful, and stressful, year. I am reminded of the ancient curse; " may you live in interesting times." We should recall, however, that as difficult as recent events seem they are minutia to those of our forbears which should be recounted this, and every, November.

The lessons to be learnt will be slow to materialize, but as every member of our industry should comprehend, preparedness is key, and what better tool to assist you in those preparations than InfraStructures. By bringing you reports of innovations and technologies, you can arm your organization to fend off whatever adversity may be lurking. Regardless if your agenda is Balance Sheet green or Environmental green, the products and solutions you need will be objectively presented to you here first.

Utility, sustainability, and profitability, are not mutually exclusive anymore and InfraStructures can sort the wheat from the chaff so your long-term plans can be readily achieved. Right now there are many voices, creating a fog of confusion about things to come, InfraStructures does not profess to possess a crystal ball, but we can point to our reputation as Canada's leading editorial source to the industry.

It has long been held true that the hardest decisions are the most rewarding, turn to InfraStructures to ease that decision-making. Hybrids, hydrogen, hydrocarbons or hyperbole will be presented to you in our pages, as inventors and innovators rise to the challenges of shaping the future of the equipment industry. As your first, and Canada's only, bilingual publication of its kind; we will continue to be your beacon through the current storm.



On the cover:

the installation of a wind-powered radio base station site concept, developped by Ericsson working with Vertical Wind AB and Uppsala University in Sweden, as part of their commitment to sustainable and cost-efficient solutions that help bring communications to remote locations.

New 3 Year/3000 Hour Warranty For **Yanmar Construction Equipment**

The construction equipment division of Yanmar North America has recently increased the warranty to 3 years or 3000 hours on its line of excavators, loaders and backhoes. This warranty covers all elements of the machinery.

Jack Green, Yanmar's North American Service and Warranty manager says the extended warranty is in keeping with the

company's "value without compromise" philosophy.

"Yanmar is striving to be the number one engine and compact equipment supplier in the world", states Mr. Green. "Everything we do has that mission clearly in focus. Based on internal surveys, we know our equipment in the field has a reputation for durability and reliability which translates to cost savings for our customers. That's why we stand squarely behind this equipment with such confidence." The new warranty does not cover normal maintenance procedures, or wear items such as tires and brakes.

Source: Yanmar Construction Equipment

TTControl and HYDAC Form Strategic Partnership

TTControl, TTTech's subsidiary for off-highway solutions, and HYDAC International, one of the leading companies in the area of fluid technology and hydraulics, announce their strategic partnership in the area of electronics for mobile equipment. This comprehensive cooperation will promote the further development and worldwide distribution of innovative solutions for the industry. The combination of HYDAC's professional sales network with TTControl's profound electronics expertise opens up significant growth potential.

The cooperation between TTControl and HYDAC will meet the growing demands of the dynamic market. Customers are more and more inclined to purchase electronics and hydraulics in combination. Established in 2001, TTControl has a broad range of highly reliable electronic control systems and a vast product offering related to mobile work machinery. The company's electronic units are used in a number of commercial off-highway projects, fulfilling the safety requirements of the international IEC 61508 standard up to SIL3 and achieving the EN ISO 13849 performance level d.

HYDAC's product offering ranges from hydraulic components through complex mechatronic drive units for mobile and stationary machines and systems. HYDAC is among the five leading hydraulics companies worldwide. Both companies expect considerable sales growth from the synergy of their cooperation.

HYDAC contributes its global sales network to the partnership. "HYDAC's extensive sales network provides us with the opportunity to bring our solutions closer to customers all around the world," states Marc Weissengruber, member of the managing board at TTControl.

With 10 sales offices in Germany and more than 40 locations worldwide. HYDAC offers both global reach and local support. Source: TTControl S.r.l.

1-888-649-3331

(514) 866-6859

(450) 649-9461

Fax: (450) 649-1874

Non-Contact Infrared Thermometers Extend Reach of Predictive Maintenance

The Timken Company is introducing a new line of non-contact infrared thermometers that allow users to safely measure the temperature

MANUFACTURER SNOW REMOVAL EQUIPMENT & ATTACHMENTS FOR HEAVY MACHINERY

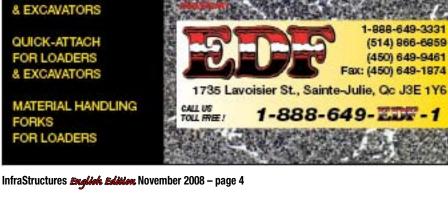
INTERNET : www.edfitd.com

E-MAIL : info@edfltd.com

BUCKETS FOR LOADERS & EXCAVATORS

QUICK-ATTACH FOR LOADERS & EXCAVATORS

MATERIAL HANDLING FORKS FOR LOADERS



of equipment operating in hard-to-reach or dangerous areas.

These new hand-held, non-contact infrared thermometers are the latest in Timken's line of industrial tools designed to help customers improve shop maintenance and increase uptime.

Capable of reading temperatures ranging from -60°C to 870°C, the thermometers use infrared technology to determine an object's surface temperature and provide a clear reading on the thermometer's backlit LCD display.

Although it is suitable for a variety of industrial environments, these non-contact infrared thermometers are recommended for applications that involve moving rollers, machinery and conveyor belts.

Timken offers three models, each with characteristics suited to different applications. Timken service engineers are available to advise users on choosing the appropriate model for their application.

Source: The Timken Company

BOMAG TO CONSTRUCT STATE-OF-THE-ART DRUM PLANT

BOMAG has announced plans to build the world's most modern roller drum facility, an expansion of BOMAG's main factory in Boppard, Germany. The 11 500 m² facility will cost approximately \$34 million, making it the largest single investment in the 51 year history of the company.

The new facility will double BOMAG's current capacity. An independent plant within a plant, it will operate in response to customer orders using the latest energy-saving, costefficient, ergonomic and worker-friendly design methods. The new plant will feature heat recovery systems, a photovoltaic system for generating electricity, innovative production technology, clean-room assembly and process optimization.

Whereas current production areas are located apart from each other, the new plant will consolidate everything onto one site. This will reduce in-house plant and forklift traffic, allowing materials to be stored close to assembly. State-of-the-art logistics for material handling and supply, greater use of robots and driverless transport systems, and a high level of automation will reduce costs and increase BOMAG's competitiveness over the long term.

In spite of all the automation, the new factory's focus is still people-oriented. Production is based on the principles of group work, individual responsibility and freedom to make individual decisions. The short routes between areas are driven by the need to have materials in close proximity to their use. Robots will carry out less-pleasant work such as washing or spray-painting drums. The increased automation takes the pressure off staff but does not lead to less employment. On the contrary, once the last expansion phase is reached, the new plant will employ 160 workers, or 50 more than currently.

Source: BOMAG

CANADIAN DESIGN-BUILD AWARD OF EXCELLENCE

The Canadian Design-Build Institute (CDBI) recognized excellence in Canada's designbuild industry by presenting its 6th Award of Excellence on October 3, 2008 at CDBI's 2008 National Design-Build Conference held in Toronto, Ontario.

The project award recipient was: *The Anthony Henday Drive Southeast Leg Ring Road Project* is the winner in this year's

Concess REST RUBBER TRACKS IN CANADA

TECHNOLOGY AT ITS BEST WITH ONE OF THE LARGEST MANUFACTURING COMPANY IN THE WORLD LARGEST AVAILABILITY IN CANADA & SAME DAY SHIPPING

4 affiliated warehouses & toll free numbers:

MONTREAL, QC: 1-877-332-1879 ST-HYACINTHE, QC: 1-800-363-0115 SHERBROOKE, QC: 1-877-888-3555 QUEBEC City, QC: 1-800-517-4497

> Want to become a distributor in your tentitory or you are an OEM dealer? Call Mr. Sylvain Auger at 450-888-0880

WHY PAY MORE? ...#1 in CANADA

competition. Submitted information was thorough and comprehensive, supplying complete factual and quantitative data. This allowed the evaluation of the project's merits on all criteria. The team and client also dealt with financing, operations and maintenance issues expanding the design-build project into a DBFO, or Design Build Finance Operate, an approach which minimizes capital and operating costs, as well as construction time.

Among items of interest were innovative scheduling approaches, the integration of the future operating team in the design process and use of ISO standards. The project incorporated some innovative design and construction techniques in order to reduce construction time frames for the fly over bridges, achieving remarkable time savings. It responded to environmental impact concerns through proactive consultation and corresponding wildlife habitat mitigation measures. The team achieved all client goals.

The members of the winning team are: PCL Construction Management Inc.; MMM Group & Stantec Consulting Ltd.; Alberta Infrastructure & Transportation.

Established in 2002, the CDBI Awards of Excellence are presented annually to recognize excellence in Canada's designbuild industry and to acknowledge designbuild teams whose projects contribute to the growth and stature of the design-build profession. Award recipients demonstrate the highest standards and principles in the design-build industry and the business community in pursuit of excellence.

Source: Canadian Design-Build Institute

AREVA T&D AWARDED A CONTRACT FOR THE BHILAI STEEL PLANT IN INDIA

AREVA T&D India Ltd. has been awarded a contract worth approximately \$48 million with Bhilai Steel Plant (BSP), a flagship unit of the "Steel Authority of India Ltd" (SAIL), the largest steel manufacturer in India.

This contract includes a 132 kV gas-insulated substation and air-insulated substations. It will also include the complete revamping of the existing protection & control system and feeding the new sub stations through 132 KV transmission cables.

AREVA T&D will provide its state-of-the-art protection, control and monitoring system for the existing substations. This project is scheduled for delivery by October, 2010.

"The transmission and distribution market in India is booming (almost 20% per year). Thanks to the support of our sales network covering the entire country, we were able to match our customers' expectations. Through this project, we significantly increase our presence in the Steel Sector, allowing us to demonstrate our state-of-the-art technology", said Rathin Basu, Country president & managing director of AREVA T&D India. Source: AREVA T&D

ACMA'S PROPOSED CHANGES TO INTER-NATIONAL BUILDING CODE APPROVED

The American Composites Manufacturers Association (ACMA) announced that building officials from the International Code Council (ICC) on September 18 approved "as submitted" the association's proposal to include language into the International Building Code (IBC) about the proper use of

Pipe Rammer Package for Oil & Gas Pipeliner Industry

TT Technologies recently introduced a pipe rammer and bentonite system package for oil and gas pipeline installation projects. The pipeliner package features an 45 cm diameter Grundoram Goliath pneumatic pipe ramming system and a Grundomudd 500 bentonite mixing/delivery system.

During the ramming process the rammer is attached to the rear of the casing. The tool then drives the pipe through the ground



with repeated percussive blows. The Goliath rammer installs steel pipes and casings from 60 to 142 cm diameter. The rammer can also be used for the slick-bore process, installing a bore pipe, which, when removed, pulls the product pipe into place. Ramming provides accurate installation of casing in a wide range of soil without surface slump, making it ideal for installations under railways and roads.

The pipeliner package is also useful in HDD assist and rescue applications. The rammer can be used to salvage product pipe after a failed bore, install Conductor Barrel[™] casings, remove stuck drill stems and assist drills during product pullback, preventing hydrolock.

Source: TT Technologies

Oilmatic Couples Electrics Too

Wimmer's Oilmatic Technology has become a well known term in the construction industry. Starting in September 2008, the system was expanded with one more feature – an electric

coupler with 7 connections has been added to the hydraulic circuits coupler.

The gold plated contacts can transport enough capacity



to switch magnetic valves in the hydraulic attachments.

An actual application of this technology is used in the "Tiltator", a rotating and swivelling adapter produced since the beginning of 2008 by Wimmer.

Valves inside the Tiltator manage the control of functions through electric signals coming from the excavator.

Until now electrics had to be connected manually, from now on it is coupled automatically thanks to Wimmer's Oilmatic Technology.

Source: Wimmer International

ONE way.

THE MB BUCKET CRUSHER THE ONLY CHOICE FOR A BETTER JOB.

bauma

China 2008

Out door GO4 and indoor Hall 52 stand number 2168

- CRUSHESANWHERE
- ON-SITE REUTILIZATION
- LOWERS COSTS
- A COMPLETE LINE OF UNITS

THE MB BUCKET CRUSHER

THE MB BUCKET CRUSHER: TRUST THE EXPERIENCE OF THE WORLD'S NO. 1 MANUFACTURER.



Tel. +39.0445.308148 - Fax +39.0445.308179 - www.mbcrusher.com - info@mbcrusher.com

FRP composites for architectural products. Inclusion in the 2009 edition of the IBC shows that FRP composites are recognized as viable alternatives to other building materials for many building applications.

The ACMA first submitted proposed changes to the ICC back in August 2007 with a new section that addresses fire performance of FRPs in non-structural architectural applications. The ICC's Fire Safety Committee voted to accept ACMA's proposal at its February 2008 meeting and then published for public comment all proposed changes to the IBC. All proposals and comments were then discussed at the full ICC meeting on September 18, 2008, where the ICC voted to uphold its committee's recommendations. Now, for the first time, FRP composites will be included in the IBC.

Source: American Composites Manufacturers Association

PURE TECHNOLOGIES WINS NEW MONI-TORING CONTRACT

Pure Technologies Ltd. announced recently that is has been awarded a contract to supply and install a SoundPrint[®] monitoring system in a high-rise office building in Calgary. The combined value of the contract and the associated monitoring and technical support contract is in excess of \$650 000. The system will be installed and commissioned in the fourth quarter of 2008.

Commenting on the contract, Jack Elliott, Pure's COO said: "Although the building sector now constitutes only a small part of our business, it is an important component because of the stable long-term monitoring revenue it generates. With only a couple of exceptions, we continue to monitor every one of the buildings in which our systems have been installed since the introduction of the

You will find even more news of the industry as well as links to all the major players' websites on www.infrastructures.com technology in 1994. Many of the buildings have gone through one or more ownership change and the availability of comprehensive information on the structural health of these properties has removed uncertainty for the purchasers. In fact 2008 has been relatively busy for us in this sector, with projects in Vancouver and Atlanta already completed."

Source: Pure Technologies Ltd.

IST AWARDED TWO CONTRACTS TOTALING \$8 MILLION

Aecon Group Inc. recently announced that its wholly-owned subsidiary, Innovative Steam Technologies (IST), has been awarded two contracts totaling \$8 million to supply its Once-Through Steam Generator (OTSG) units to clients in Turkey.

The first contract calls for the design and supply of an OTSG unit for the Ataer industrial zone in Izmir, in Turkey, a holiday town on the Agean coast. The project is scheduled for a September 2009 delivery.

Under the terms of the second contract, IST will supply an OTSG unit to Ugur Enerji in Cerkezkoy, Turkey. The OTSG unit will operate in a cogeneration mode, producing steam energy for the textile industry in Turkey. This is the second OTSG module IST has provided for the Cerkezkoy industrial area. The project is scheduled for a July 2009 delivery.

These new contracts represent the ninth



At the Hybrid Truck Users Forum, held October 14-16, 2008, in South Bend, Indiana, Navistar unveiled its new hybrid truck configuration – the International[®] DuraStar[™] Hybrid tractor. The Class 7 International DuraStar Hybrid tractor has the capability to provide fuel savings from 20-25% on a standard in pickup and delivery applications.

The International DuraStar Hybrid also reduces the amount of hydrocarbon emissions by up to 33% and nitrogen oxide emissions by up to 35% versus standard diesel trucks.

The parallel-type, diesel-electric hybrid architecture is supplied by Eaton Corporation. It incorporates an electric motor/generator between the output of an automated clutch and input of the automated manual transmission. The hybrid-electric system recovers energy during braking, and can add power back into the driveline during start and acceleration. This capability makes the truck more efficient in stop-and-go driving.

Source: Navistar International Corporation

Timbren SES Kit for 2009 Dodge 1500

The 2009 Dodge 1500 has barely hit the showroom, and Timbren is already offering a Suspension Enhancement System that fits the new coil spring rear suspension.

Not only does it deliver a safe, comfortable ride even with the heaviest loads, but it installs very easily. Not only is it a "No drill" installation, it's also "No Tools Required". Just 'pop' out the OEM bump stop, and 'pop' in the Timbren system. And you are done!

The kit for the front suspension is the same great design from the previous year. Source: Timbren Industries Inc.



and tenth OTSG units supplied by IST to clients in Turkey.

"Turkey has become an important market for us as we continue to expand our services internationally," said Bob Dautovich, president of IST. "We're very pleased to have been awarded these new contracts, and we look forward to future opportunities to provide services to other clients in the region."

Innovative Steam Technologies is the world leader in the design and fabrication of oncethrough-steam-generators and is a wholly owned division of Aecon Group Inc.

Source: Aecon Group Inc.

AECON AWARDED UTILITY DISTRIBU-TION CONSTRUCTION CONTRACT FROM ENBRIDGE GAS DISTRIBUTION

Aecon Group Inc. recently announced that its Infrastructure Division has entered into a four-year alliance contract from Enbridge Gas Distribution Inc. that could total approximately \$180 million over the term of the agreement.

Under the alliance agreement with Enbridge, Aecon will undertake Enbridge's gas distribution construction work in the central and eastern portions of Enbridge's natural gas distribution franchise area in Ontario. Work performed under the alliance agreement will include the installation of distribution

MTU at MINExpo: Showcasing Safety, Reliability and Fuel Efficiency

MTU displayed its innovative line of power solutions for the mining industry at the MINExpo exhibition, that took place on September 22-24 in Las Vegas. The engine line up included all three configurations (12, 16 and 20 cylinders) of the latest generation of its Series 4000 engine family, along with a Series 2000 industrial engine and an Underground Optimized[™] Series 900 engine.

The latest version of the Series 4000 is EPA Tier 2 certified and has a revolutionary thermal protection system that is unrivalled in this segment. Using a liquid-cooled exhaust system, it keeps the surface temperature of the engine below 200°C, preventing any oil or diesel fuel that might leak onto the engine surface, from igniting due to engine heat. This

significantly reduces the risk of fire hazard for mining trucks, enhancing operator safety and protecting the customer's investment.

The new Series 4000 also boasts greater power density and reliability with ratings of 2250 hp, 3000 hp and 3750 hp. In addition, they have been designed to rigorous standards and depending on the specific mining application, have an average life of 20 000 - 40 000 hours before first overhaul.

Another benefit of the Series 4000 engine series is that it is a true engine family. A single standardized set of parts is used in each of the three engine cylinder sizes, whether they are operating in excavators, haul trucks or front-end loaders, and whether they are operating at high altitude or sea level. This allows customers to reduce inventory costs by stocking one set of spare parts instead of several sets based on the types of engines in use.

In addition to the Series 4000, the Series 2000 is also a mainstay of MTU's portfolio of products serving the mining industry. Used extensively in North American quarries, 12 and 16 cylinder Series 2000 engines power 65 and 100 t trucks with a fuel consumption rate that is the best in the industry.

MTU's product line for the mining industry also includes its Underground Optimized[™] engines, designed specifically to meet the needs of underground mining operations. These engines are MSHA and CANMET certified, provide optimal ventilation rates and are extremely clean-running. Most importantly, they are optimized to meet the unique needs of underground mining applications.

Source: MTU Detroit Diesel, Inc.



mains as well as the connection of services to customers. Work under the alliance will begin immediately.

"Completing this alliance agreement with Enbridge Gas Distribution is an important strategic and operational milestone for Aecon. It represents an entirely new source of gas distribution work for us, and has the potential to double our gas distribution revenues over the next few years," said Teri McKibbon, CEO of Aecon's Infrastructure Group. "This award is a testament to the strength of Aecon's ability to work with its key clients over an extended duration. We very much look forward to working together and building a strong strategic relationship with Enbridge Gas Distribution in the years to come."

Source: Aecon Group Inc.

DAIMLER TRUCKS WILL DISCONTINUE THE STERLING BRAND

Daimler Trucks North America (DTNA) recently announced a comprehensive plan to adjust and strengthen company operations in response to continuing depressed demand across the industry and structural changes in the company's core markets.

The Sterling Trucks brand will be discontinued effective in March 2009. Additions to the Freightliner and Western Star product ranges will be made to address market segments that have been served exclusively by Sterling offerings in the DTNA stable. L'AN ST

As a result of the decision to discontinue the Sterling brand, the St. Thomas, Ontario, plant will cease truck manufacturing operations in March 2009, concurrent with the expiration of the existing agreement with the Canadian Auto Workers members employed there. The plant currently manufactures Sterling medium and heavy-duty trucks.

DTNA will also close the Portland, Oregon, Truck Manufacturing plant, in June 2010, when current labor contracts expire. Western Star commercial production will be assigned to the company's Santiago, Mexico plant, while production of Freightliner-branded military vehicles will take place at one of the company's facilities in the Carolinas by mid-year 2010.

Start of production at DTNA's new Saltillo, Mexico manufacturing plant will occur as planned in February 2009. The plant will produce Freightliner's new flagship Cascadia model.

Source: Daimler Trucks North America



Jack Lee, 4Refuel Canada Inc. Special Collaboration



The upheaval in the financial markets this past month has added a pile of new pressures for business owners and managers. The hot buttons are managing cash flow and operating costs while also holding onto people and business volume. But, amid this re-ordering of priorities, is anyone still thinking about the commitment to become more environmentally conscious or has that been swept under the boardroom table as an unnecessary frill?

As we reorganize our priorities I suggest looking at our financial challenges and our promises to the environment as one key initiative. The two are connected.

For most companies fuel is the largest operating expense and the biggest contributor to pollution. Everyday our cars, trucks and equipment spew hundreds of tonnes of pollutants into the atmosphere. But how can we cut fuel consumption without destroying productivity? The answer is to think greener and become more responsible consumers. We must eliminate waste. When we eliminate wasted fuel we have cut toxic emissions as well as lowering fuel costs. Now, how do we eliminate wasted fuel?

There are a lot of choices and there is the right fit for you and your company from better fuel management through better planning,

to using new technology to measure and manage fuel consumption and better training your drivers and operators. It all helps.

The biggest benefit to your company is

without question, saving money.

Most people think it costs money to become more environmentally friendly, but that is not true. Think about it this way: When you use less fuel, you spend less money on fuel. Becoming more efficient with your fuel consumption pays dividends to your

company and the environment rather than adding cost. As mentioned before there are lots of solutions to eliminating wasted fuel. Here are just a few:

- Stop driving to card locks. Use an on site refueller. When you have fuel delivered to you, you eliminate wasted time and fuel.
- Measure and Manage your fuel consumption. You cannot manage what you do not measure. With the right information you can calculate which piece of equipment is guilty of over consumption and make the necessary changes.
- Train your drivers and equipment operators to be more fuel conscious. Bad driving habits waste fuel.
- Use technology to understand where you are efficient and where you are wasteful.
 There are a number of choices available to monitor engine performance so you can control fuel consumption.
- Cut pollution and switch to biofuels wherever necessary. You can do this without any engine modifications.

Once you have made a decision to cut wasted fuel and pollute less you have made huge strides towards becoming a leader in changing business attitudes. You have become a smarter company and there are big benefits. A smart company attracts more attention and a better caliber of clients. Add this to your list of standard company benefits and you will improve your corporate profile and enhance your market position.



As a smart company who has made a real decision to stop wasting the world's resources you are making a contribution helping to reduce the stress on our planet. You are helping to create a better future for our children and grandchildren. This century will see new heroes created and you will become one of those pioneers. Now that is something to tell your grandkids!

Even if you decide to use only one of the above tips to help reduce your company's fuel consumption you will be making a huge impact on the environment. By how much? Consider this. You generate 2,79 kg of greenhouse gases for every liter of fuel you burn. For example if you decide to have vour fleet refuelled on-site instead of driving to a card lock, you eliminate at least 20 minutes driving time to and from the card lock. That is 20 minutes your engines are not running. 20 minutes you are not consuming fuel, and 20 minutes you are not paying in non-productive labor costs. How many times a week could you put cash back on to your bottom line and cut emissions? It adds up to thousands of dollars each month in cut costs at a time when cash flow is critical.

Ericsson Unveils Wind-Powered Concept for its Award-Winning Tower Tube

Ericsson recently unveiled its latest energy-optimized radio base station site concept, a research project for a pioneering wind-powered Tower Tube. Working with Vertical Wind AB and Uppsala University in Sweden, Ericsson is developing the concept as part of its commitment to sustainable and cost-efficient solutions that help bring communications to all.



The wind-powered Tower Tube takes the energy-lean design of Ericsson's awardwinning original Tower Tube one step further by employing renewable energy. It harnesses wind power via a 4 blade turbine with 5 m blades vertically attached to the tower. The vertical rotor blades work silently and minimize the load on the tower during operation.

Trials will be conducted to determine if the design of the energy-efficient Ericsson Tower Tube and the vertical wind rotor blades work together to enable low-cost mobile communication, with reduced impacts on both the local and global environment.

The Ericsson Tower Tube construction houses base stations and antennas, fully enclosing them in an aesthetically pleasing concrete tower. It has a smaller footprint and lower environmental impact than traditional steel towers with CO₂ emissions related to materials, such as production an transportation, that are at least 30% lower.

Furthermore, the Ericsson Tower Tube has no need for feeders and cooling systems. With up to 40% lower power consumption than traditional base station sites, it helps operators reduce their operating costs



significantly. It employs cutting-edge design and can be built in many sizes and painted in a variety of colors, making it a natural fit for any landscape.

Source: Ericsson



Watch a video of the tower installation on www.infrastructures.com

Thru-Way Trailers Hosts Gala Event at CNE for Wind Energy Industry

Ontario fast-growth firm Thru-Way Trailers[™] showcased the revolutionary BladeMaster[™] wind turbine, blade trailer at their Size DOES Matter Gala Exhibition on September 17, to over 40 executives in the



energy efficiency and transportation industry. The event was held at the landmark site of Toronto's first Windmill Energy Source, The Canadian National Exhibition (CNE).

"We are so proud of what BladeMaster™ can do for the emerging wind energy industry," says Saifu Mawji, Thru-Way Trailers™ president. "This event was a great opportunity to demonstrate how our technology can help this industry grow, how Thru-Way can be a pivotal part of such an important issue."

BladeMaster[™], the most advanced windmill blade trailer to emerge on the global market today, is a one-of-a-kind trailer designed to transport wind turbine blades easily and effectively. It is lighter, safer, more adaptive and cost effective than traditional trailers.

Attendees, including industry leaders from across North America, witnessed the unique steering capability first-hand as Thru-Way Trailers[™] engineers demonstrated the technology by driving around the CNE grounds. Built around the Active Steering Metrics (ASM) designed by VSE, a leading-edge, trailer-systems engineering firm in Europe, BladeMaster[™] maneuvered the narrow roads without difficulty.

"The ASM technology allows BladeMaster™ to easily and continuously drive around tighter corners," says Mr. Mawji. "This is ideal for transporting long and cumbersome windmill blades."

BladeMaster[™] was built specifically for the Wind Energy industry, but the steerable



technology can be applied to customized trailers hauling any type of load.

Thru-Way Trailers has been providing customized trailers to specialized carriers for nearly 40 years. From inception to delivery, we thrive on finding engineering solutions for your specific functionality and most challenging moves. Thru-Way is always on time, on budget and on target.

Source: Thru-Way Trailers

Zephyr Exhibited its Airdolphin Small Wind Power Generator at CanWEA

Zephyr Corporation, Japan's leading small wind generator manufacture, exhibited its original 1 kW generator called "Airdolphin" for the first time in Canada at CanWEA 2008, held in Vancouver October 19 - 22.

Airdolphin has a rated capacity of 1 kW, and with average wind speeds of 5 - 6 m/s. The generator's output equates to around one-third of the typical power usage of a family of four.

Ryosuke Ito, president of Zephyr said, "I am very excited to be able to participate in this event and to offer new experiences to the audience at



this time. I am sure that everybody visiting our booth will found out a great and exciting world of renewable energy for the future of this planet Earth."

The key differenciators of Airdolphin are its extremely low mass of 17,5 kg and its wide range of operating wind-speed of 2,5 - 50 m/s.

Airdolphin is already on global market and is effective in applications ranging from residential to industrial applications. It is ideal for off-grid use such as remote homes, mountain lodges, and mobile uses.

Source: Zephyr Corporation

International Specialized Trailers Chooses Haldex ABS and Gold Seal Actuators

International Specialized Trailers Manufacturing in Litchfield, Minnesota, has chosen the Haldex PLC Select Full Function Anti-lock Braking System (FFABS 2S/1M) and Gold Seal® Actuator.

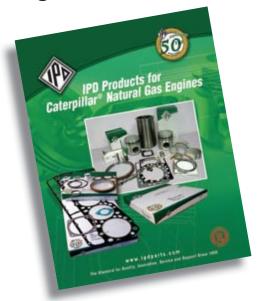


Haldex PLC Select Full Function ABS has an integrated control valve that performs all ABS control functions including service braking, spring brake control and anti-compounding. The single patented FFABS valve replaces up to three separate valves to minimize parts, plumbing, system weight, installation time, potential failure points, maintenance requirements and troubleshooting procedures. The Gold Seal[®] Spring Brake includes unique design features to save time and money by reducing maintenance costs and downtime expenses. Design features include long-lasting special heat-treated power spring which produces maximum output force and the zinc-plated push rod for added corrosion protection. Gold Seal models are available for both S-Cam and Air Disc Brakes.

Haldex offers Gold Seal[®] Spring Brakes in 12 different sizes to meet every air brake system for trailer applications. Every Haldex Gold Seal[®] Spring Brake is backed with a four-year, unlimited mileage warranty.

Source: Haldex Commercial Vehicle Systems

IPD Offers Parts Coverage for Caterpillar Natural Gas and Methane Engines



IPD has been supplying quality heavy-duty engine parts since 1955. Within the IPD offering is a full line of repair parts for Caterpillar[®] G3300 to the G3500 series engines. Cylinder Kits, Bearings, Seals and Valve Train Components are a few of the main items offered. Also, IPD Gaskets Sets are packaged in the trademarked IPD 1-2-3[™] System to make the repair job easier for the technician. IPD presents a new 61-page catalog of extensive IPD Brand parts used for Caterpillar[®] Natural Gas and Methane engines. The catalog also shows examples and photos of IPD's quality manufacturing.

According to Bob Straw, IPD vice president, Sales and Marketing, "IPD Brand quality replacement Diesel and Natural Gas engine parts are of the quality IPD customers have come to expect, and are backed with the IPD warranty coverage. This product line also presents several key innovations exclusive to the IPD Brand."

Source: IPD

Caterpillar[®] and CAT[®] are registered trademarks of Caterpillar, Inc.

InfraStructures English Edition November 2008 - page 12

Volvo Trucks Looks Beyond Euro V With the Launch of EEV Engines

Volvo Trucks will start delivering its first FH and FM trucks with EEV (Enhanced Environmental friendly vehicle) engines during 2009. The new engines will help improve air quality by reducing particulates and smoke drastically, going beyond the requirements of Euro V. The first stage of Volvo's EEV engine offer, based on an optimized D13 engine with SCR, will cover the majority of the D13's current sales volume.

The roll out of the Volvo EEV engines will start with the powerful and fuel-efficient D13 engine, which has been further optimized to be able to reach EEV levels. The first stage is expected to meet the requirements of the majority of today's current D13 customers. In addition to reducing particulates and smoke considerably, the new EEV engines will offer customers improved economy, while allowing them to take advantage of tax incentives available on some markets. Yet for Volvo this is just the beginning; the aim is to be able to offer a wide range of EEV engines.

Looking ahead, Volvo Trucks is closely following the development of the Euro VI standard and is in a solid position to help lead the way. Volvo's current engine platform is proving to be an excellent starting point. Volvo believes that a combination of SCR and EGR technologies will provide the most efficient solution. The challenge of course is to offer a



high performing engine without compromising fuel efficiency and engine response. Volvo Trucks is on its way to achieving just that. Source: Volvo Trucks

Anderol Specialty Lubricants Help Buzzimarine Racers Capture 2008 Victories

The waves, the weather and the grueling pace make offshore racing one of the most punishing tests of high performance. This year, designer, engineer and champion Fabio Buzzi has proven to be the man with the edge: his marine racers have won two of the biggest challenges of the high seas – The Round Britain Offshore Powerboat Race and the Cowes-Torquay-Cowes Race. His long-time technical partner, Anderol Specialty Lubricants, protected the engines.

On June 30th, Vassilis Pateras and his crew aboard the Buzzi-designed Blue FPT FB won The Round Britain Offshore Powerboat Race – one of the longest and toughest anywhere – at 1164 nautical miles (2155 km). It swept to victory over 47 competitors in 20:36:47, at an average speed of 56,47 kn.

Then, on August 23rd, Fabio Buzzi and his crew piloted the Red FPT FB to win the prestigious Cowes-Torquay-Cowes Race, in a breathtaking, 337 km nonstop nail-biter at isle of Wight, on the English South Coast. They beat 37 other contenders – several who never finished. The final two competitors were bowto-bow, until Red FPT FB pulled ahead by just four seconds – a stunning, record-breaking win at 2:18:9.

Team Buzzi does not leave those four seconds to chance. "Fabio Buzzi wins by pushing every high performance advan-



tage he has – including Anderol Specialty Lubricants," says Patrick Meyer, Anderol Italia sales manager. Since marine engines take a brutal pounding in these races, Buzzi lubricated his four Fiat Powertrain Technologies N67 turbodiesels with high-performance Anderol Specialty Lubricants. As Technical sponsor of Team Buzzi, Anderol Specialty Lubricants, a Division of Chemtura Corporation, makes specialty fluids for heavy-duty service, for aviation, industrial, refrigeration as well as marine applications – anywhere lubricants need an extra edge.

Fabio Buzzi, holder of 52 racing titles and 48 speed records, has had Anderol on his

team for a long time. Fighting angry seas, he conquered the 2004 Tampa-Miami Race – 513 km of extreme conditions – with Anderol Specialty Lubricants protecting his two Isotta Fraschini 12-cylinder, 1300-hp Evolution turbo diesels. He shattered the standing speed record, bringing in his FB Design monohull at 2:36:7, at an average speed of 84,19 kn. Just prior to the Florida competition, Fabio Buzzi also won the AmericanWord Apba and Superboat Offshore Championship. Source: Chemtura Corporation

GE Restarts NJ Power Plant with Capital, Expertise, Technology

GE Energy Financial Services, a unit of GE, announced recently that it has applied the company's capital, expertise and technology to restart and successfully complete the first operating season of its 123 MW Parlin Energy Center in northeastern New Jersey.

GE began work on the power plant in June 2007 after buying the project for \$12,1 million from Calpine Corporation.

"Combining GE Energy Financial Services' financial know-how and capital with the in-depth technical skills of our sister manufacturing and operations business, GE Energy, we were able to restart Parlin after a temporary shutdown," said Mark Mellana, managing director of Operating and Development at GE Energy Financial Services. "Parlin gave us the opportunity to put to work GE's collective expertise to provide cost-effective power to a customer and the market."

Since coming online in June 2008, Parlin has produced 36 333 MW of power, and has experienced 100 percent availability. The power produced is sold to PJM Interconnection, a power system serving 51 million people across 13 states. Parlin bought into PJM after a Reliability Pricing Model auction allowed more than 2000 MW of power to come back online to meet high demand. The Reliability Pricing Model allows higher prices for capacity where generation is limited by resources and congestion.

The Parlin Energy Center – a modest brick building adjacent to a scenic park in Sayreville – sells cost-effective power to a neighboring photochemical plant owned by DuPont. At the heart of the operation are two GE frame 6B gas combustion turbines and two Alstrom steam turbines.

"GE Energy is providing several benefits to the Parlin Energy Center: optimizing the plant by lowering its heat rate and increasing capacity," said lain O'Brien, senior Operations manager for GE Energy. "In addition, GE employees brought a commitment to safety, as well as an ability to diagnose and repair problems on site. They contributed to health and safety, as well as to the environment, by reducing the use and storage of hazardous chemicals."

Out of commission temporarily, the plant required repairs and minor permit modifications before it could come back on-line. Technicians from GE Energy repaired the



combustion and steam turbines, installed a state-of-the-art emissions monitoring system, and installed a GE reverse osmosis water purification system, minimizing industrial wastewater, reducing the burden on treatment plants and conserving clean water for domestic and agricultural needs. The reverse osmosis equipment is part of GE's ecomagination initiative, the company's commitment to help its customers meet their environmental challenges while expanding its own portfolio of cleaner energy products and facilities.

The Parlin Energy Center continues GE Energy Financial Services' 25-year legacy in power investing. GE Energy Financial Services holds equity investments in power projects with a capacity of 26 GW.

Source: GE Energy Financial Services

REC Launches a Redevelopment Campaign

Restoration Environmental Contractors (REC), experts in environmental remediation, demolition, disaster recovery, plant closures and industrial site remediation, has launched a plan to help businesses strengthen their competitive positions after the decision has been made to close plants, and further, promote a positive corporate image through retraining and employing the local workforce.

The number of plants closing throughout Ontario and the U.S. is on the rise. Businesses see this as a necessary







move in order to remain competitive through tough economic times.

Since 1989, REC has successfully completed over 9000 environmental remediation and demolition projects throughout Canada, specializing in industrial plant cleaning, decommissioning closures, site remediation and disaster recovery in the industrial, commercial, government, and institutional sectors.

Source: Restoration Environmental Contractors

Bri-Mar Offers New Longer Deck Equipment Haulers

Bri-Mar Manufacturing, LLC has recently introduced two new deckover equipment haulers for transporting construction, paving or landscaping equipment plus attachments and materials.

The EH824-14 offers a GVWR of 6350 kg, enabling it to carry up to 4300 kg of equipment and materials. The EH824-16 claims a GVWR of 7250 kg. Both feature a longer 7,3 m bed length (6,1 m flat deck plus a 1,2 m dovetail) and 2,5 m deck width in response to requests from Bri-Mar customers and dealers.

Like other Bri-Mar Equipment Haulers, the new EH824 Series offers a choice of standard ramps or available split landscape gates (spring loaded) for easy loading of small backhoe-loaders, excavators, wheel loaders, skid-steers, small pavers and other construction equipment and attachments. Construction and landscaping materials on pallets may also be easily loaded on the deck of the EH824 with plenty of room left for equipment.

These trailers feature a heavy-duty

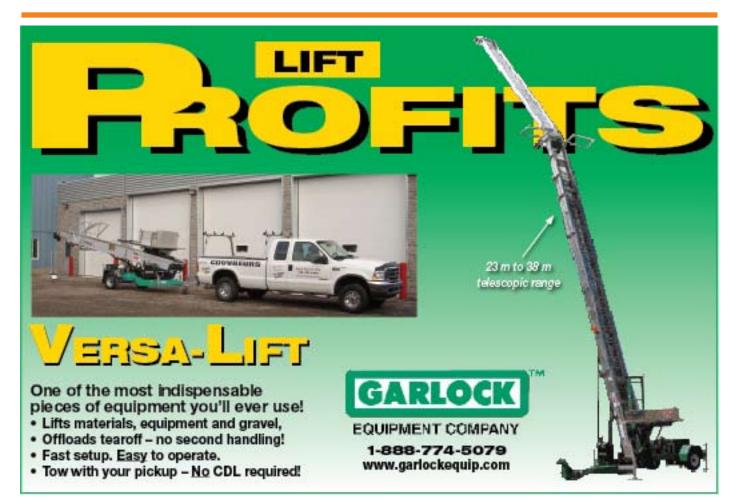
15 cm tube mainframe and 7,5 cm channel crossmembers. The decking lumber is treated

with 7-way RV plug and rubber-mounted LED lights.



for long-term reliability. Liquid coatings of primer and topcoat using quality Valspar paint products promote a high-class, durable finish. Other value-added features include a rub rail with 12 stake pockets on both sides, six foot ladder ramps, dual Dexter EZ-lube axles, breakaway kit, a sealed wiring harness Backing up the quality of all Bri-Mar trailers is a comprehensive, hitch-to-ramp two-year structural warranty, one of the best in the industry. The EH824 Series is available in a choice of black, red, yellow, grey, green, or blue.

Source: Bri-Mar Manufacturing



Record Swedish Tunnel Powers On with GIA Loaders

Issued on behalf of GIA Industri AB by Joem Promotions Special Collaboration



GIA 10 HR Häggloader "digging arm" loaders are used to the power cable tunnel project in Stockholm's southern suburb of Globen. At 7 km-long, the Solberga Project is believed to be the longest power-related tunnel of its type in Sweden. Oden Anläggngsentreprenad, Sweden's leading specialist tunnelling contractor, placed the order for three 10 HR loaders at the start of the 23



months drill and blast contract in February 2007.

With the increase in demand for residential housing in Globen and towards the E4 motorway the scarcity of land, the City Council recognized the potential benefits of relocating its high voltage power cables underground; redeveloping the corridor of land made available with the removal of the power pylons. Restrictions currently prohibit building within 10 m of the overhead cables and pylons.

The resulting removal of the overhead cables and pylons will open up land for housing up to 30 000 people.

Stockholm Council therefore financed the tunnel at a cost of 335 million Sek (\$53 million) to be repaid by land sales to developers. Oden won the contract for the tunnel stretching from the E4 motorway to Skanstull on the outskirts of Globen, including a 500 m extension close the main tunnels midpoint and three 300 m access tunnels.

The GIA Häggloader was considered to be the ideal loading machine for the project's main tunnel 18,2 m² face areas according to project manager, Peter Ahlgren.

The rubber tired digging arm loader has been purpose designed for operations in 3,4 m or 4 m tunnel widths.

A unique digging arm system loads the rock spoils onto a conveyor which fills the



haulage trucks at a constant flow of rock.

The conveyor can be raised and lowered to suit the loading height of different haulage vehicles; allowing the 10 HR to operate on ramps as steep as 1:7 going down and 1:5 going up.

Continuous loading directly at the face makes forward and reverse travel unnecessary resulting in reduced tire wear. The units' dozer blades effectively clean the floor area eliminating the need for manual clean up. The 10 HR offers a loading capacity of

3-4 m³/min and features an electric-powered hydraulic system to ensure good air quality in the tunnel with no diesel exhaust fumes and



reduced energy costs.

A Perkins 1104C – 44T rated at 100 hp provides an alternative loading power source for the contractor if required and for travel into the tunnel and on the surface; travelling at speeds of up to 12 km/h.

TUNNEL CONSTRUCTION

The tunnel, as an elongated-Vee stretches



over 6 km from the E4 to Skanstull, and a 500 m extension to Örby, passes through typical Stockholm granite. This according to Peter Ahlgren is "very good with a 'Barton Q-System' factor of up to 40."

Drill and blast techniques are used for tunnelling with 4 m long rods and 48 mm diameter holes on the main tunnel faces. Oden are working to an 8 hour cycle including drill, charge, blast and cleaning with 80 m³/blast. It takes each GIA loader less than two hours to clear the 80 m³ loading two trucks in a five minute cycle to the surface and dumping areas close to each of the three tunnel portals.

Two of the access tunnels at Östberga and Globen are 300 m long and feature a 1:7 gradient levelling at -40 m to ensure clearance of the numerous road, telecommunication and water tunnels criss-crossing the area.

The third access at Solberga is located close to the E4, with all three providing a total of five working faces for the GIA loaders – one at the Solberga, two from Õstberga and two from Globen.

With staggered deliveries, the first loader was delivered for the Globen access in October 2007, the second in February 2008 for the Solberga face, and the third in April to MIT.

"This is my first experience with GIA loaders" said Peter Ahlgren, adding "with such small cross-sectioned tunnels over a long distance they have proved an excellent solution. Furthermore, the electric power has been a key advantage. Diesel-powered units would have required more air ducts, meaning a bigger tunnel excavation. Additionally, they require just a minimal turning circle every 300 m or so."

Throughout the excavations, Oden Anläggngsentreprenad have been experiencing several sections of very cracked and fragmented granite. Some shotcreting, mostly without steel fibers and a rock bolt per meter has been specified where required.

In one 100 m section between Globen and Õstberga, the rock in the past had been underwater and the contractor is anticipating some problems, which may require a lining.

The project calls for extensive grouting to maintain the specified ground water levels. "We generally aim for four blasts per tunnel and one grouting session every 16 m," said Peter Ahlgren.

Along the tunnel route, five shafts are to be excavated to provide access for the high voltage cables to adjacent transformer houses. "With four located close to highways, residential housing and overhead power cables and pylons, conventional drill and blast methods is not an option," according to Mr. Ahlgren.

Instead the contractor is seriously looking at a new innovative diamond wire cutting technique perfected in Norway. Four holes will be conventionally drilled from the surface to a depth of 22-45 m in the four corners of a 4 m square grid. The diamond saw will then be passed through two of the 76 mm



diameter drilled holes cutting through the full 22-45 m before proceeding to the next two holes.

Before the fourth cut – completing the square, the tunnel below will be filled with sand to prevent vibration and provide control of the resulting rock

fall.

It is estimated that up to 2 m of rock will fall at a time which is then drilled and blasted, relying on the GIA Häggloaders to clear the resulting rock debris, ready for the next fall.

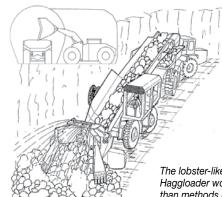
If successful, the technique will be used for four of the

shafts. The fifth, with a more remote location and just 10 m deep will rely on conventional drill and blast.

On completion of Oden's drill and blast contract, the contractor will spend a further six months cleaning the tunnel surfaces, installing cable racks and fitting water and electricity services.

It will then be handed over to the electric company Fortum to install the power cables allowing Oden to finally install small sectional walls and doors to secure the tunnels.

Plans are thought to be currently underway



by the Stockholm Council to further extend the tunnel into a ring around the Swedish Capital.

Oden has also recently took delivery of a GIA Charging truck mounted onto a Volvo truck chassis

The lobster-like fashion in which the GIA Haggloader works takes much less room than methods using conventional loaders

for the Murberg Tunnel project at Härnösand in Northern Sweden. In addition, GIA has also supplied Oden for its ventilation ducts in the Murberg Tunnel.

A second charging truck will also be delivered to Oden in June for a road tunnel project in Stockholm.

With more readers across Canada than any other trade magazine InfraStructures offers the **widest** coverage in the business. With readers involved in all aspects of the industry InfraStructures offers the **deepest** coverage in the business.

> Why settle for less? Go with the **best** Choose **InfraStructures** for your next campaign.

tendor Bay Ottowa

Longitudinal Joint Heating Makes a Good Joint

A presentation on asphalt longitudinal joints given by Rob McClure P. Eng. of Hatch, Mott, Macdonald at this past Swift Airport Conference in Calgary, Alberta, has demonstrated success of longitudinal joint heating as a means of making a well constructed joint. The presentation was an outline of the problems of construction of a durable longitudinal joint, and used a case study of a paving project done by Lafarge Construction, in 2007, at the DFC Shearwater Heliport in Dartmouth, Nova Scotia.

The specifications required cutting and removal of the edge of the cold lane prior to butting up the new hot lane. Lafarge requested approval on an alternate using a longitudinal joint heater, the HDE JMH 400T, manufactured by Heat Design Equipment Inc. (HDE) of Kitchener, Ontario. This alternate was approved and the results well documented.

The joint heating proved very effective, saving Lafarge money in material, labor, and project time. All the test results using the joint heater met the required compaction, whereas the cut joints had failures. The appearance of the joint was very good. The cost was reported to be in the area of \$0,15 per lineal meter, which is considerably under any other longitudinal joint construction technique cost, even considerably under any joint repair technique. The infrared heating equipment used, was able to reheat the cold joint at paving speeds without overheating the asphalt pavement. The 2008 project specifications were changed to include joint heating.

Heat Design Equipment Inc. has been promoting the idea of a reheated joint since 1995, and have been supplying their



patented heating equipment to meet a hot joint specification in the Province of Quebec since then. Over the years, they have been on numerous projects, both in Canada and the United States, but this project could be considered the best documented.

One of HDE's early test projects for the Ministry of Transport of Ontario was in 1997 on the QEW, where after 11 years "these longitudinal joints continue to perform well." according to Ontario's Minister of Transport the Hon. Jim Bradley.

The idea of a hot joint is nothing new, and echelon paving is recognized as the best way to achieve a good longitudinal joint. Robert

Kieswetter P. Eng, CEO of HDE likes to think that joint heating is the next best thing, and "it is, providing it can be done efficiently, without overheating the asphalt." HDE has done this now in Quebec, Ontario, Tennessee, Michigan, Nova Scotia and Washington DC (at the White House*) on real projects. The Shearwater report is a documented testimony to this.

HDE introduced a new lightweight paver attached model, the HDE JMH 300PA at CONEXPO-CON/AGG 2008, and will show an improved model at the upcoming World of Asphalt 2009 in Orlando, Florida, March 9-12, 2009. This model was built to accommodate tighter paving conditions for new hot joint specifications by municipalities who are realizing the value a heated joint.

The Shearwater report and HDE product information can be viewed on the HDE website www.asphaltheater.com.

Source: Heat Design Equipment, Inc.

* Looking for more information? Want to read past stories? Such as "Canadian Heat for the White House" published in October 2005... Visit the archives on WWW.infrastructures.com

• ACE

ACE, ACCENT ELECTRONIC CONTROLS INC. T 418 847 6344 • F 418 847 4851 WWW.ACEELECTRONIC.CA 29 GIROUX ST., QUEBEC CITY QC G2B 2X8



GPS systems meeting all the requirements of the Ontario Ministry of Transportation and major cities. «Optivalve» hydraulic system for better performance and reduced fuel consumption. Canadian manufacturer of spreader controls

Welcome to Traction Watcher One

The only friction measuring device that can provide continuous friction readings, simultaneously compensating for ground pressure.

Traction Watcher One (TWO) is a device that when attached to a vehicle can efficiently measure friction levels on a road surface. The readings are made in the left wheel track with 60 kg ground pressure. TWO can easily be elevated and lowered from within the vehicle via PC or outside by manually operating the device. The device can be transferred between any vehicle with an attached mounting bracket.

Functionality contracts stipulate requirements concerning the friction that shall be maintained on black (μ =0.4) and white (μ =0.3) roads. TWO makes it easy to discover where measures need to be implemented and which roads should be prioritized according to traffic density and how poor the friction conditions are.

The friction measuring device has a simple, robust design. It is mounted on the vehicle using a mounting bracket with four locating points. The connection plate has two quick locks with a safety device. There is also a safety hook.

TWO is connected to a laptop PC/PDA inside the vehicle and is delivered with software for viewing and storing measurement data. TWO's readings can be transferred via Bluetooth or cable and generate reports and produce easy-to-read friction graphs of the readings made over the measured distance. GPS can be added

as an accessory allowing you to carry out continuous friction readings over a given stretch of road and plot these on a map (extra software required) In addition to two versions of the PC table for vehicles, Les Machineries Tenco (CDN) Ltd can also supply a range of accessories that provide additional readings, including measuring sensors for: air tempera-



ture, ground temperature, and air humidity. Source: Les Machineries Tenco (CDN) Ltd



Dual Valve Controller with Electronic Assistant™

Axiomatic announces the release of a new multi-purpose Valve Controller with 4 universal signal inputs to 2 - 3A outputs, part number AX021800. This controller is part of a growing line of compact rugged controllers packaged for harsh operating environments.

The Dual Valve Controller is designed to control two proportional or on/off solenoid valves using PWM control from a variety of input sources. It accepts voltage, current, resistance, frequency, PWM, and discrete levels from four universal inputs. One unique feature is its ability to provide accurate power, up to 100 milliamp on each input. It also uses powerful 32 bit processing. The highly versatile AX021800 can also be used to support PID control and hydraulic fan control applications.

Electronic Assistant[™], together with an Axiomatic USB-



CAN converter, links the PC to the CAN bus for user configuration.

It features flexible user programming for application-specific control logic via the CAN based Electronic Assistant. The controller's internal functional blocks for inputs, outputs and signal conversion or hydraulic control can be mapped to a control structure that suits the application.

It can be used without a load as a voltage or current signal to CAN converter.

Source: Axiomatic

Rugby 55 and DISTO D3 Instrumental in Museum Showcase Installation

Click Netherfield Ltd., international museum showcase designers and manufacturers headquartered in Livingston, Scotland, overcame challenging museum showcase installations in Alaska and Toronto by using Leica Geosystems' Rugby 55 laser level and DISTO™ D3 laser distancemeter.

Because Alaska's Anchorage Museum at Rasmuson Center resides in the Pacific Basin's "ring of fire", where seismic and volcanic activity is heaviest, Click Netherfield had to design a unique display system. Hanging the 3,66 m x 5,5 m glass cases from the ceiling reduces their vulnerability to shifting floors during seismic activity, but intensifies the need for the glass panels to be perfectly plumb.

Working with the Gehry Partners of Los Angeles in the newly renovated Art Gallery of Ontario posed challenges of a different nature. Although the showcases in the Thomson Ship Models Collection Gallery are firmly anchored to the ground, they feature curved, serpentine glass to create a "wave" feel. Glass cases in the Thomson Collection of European Art Galleries are square, but incorporate high-end materials such as white marble, Douglas Fir, copper plate and cast bronze.

In both applications, because precision was key, Ryan Skorch, projects & development director for Click Netherfield, chose Leica Geosystems' Rugby 55 and DISTO™ D3 to

ensure the accuracy of his measurements. Designed for interior usage, the Leica



Rugby 55 is built construction-tough. It features an easy-to-use keypad, watertight seal, variable head speeds, scanning modes that include a beam-down mode for plumb down alignment, and a rechargeable battery pack. Its scanning or stationary beam can be quickly positioned in 90° increments.

Lightweight and small, the multi-functional DISTOT D3 features an integrated tilt sensor that assists with indirect measurements so horizontal distances can be measured despite obstructions. It is also capable of measuring angles up to $\pm 45^{\circ}$ at the touch of a button. Another sensor assesses lighting conditions, automatically turning on the display and keypad illumination for working in poorly lit or dark conditions.

Source: Leica Geosystems Inc.

Building a Better **Snow Blade**

Valley Blades Limited in Waterloo Ontario has been making snow plow blades for over 40 years. In those 40 years, they have led the way with technological innovations such as heat treated and carbide tipped blades. Recently a new product, PolarFlex, again changes the rules in the blade business. PolarFlex replaces the rigid cutting edge of a standard blade setup with independent 12 inch long carbide tipped steel segments. These segments are mounted inside a system of synthetic rubber components which completely isolate the segments from the plow. The rubber mounted segments are free to move vertically and axially (float), allowing them to conform to the uneven contours of most roads.

Free floating segments have many advantages over standard blades. Cutting edges conform closely to the uneven surface of the road and therefore remove more snow. If more snow is removed fewer trips with the plow and less salt use can be expected. Also, the 12 inch segments will wear more evenly as they will all be in contact with the road. If a few segments wear prematurely or are damaged by road obstructions, these segments can be replaced individually.

With no metal to metal contact between the truck and the road, vibration is significantly reduced, leading to other benefits. Unlike traditional blades, the unique design of PolarFlex reduces the blades' tendency to chatter or bounce. Eliminating the chatter leads to much longer wear life as the chipping and cracking of the carbide edge is all but eliminated. A reduction in vibration also has a positive effect on driver fatigue, plow damage and truck maintenance.

The design allows for the reuse of all flexible elements. Wear segments and flexible elements can be easily separated to allow recycling.

Source: Valley Blades Limited



Alternative Fuel-Powered Pelican Sweeper

Elgin Sweeper, the leading manufacturer of street sweepers, has introduced a version of the legendary Pelican® three-wheel broom sweeper that may be powered by either compressed natural gas (CNG), liquefied natural gas (LNG), or liquefied petroleum gas (LPG) – also known as propane. In addition to being Elgin Sweeper's flagship product, the Pelican has been America's most popular urban street sweeper for generations. This three-wheel broom sweeper features outstanding maneuverability, visibility, a 3 m sweeping path, and the heavy-duty No-Jam debris conveyor.

The alternative fuel, single-engine Pelican is powered by the ultra-low emissions Cummins B5.9-195G engine that is certified to the most stringent current emission standards.

"Elgin Sweeper is leading the charge in advancing the use of cleaner, safer, and healthier energy technologies in the sweeper industry," said Brian Giles, sweeper products manager, Elgin Sweeper. "With the introduction of the Pelican powered by alternative fuels, Elgin Sweeper is providing customers with an efficient, hardworking sweeper that reduces costs and environmental emissions."

A clear, odorless, and non-corrosive gas, CNG has become an ideal energy source for the future. LNG is an alternative fuel that is economical, abundant in supply and produces approximately 10% of the pollutants normally emitted by traditional gasoline or diesel engines. LPG, or propane, is a low-emission, economic and easily used fuel with a long and varied history in transportation applications since its inception as a motor vehicle fuel. Vehicles powered by CNG, LNG and LPG are used in a wide variety of commercial applications, including light-duty trucks and sedans, mediumduty trucks, and heavy-duty vehicles like sweepers, refuse haulers and transit buses.

Due to deterioration in air quality, many cities in North America have embraced the use of alternative fuels in their municipal fleets



and are showing increased interest in green transportation technology.

"A fleet of alternative fuel-powered Pelicans can significantly reduce a city fleet's greenhouse gas and NO_x emissions over their diesel equivalents, while reducing the consumption of crude oil-based diesel fuel," Brian Giles said. "The alternative fuel-powered Pelican is yet another example of Elgin Sweeper's commitment to our customers in North America."

Source: Elgin Sweeper



A new gathering place for the construction industry

Leading construction equipment companies from around the world who supported the first-ever CONEXPO Russia construction equipment trade show have voiced their supand thousands of leading contractors and other industry professionals conducted business with equipment manufacturers from around the world. The 6000 registered



A. M. Afanasiev, of the Russian Association of Territorial Highways Department (RA-DOR), spoke at CONEXPO Russia 2008 opening ceremonies. Behind him (l. to r.) are Vadim Kalabashkin of CHETRA, Natalia Alexeeva of the GAZ Group, Dennis Slater of the Association of Equipment Manufacturers, Dr. Frank Schauff of the Association of European Businesses in the Russian Federation, Eric Krider of the Mission for the US Embassy, Tomas Kuta of Volvo and also the volunteer chair of CONEXPO Russia 2008; Joe Krider of Terex is behind Mr. Afanasiev; to the right of Mr. Krider is Glen Tellock of Manitowoc Company, Toru Sunada of Komatsu, Sonosuke Ishii of Hitachi, Douglas B. Stark of Caterpillar, and David Hill of JCB.

port and satisfaction with the inaugural show by increasing the amount of exhibit space they are buying for the next CONEXPO Russia, to be held in 2009. Such actions confirm that CONEXPO Russia is the new gathering place for construction equipment businesses in Russia as well as neighboring countries.

The next show, CONEXPO Russia 2009, will attract an additional group of construction professionals from around the world who are looking to improve their businesses through the latest equipment, technology and industry training.

The construction industry has been booming in Russia and CONEXPO Russia 2008 was endorsed by a number of leading Russian contractor and manufacturer groups, including RADOR and the Russian Builders Union. It was also certified by the United States Department of Commerce as a premier international trade event. Department of Commerce offices around Russia and the former Soviet states recruited delegations to attend what was the most innovative industry event in 2008.

Show organizers reported that the inaugural CONEXPO Russia exceeded expectations with more than 230 exhibitors using more than 34 330 m² of exhibit space. Participating exhibitors connected with customers from the Russian market and its neighbors, event in the region that is run by the industry, for the benefit of the industry. Its volunteer

e 6000 registered attendees were able to update their knowledge of business solutions and keep up with the newest construction methods.

CONEXPO Russia is based on the CONEXPO-CON/AGG trade show model used by the Association of Equipment Manufacturers (AEM), the CON-EXPO Russia show owner and producer. CONEXPO Russia is the only



group of company executives determines the direction of the show to meet industry needs. Education is also an important show component, and CONEXPO Russia 2008 scheduled more than 20 education sessions to equip attendees with the tools to stay competitive and succeed.

More details about CONEXPO Russia 2009 will be announced in the coming weeks.

Source: Association of Equipment Manufacturers

New Holland Construction at the Conexpo Show in Moscow

After the success of Las Vegas, the worldwide construction equipment industry moved one of its most important fairs for the first time to Moscow.

Conexpo took place September 15-18, 2008, in the Crocus Fair Center of Moscow. All the major global manufacturers of construction machines displayed their new products and New Holland Construction was be among the players of this important event. The Fiat Group company considers strategically important the participation to this fair having the objective of consolidating its presence in this market.



New Holland Construction, with its 13 product families and 80 base models, is a key player in this industry both for the heavy and for the light equipment. New models, specifically tailored for the Russian market, were on display during the fair on a stand of over 1000 m² positioned at the center of the fair's exposition area.

The E215B, E265B and E135SRB crawler excavators from the new B series, the W190B wheel loader, the F106.6 motorgrader, and the D180 dozer represented the heavy line, while the B110B, B115B backhoe loaders, the LM1745 telehandler, the L185 skid steer loader, and the C185 compact track loader represented the compact line.

As a bonus for the visitors, the latest Maserati model, the "Quattroporte" was on display as well as the T8040 high horsepower tractor of the New Holland Agriculture product range. Source: New Holland

New Forestry Extravaganza Unveiled for 2009

An exciting new partnership has been forged between Master Promotions Ltd. and Démo Forêt 2000, organizers of Wood Week, which will combine four forestry events into one exciting extravaganza.

Wood Week will kick off on September 10-12, 2009 in the heart of Eastern Canada's Forest Industry and is a combination of three established shows, including LogFor, InterSaw and Démo Forêt 2000. It will also include the all-new National Biomass Show, a separate indoor/outdoor pavilion that is sponsored by Canadian Biomass Magazine.

The industry has asked and we have listened. All the players involved in the forestry industry, at one place, at one time, will discuss and observe the latest technology, services and policies as part of the industry's drive to recover during these challenging times. The Centre de foires de Québec, ExpoCité, will be the venue for this must attend industry event. The threeday event will include thought provoking and relevant seminars, pertaining to the Sawmilling, Logging and Biomass Industries.

A huge Industry Dinner will allow all the key players in this industry, along with suppliers, to relax and network, while discussing improvements and possible partnerships that will aid this industry's march into the future.

This event is the first in a planned series, with the second venue boasting more of an outdoor component. In September of 2010, Wood Week will go to Dolbeau-Mistassini – Lac-Saint-Jean, Québec, with all the same components from this exciting new partnership.

"As a founder of Démo Forêt 2000, the

Master Promotions and Démo Forêt 2000 partnership consolidate a great national event that offers a global expertise to the whole forestry business," says Michel Mallette, general manager of Démo Forêt 2000.

Master Promotions Ltd. organizes and manages trade shows, conferences and consumer events in association with numerous industry associations, publications and charitable organizations.

Master Promotions Ltd. is the current producer for several forestry related trade shows including Demo International[®], InterSaw and LogFor, as well as the National Heavy Equipment Show and EXPO Grands Travaux.

Source: Master Promotions Démo Forêt 2000



The Minerals Separator from ROTEX Global

The Minerals Separator[™] from ROTEX Global, LLC, is specifically designed to meet the demanding screening requirements

of minerals applications, including industrial sand applications. The multi-deck stacked design provides sharp separations and maximizes



fractional recovery efficiencies at high capacities. Combined with durable abrasion-resistant steel construction, the ROTEX Minerals Separator[™] provides unsurpassed performance in industrial sand applications.

The ability to screen at high capacities is achieved through a special multi-deck design. It achieves high separation efficiency through a unique elliptical-linear motion. Incoming sand is distributed equally to each screen deck level and then uniformly spread across each screen surface. The elongated stroke of the machine also provides effective blinding control allowing near-horizontal screen deck angles. Abrasion-resistant steel construction in all product contact components and replaceable "rock-box" grating on all material landing areas is standard.

Source: ROTEX Global, LLC

Conmac Ukraine/KievBuild

Conmac Ukraine, the largest exhibition for the construction industry in Ukraine, will take place February 24-27, 2009, welcoming thousands of trade buyers. With just 20% of the space still available, now is the time to book your stand!

The latest edition of Conmac Ukraine featured 72 exhibitors and, judging by current bookings, we expect the show to grow considerably in 2009. A large part of this growth must be attributed to the booming construction market in Ukraine.

Conmac Ukraine is the ideal platform from which to launch your products in the region, presenting them to a targeted audience and gauging demand. Unlike other forms of promotion, exhibition participants can demonstrate products in action and meet buyers face to face to maximize sales potential.

Conmac Ukraine is officially supported by: Ukraine Committee for Building and Architecture and the National Union of Architects of Ukraine. The event is held alongside Ukraine's largest building and interiors exhibition, KievBuild, which features over 500 exhibitors and recorded an attendance of over 20 000 in 2008.

Conmac Ukraine, is produced by ITE Group plc, of London, UK. They also produce construction events in Algeria, Kazakhstan, Turkey and Siberia.

Source: Mining and Construction Division, ITE Group plc

Appointments

Rick Curnutte, manager, Telescopic Boom Cranes, announced the promotion of **Brian Smoot** to marketing specialist, Telescopic Boom Cranes, Link-Belt Construction Equipment Co.

Brian Smoot most recently worked in the service department supporting Link-Belt customers in the field. Prior to that, he worked in the service training department. Before coming to Link-Belt, Mr. Smoot was an assistant service manager in an auto dea-



lership gaining a strong mechanical background and extensive customer service experience.

"Brian's service background gives him a thorough technical understanding of our cranes and the needs of our customers," said Curnutte. "He is already a strong customer advocate and will be a great asset to our marketing department."

Source: Link-Belt Construction Equipment Company,

Manitowoc has appointed Keith Crider as regional business managers overseeing sales of Manitowoc crawler cranes and Grove mobile cranes for the Northeast region of the U.S. and Canada.

In his new role, Mr. Crider will work closely with Manitowoc dealers in his regions. He reports to David Hull, Manitowoc's vice president of sales for North America.

Keith Crider brings almost 30 years of Manitowoc experience to his new position. Prior

to this most recent appointment, he was director of service operations at Manitowoc Crane Care where his role included the development of Latin America's Crane Care organization.

Source: The Manitowoc Company

Venetor Group of companies, the largest independently owned Crane & Equipment Rental House in Ontario, is pleased to announce that John French has joined Venetor as an account manager in their Hamilton branch. John will be responsible for strengthening Venetor's position in the contractors' equipment market.

Vince Oddi, sales manager of Venetor Group says "We are very pleased to have John join our team. Having come from Hertz

Equipment Rental, John has first hand knowledge in the rental industry and contractor's equipment. He brings with him a strong commitment to customer service which compliments one of our core competencies. Customer service is what differentiates Venetor from its competition." Source: Venetor Group



MARCH 5 & 6, 2009

THE MEETING PLACE FOR CANADA'S HEAVY EQUIPMENT LEADERS

The nation's largest Heavy Equipment Show is back and bigger than ever at the International Centre in Toronto March 5-6, 2009. This show has evolved into the must attend event for the heavy equipment industry. If you are in the Heavy Equipment Business, The National Heavy Equipment Show (NHES) is the venue to kick-start your sales for 2009!

The Gravel Pit – Crushing – Processing – Recycling – Haulage

The Gravel Pit is the newest exciting feature added to the highly acclaimed NHES. This section of the International Centre will showcase the largest and most complete lines of equipment for the aggregate and roadbuilding indus-

try, including crushers, rock screens, recyclers, excavators, drilling and so much morel Aggregates & Roadbuilding Magazine is delighted to be the official sponsor of the Gravel Pit. This industry leading publication will also publish the official show guide, show previews and reviews. Endorsed by:

BACKHOE RODEO

Backhoe operators from across the country will showcase their skills and vie for the coveted trophy and other prizes, as well as the prestige of being named the nation's best. This event always draws a standing-room only crowd and is sure not to disappoint.

NATIONAL

RENTAL EQUIPMENT PAVILION

This feature just keeps growing and growing, with space for exhibitors at a premium. Rental Products specialists in the light and heavy construction sector flock to this area of the show to showcase their products and packages. If you rent Heavy Equipment of any sort, this is the location for you. Book early, as space is limited!

SHOW HOURS

Thurs, March 5th • 9:00am - 8:00pm Fri, March 6th + 9:00am - 5:00pm

BOOK YOUR SPACE TODAY!

Mark Cusack • mcusack@mpltd.ca Rob Etmanski • retmanski@mpltd.ca

TOLL FREE 1-888-454-7469





Produced by

Master Promotions Ltd.







AGGREGATES &

ROADBUILDING

ADA









CONSTRUCTION • ROAD BUILDING • LAND IMPROVEMENT • INFRASTRUC

N



Agenda

Congrès INFRA 2008 November 17 - 19, 2008 Quebec City, QC Canada

Civils 2008 November 18 - 20, 2008 Earls Court, London, UK

SISS 2008 International Road Safety Exhibition November 20 - 22, 2008 Verona. Italv

Bauma China 2008 November 25 - 28, 2008 Shanghai, China

Asphaltica Urbania Exhibition of Equipment and Technologies for the Asphalt Industry November 27 - 29, 2008 Padova, Italy

inter airport China December 2 - 4, 2008 Beijing, China

Pollutec 2008 December 2 - 5, 2008 Lyon, France

Congress - International Horticultural Trade Show and Conference January 6 - 8, 2009 Toronto, ON Canada

LogiCon 2009 February 2 - 4, 2009 Brussels, Belgium

Concrete Sawing & Drilling Association - CSDA 2009 Convention March 3 - 7, 2009 Cancun, Mexico

National Heavy Equipment Show March 5 - 6, 2009 Toronto, ON Canada



INTERY AT

World of Asphalt / AGG1 Aggregates Forum & Expo March 9 - 12, 2009 Orlando, FL USA

EXPO Grands Travaux April 3 - 4, 2009 Montreal, QC Canada

ExpoCam 2009 April 16 - 18, 2009 Montreal, QC Canada

Intermat 2009 April 20 - 25, 2009 Paris, France

Building Fairs Brno April 21 - 25, 2009 Brno, Czech Republic

WasteTech 2009 6th International Trade Fair on Waste Management, Recycling and Environmental Technology June 2 - 5, 2009 Moscow, Russia CTT Moscow 2009 - 10th International Show of Construction Equipment and Technologies June 2 - 6, 2009 Moscow, Russia Hillhead 2009

June 23 - 25, 2009 Buxton, UK

CAM-Logique September 17 - 19, 2009 Montreal, QC Canada

ICUEE - The International Construction & Utility Exposition October 6 - 8, 2009 Louisville, KY USA

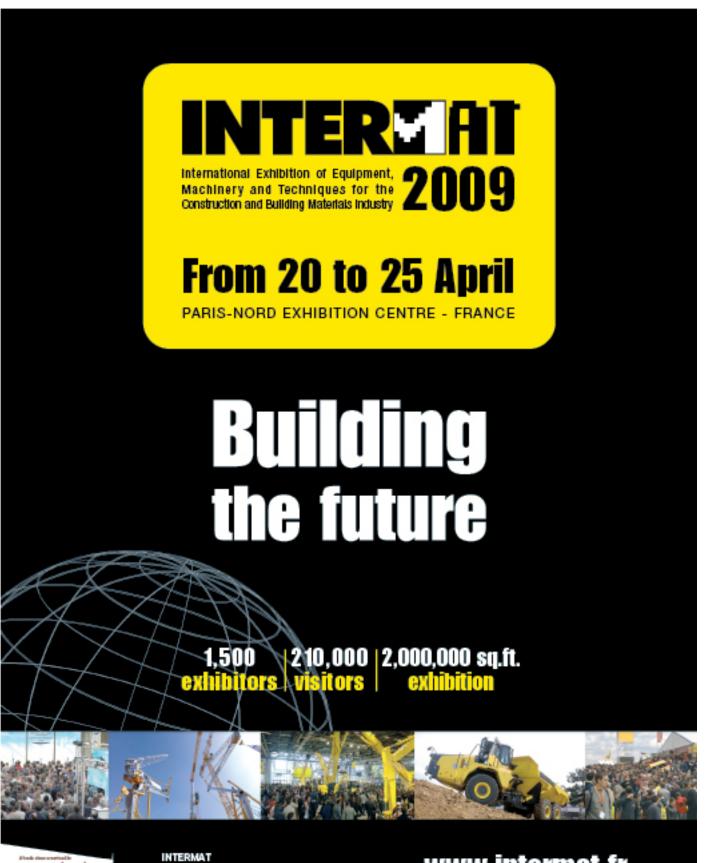


Bauma 2010 April 19 - 25, 2010 Munich, Germany



InfraStructures English Edition November 2008 - page 26





comexposium

INTERMAT ç/o IMEX Management, Inc. T: 704.365.0041 - F: 704.365.8426 E: Intermat@Imex.mgt.com

www.intermat.fr

