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LeeBoy 665B Grader 47 HP Kutoda Tier 3 diesei engine, 7,880 bs operating weight, 2 speed hyddrostatic tandem drive, 8 foot sliding moldboard, center-mounted scarifler, optional endosed cab, tit console

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### A Brief Word...

Holidays have come and gone and the promise of a New Year beckons. But what sort of year will it be?

There will be a steady stream of work, in part due to government involvement, in part from carry-over and in a large part because some things just must be done. The biggest sector of the docile recovery will be retrofits, upgrades and maintenance. Lifecycle extension maintenance needs to be done in oder to offset a prolonged lack of preventative maintenance, particularly to roads, the electricity grid and other critical infrastructure.

It will not be white collar or virtual work that will carry most of us through the next year and beyond. It will be the old-fashioned blood, sweat, toil and tears kind. The kind that does not make the headlines and is unlikely to dramatically affect the jobless statistics, in no small part because there are too few who are willing to take up the challenges.

That is why InfraStructures is here, to help inform you about products and techniques that are available to you to do more with less. Our shrinking and aging workforce has required manufacturers and contractors alike to create and innovate in order to maintain levels of service and profitability. The development of "point and shoot" technologies is an ever growing theme and we will be there to report to you about them. From Congress to Conexpo and beyond it promises to be an eventful journey.

All the Best to you,

www.aolamLoom



On the cover:

two Atlas Copco hydraulic hammers mounted on Caterpillar 365 CL and 345 DL excavators are used on a dredging job for the Ministry of Sustainable Development, Environment and Parks, on the Mille-Îles river, north of Montreal, Quebec.

1-800-461-197

Excavation will cover an area of 15 000 m<sup>2</sup> and extend to between 60 and 75 cm in depth in order to guarantee a safe, permanent supply of drinking water to more than 400 000 residents of the area.

#### CATERPILLAR TO ACQUIRE BUCYRUS

Caterpillar Inc. and Bucyrus International, Inc. announced recently they have entered into an agreement under which Caterpillar will acquire Bucyrus International in a transaction valued at approximately \$8,6 billion (including net debt). The acquisition is based on Caterpillar's key strategic imperative to expand its leadership in the mining equipment industry, and positions Caterpillar to capitalize on the

robust long-term outlook for commodities driven by the trend of rapid growth in emerging markets which are improving infrastructure, rapidly developing urban areas and industrializing their economies.

Under the terms of the transaction, which has been approved by the boards of directors of both companies, Bucyrus shareholders will receive \$92 per share, \$7,6 billion in aggregate consisting of all cash. The transaction represents an implied premium of 32% to Bucyrus' share price as of November 12, 2010. Caterpillar will fund the acquisition through a combination of cash from the balance sheet, debt and up to \$2 billion in equity. The transaction is expected to close in mid-2011. Caterpillar intends to locate its mining business headquarters in South Milwaukee, Wisconsin, where Bucyrus headquarters is currently located, and maintain the Bucyrus brand for the principal Bucyrus legacy products.

"For several years, mining customers have been asking us to expand our range of products and services to better serve their increasingly complex requirements," said Caterpillar chairman and CEO Doug Oberhelman. "This announcement says to those customers, we heard you loud and clear. It is a strong statement about our belief in the bright future of the mining industry. Our strategy calls for disciplined investment in attractive industries that value our product and service delivery model," he added.

The closing of the transaction is subject to regulatory approvals, customary closing conditions and approval by Bucyrus stockholders. At that time, Caterpillar group president Steve Wunning will have executive office accountability for Bucyrus, along with his current responsibilities for the company's mining business.

Source: Caterpillar Inc.

👸 booths 130, 1913

### **TOROMONT TO SPIN OFF ENERFLEX**

Toromont Industries Ltd. recently announced its Board of Directors has unanimously approved a proposal to spin off to its shareholders Enerflex Ltd., a market leading supplier of natural gas production & processing equipment, as a separate, publicly traded company.

The spinoff is designed to enhance long term value for the shareholders of Toromont by separating its businesses into two distinct public companies. Each will be better able to pursue independent strategies and opportunities for growth.

After the spinoff, Toromont's operations will consist of Toromont CAT, Battlefield -The CAT Rental Store, and CIMCO Refrigeration.

Enerflex is the market leader in the compression business in Western Canada and Australia and is a leading supplier in the United States and the Middle East.

The transaction will see existing



Toromont shareholders exchange each current Toromont share for shares in both the new Toromont and in Enerflex, which intends to apply for its own listing on the Toronto Stock Exchange.

The management teams of Toromont and Enerflex will remain in place following the spinoff. Toromont will be led by Robert M. Ogilvie as chairman and CEO, continuing more than 25 years of leadership. Enerflex will continue to be led by Blair Goertzen as president and CEO. Mr. Goertzen has been Enerflex's CEO for four years, including three years while Enerflex was an independent, TSX listed issuer.

Source: Toromont Industries Ltd.

#### WEBSITE LAUNCHES TO CONNECT CON-STRUCTION INDUSTRY WITH SUPPLIERS

Sourcing of composite materials for building applications is now much easier thanks to the introduction of CompositeBuild.com, a website that connects composite manufacturers with architects, engineers, designers and builders. This new tool, sponsored by Ashland Inc., provides an easy method for learning about and specifying composite building materials for various commercial and residential building projects.

"We introduced this website to help connect those who specify and source building products with composite manufacturers who participate in that market," said Ted Harris, president, Ashland Performance Materials. "This effort truly assists designers, architects and engineers with finding composite material solutions for their creative building plans."

The CompositeBuild.com website is open to all composite building materials manufacturers. Fabricators of composite building materials or their distributors can be listed on the website free of charge. The interactive design of the website allows visitors to move through a residential or commercial building and find areas of construction where composite materials are a good fit.

Ashland Performance Materials is the number one global leader in unsaturated polyester resins and vinyl ester resins. In addition, it provides customers with leading technologies in gelcoats, pressuresensitive and structural adhesives, and metal casting consumables and design services.

Source: Ashland Inc.

### **ALLISON TO CO-SPONSOR EMERGING TECHNOLOGY DAY AT INDIANAPOLIS MOTOR SPEEDWAY**

Allison Transmission, Inc. recently announced that they will co-sponsor Emerging Technology Day to be held in May 2011 at the Indianapolis Motor Speedway (IMS). This event is part of the IMS's 100th Anniversary Indy 500 celebration.

The event will highlight innovative renewable technologies by some of the brightest young minds in America. Three main competitions will be featured: The Formula Hybrid, an exhibition competition that challenges university students to design, build and race high performance, plug-in hybrid vehicles, The American Solar Challenge, a competition to design, build and drive solar powered cars, and a Purdue University electric powered kart race.

"Allison's sponsorship of Emerging





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Technology Day is a natural extension of our commitment to developing future technologies and to building strong relationships with university talent and the Speedway, Indiana community," said Allison Transmission vice president of Engineering, Randall Kirk.

Allison Transmission was started by James Allison, one of the original founders of the IMS and team owner of the 1919 winning Indy 500 car. As a result, Allison and the IMS have enjoyed an association for almost 100 years.

Today, Allison's vision of driving transmission technology has made them the premier global provider of commercial duty automatic transmissions and the world's largest producer of commercial hybrid systems.

Allison was one of the first to develop a commercial hybrid system for transit buses, and now their product is in nearly 3000 buses around the world.

A new Allison hybrid propulsion system is currently in the works for medium duty trucks that will utilize the most advanced hybrid technology to deliver greater fuel efficiency and performance to even more vehicles.

Source: Allison Transmission, Inc.



#### **NEW "GREEN ROADS SUMMIT" AT** CONEXPO-CON/AGG 2011

Increased interest in green highways is a natural extension of the fast-growing green building movement in construction. A new "Green Roads Summit" at CONEXPO-CON/ AGG 2011 will offer attendees ready-to apply green construction techniques and the latest environmental information affecting job sites, including green roads programs.

The daylong event, which includes a closing reception, is March 24, 2011 and is open to all show attendees. CONEXPO-CON/AGG 2011 will be held March 22-26, 2011 in Las Vegas, Nevada.

The Green Roads Summit is a collaboration between CONEXPO-CON/AGG and Construction Materials Recycling Association (CMRA), U.S. Federal Highway Administration (FHWA), U.S. Environmental Protection Agency (EPA) and Associated General Contractors of America (AGC).

Also participating are industry experts from groups including Maryland State Highway Administration, New York Department of Transportation, American Concrete Pavement Association (ACPA), Diesel Technology Forum, National Asphalt Pavement Association (NAPA) and Rubber Pavements Association.

"Sustainability is an issue that transcends national borders, so attendees from the United States as well as worldwide will find the topics of interest. It's a great opportunity for attendees to meet with leaders in this emerging area to discuss current and future best practices," stated William Turley, executive director of CMRA.

Kicking off the event is Steven Van Beek of the ENO Foundation for Transportation, talking on "Climate Change, Sustainable Transportation and Economic Competitiveness". Emerging trends in sustainability is the focus of the summit's morning general sessions, including FHWA's sustainable highway criteria tool and pilot projects.

Afternoon breakouts will cover a variety of topics related to recycling and reuse,

stormwater management and climate/air issues.

Recycling/Reuse breakouts will discuss use of industrial byproducts in pavements, recycled asphalt pavement, scrap tires in rubberized asphalt, in-place concrete and asphalt pavement recycling and two-lift concrete construction with recycled concrete.

Stormwater Management breakouts will focus on watershed-based stormwater management, low-impact development processes/practices, performance/value of green infrastructure, and case studies of the Colorado stormwater excellence program and Maryland inter-county connector.

Climate/Air breakouts will cover achieving profitable and sustainable fleet operations, regulatory updates and a "clean diesel" retrofit case study.

Source: Association of Equipment Manufacturers



### Atlas Copco XRVS 1000 CD6 Provides **Drilling Power for Quebec Quarry**

Quebec-based drill and blast contractor, Forexplo has taken delivery of the second Atlas Copco XRVS 1000 D6 portable air compressor after winning a second quarry contract; attributing the order to the "exceptional fuel consumption of the compressor."

Formed at the beginning of 2010, Forexplo has quickly established itself as a drill





awarded further contracts. A key factor in meeting the production targets, accord-

ing to vice president Robert Bilodeau, is the on demand high pressure air provided by the two Atlas Copco compressors for two 750 hp drill rigs. The XRVS 1000, rated with a free air delivery of 1000 cfm at 25 bar (365 psi) is powered by a Caterpillar C13 ACERT Tier 3 diesel engine and Atlas Copco FuelExpert to provide fuel consumption figures of just 60-62 l/h.

Bauval is a leading supplier of aggregates, concrete constructions, building products and industrial services in

Quebec and generates a number of quarries and sandpits across the Province.

Source: Joem Promotions on behalf of Atlas Copco Portable Air Division Atlas Copco



### CDE ESTABLISHES ORE PROCESSING HEADQUARTERS IN INDIA

CDE Global used their attendance at the International Mining and Machinery Exhibition in Kolkata, India, last month to launch their enhanced iron ore beneficiation offer to the Indian mining market.

The suite of iron ore beneficiation plants being offered by CDE integrates the products and services of many of the leading names in the global mineral processing sector and all were present on the CDE stand in Kolkata to celebrate the new partnership.

With a history in the construction sector, CDE established a presence in India in 2005 with their factory facility on the outskirts of Kolkata opening in 2007. Following entry into the market the opportunities for developing the product range to cope with the specific requirements of the iron ore processing sector became apparent and this process was led by the India office.

The company has completed many iron ore washing plant installations over the last three years in India and count among their customers some of the largest steel producers in India including SAIL and Bhushan Steel.

"The potential in India is huge and the CDE Asia team is now recognized as the ore processing experts" says Brendan McGurgan, CDE managing director at their global headquarters in Northern Ireland. "We will continue to support the activity of the India office wholeheartedly while focusing on ensuring continuing growth in our construction and environmental divisions."

The enhanced beneficiation capability offered by CDE is made possible through the development of several partnerships. Promet Concentrators of Australia have a broad range of experience in the design and execution of many major ore processing projects throughout the world and are now working with CDE on similar projects throughout India.

Source: CDE Global

### AECON AWARDED CONTRACT TO EXTEND TTC SUBWAY

Aecon Group Inc. announced recently that a group led by Aecon has been awarded a \$279 million contract by the Toronto Transit Commission (TTC) to complete the first leg of the Toronto-York Spadina Subway Extension.

The Aecon team will extend the TTC's Spadina subway line from the existing Downsview station to the new Sheppard West station and on to the new Finch West station. The contract includes construction of the new Sheppard West station, an integrated subway / GO Transit rail station to be located southeast of Sheppard Avenue and Bakersfield Street, at the north

end of Downsview Park. The three-level station, to be constructed by Aecon Buildings, will be approximately 10 200 m² and is intended to provide access for existing and future facilities and developments in the Keele Industrial Area located to the north of Sheppard Avenue, as well as to Downsview Park.

Source: Aecon Group Inc.

### Merlo Telehandler Meets Needs of Ontario Landscaping Contractor

Last May, Manulift EMI Ltd. launched the Merlo Compact 25.6 telescopic handler, and Coivic Contracting Ltd. was the first company to purchase the unit. In fact, the company bought it the first day it was available.

Coivic Contracting serves the Greater Toronto Area (GTA), and daily work for the company consists of loading and unloading stones and pavement, handling materials on site, and erecting



stone walls and embankments in restricted spaces. The Merlo Compact 25.6 is ideal for these applications, due to its 2500 kg lifting capacity, 6 m reach and compact dimensions.

Coivic Contracting has been so pleased with the unit that it is considering purchasing another Merlo for his sandpit.

Source: Manulift EMI Ltd.

## Milwaukee® Introduces Industry's First Subcompact Hammer Drill Driver

Milwaukee Electric Tool Corporation continues to expand their M12™ Lithium-lon system with the introduction of the industry's first subcompact hammer drill driver. Delivering 275 in-lbs of torque and 0-400 / 0-1500 rpm, this new tool features best in class power, speed, and durability in a compact, lightweight size.

In addition, the M12<sup>™</sup> Hammer Drill Driver features a metal gear housing for best in class durability and a single sleeve, metal ratcheting chuck for superior bit retention. An integrated fuel gauge and LED light provide added user convenience and minimize downtime on the jobsite.

Compatible with over 25 tools on the M12<sup>™</sup> cordless system, the new hammer drill driver is one of the first products powered by RED LITHIUM® battery technology to deliver unmatched run-time,

performance and durability for the professional tradesman. With constant innovation in lithium-ion and plans to grow the M12<sup>™</sup> cordless platform in the future, MILWAUKEE<sup>®</sup> continues to expand its leadership position in the subcompact category. The M12<sup>™</sup> platform will continue to offer innovative solutions in power, productivity, and portability.

Source: Milwaukee Electric Tool Corporation

### The 2010 Swedish Steel Prize Goes to Van Reenen Steel

This year's international Swedish Steel Prize goes to the South African company Van Reenen Steel Ltd. The company has developed a lighter and more durable body



for dump trucks in the mining industry.

The purpose of the Swedish Steel Prize is to provide inspiration and to disseminate knowledge about high strength steel and the potential for developing lighter, safer, and more environmentally sound products – all qualities of the prizewinning solution.

"Van Reenen's solution is very interesting and shows the benefits of highstrength steels," says Martin Lindqvist, chairman of the jury and Business Area manager SSAB.

"Just to be nominated was a great honor, but to be declared the final winner is certainly the highlight of my 25 years in design engineering, and also

the most important technical achievement of Van Reenen Steel in the 20 years of its existence. This prize shows that our team of design engineers in South Africa can hold their own with the best in the world," says Bertus Haasbroek, technical manager at Van Reenen Steel.

The new award-winning truck body design features a raised ridge dividing the floor of the truck body down the middle. This design modification offers the clear advantages of less wear and easier unloading. In addition to a stronger and more

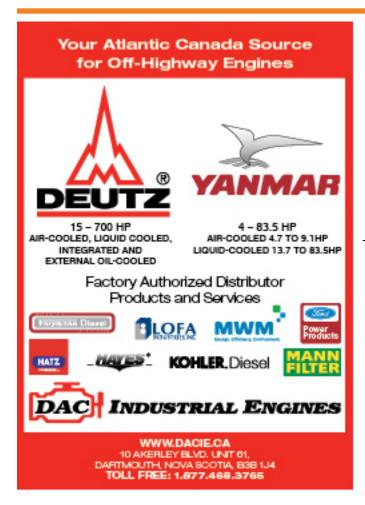
rigid construction, the vehicle weight was also reduced by 19%. This weight reduction saves fuel, is good for the environment, and allows the vehicle to carry a larger load.

The other nominees received runner-up prizes in the 2010 Swedish Steel Prize competition. They are Blupoint PTY Ltd from Australia, Ruthmann GmbH & Co from Germany, and Wranne Fåhraeus Design AB from Sweden.

Source: SSAB



booth 10808





### **Allison Continues to Optimize for 2011**

Allison Transmission Inc. widens its ongoing product optimization initiative with new features for 2011.

All Allison Automatic 2011 models are available with new Economy Shift Schedules for even greater fuel economy.

For school buses, Allison 1000/2000
Pupil Transport/Shuttle Series models are available with Increased Torque Converter Lockup Availability. Lockup occurs when the torque converter achieves a direct connection between the engine and the transmission. Allison's new Increased Lockup Availability enables the transmission to shift into lockup in 1st range, and stay locked-up through the higher range. Locking the converter earlier builds upon the already superior balance of fuel economy and vehicle performance.

Allison 2<sup>nd</sup> Reverse is now an available option for the Oil Field Series 4700 model. 2<sup>nd</sup> Reverse offers a second "deep reverse" in addition to the standard reverse. It provides more maneuverability when

operating in confined spaces and slow creep capability with high engine speeds, perfect for positioning heavy rigs.

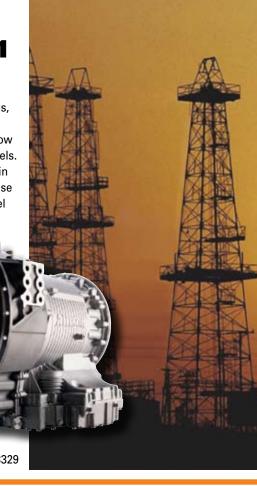
Variable Modulated Main (VMM) is now featured with all Allison 3000/4000 models. VMM modulates the pressure required in the internal lubrication system to increase transmission efficiency and improve fuel economy.

And, Allison
3000/4000 models are now
available
with new
Low Speed
Grade Assist
to provide
improved
performance
and reduce heat
generation when

climbing grades.

Source: Allison Transmission, Inc.

booth 18329







# Atlas Copco HB 7000 Breaker Turns a Nuclear Facility into a Valuable Property

Indiana's only nuclear facility has not been notable for anything other than being an eyesore and a 30-year-old unfinished project. Now MCM Management Corp. is reclaiming the property with the help of Atlas Copco breakers and is turning the property into a valuable piece of riverside land. To do that, MCM is clearing land occupied by administrative buildings, outbuildings and thick concrete and rebarcovered silo and containment structures built literally nuclear blast proof.

MCM owns 233 ha of this property, of which 760 m are along the Ohio River. The nuclear power plant was known as Marble Hill and is located north of Louisville, Kentucky, and south of Madison, Indiana.

Construction began in 1977 and was halted in 1984 with Unit 1 approximately 80% complete and Unit 2 40% complete. A proposal in June 1984 to complete the project was made by three of the major construction contractors but was rejected



because it required Public Service Indiana to continue to find financing for the \$7,1 billion project.

Mark Ramun, vice president of MCM Management, said, "Nobody ever considered how it would be to take apart. Conventional tools don't exist to handle it. The amount of engineering we've done so far just to get to where we are has been extensive."

MCM worked with Columbus Equip-

ment, an Atlas Copco dealership in Cincinnati, Ohio, managed by Jeff McVey. Fred Wahl handled the sale and said, "This job required breakers bigger than most of our customers regularly use."

Dan Perry, MCM equipment manager, said, "Challenging isn't even a word for it. It could not be destroyed." He has worked in the equipment industry for 30 years and has seen a lot of demolition projects, but said this one was unique. He noted



that the company's 11 t wrecking ball was supplemented by the Atlas Copco HB 7000.

Denise Brown is site manager for MCM. She has been in the construction and demolition business her whole life, hanging out with her father on job sites since she was a kid. She said about the Marble Hill construction, "They didn't skimp on rerod. The silos are 1,5 m thick concrete with rerod everywhere."

The hydraulic breaker's job is to expose the rebar so the silos can be imploded and laid over on their sides and to remove the concrete structure separating the two silos. The silos would not tip if the structure behind is intact. The idea, like cutting down a tree, is to give the structure a wedge on one side and a stress point at which to break on the other. The breakers have to remove the building to allow for that break point.

Throughout the project the concrete surrounds the steel rebar like a thick skin. To determine what explosives are necessary to implode the silos, test shots are necessary. Test holes (7,5 cm in diameter and 0,4 m deep) are drilled to load dynamite.

Dynamite is loaded at 1,6 kg per drilled hole in a 0,91 m  $\times$  1,06 m pattern. To drill the holes up to 21,5 m up the sides of the silo, MCM uses an air drill mounted on a hydraulic fork lift.

Subcontractor Chicago Explosives is the blasting contractor on the job. Fred Nicol is managing the blasting for Chicago Explosives. As a former mining explosive engineer, he has seen blasting from all angles. He moved from mining to demolition in the 1980s. His statement about the blast is very simple. "It's unwilling. You could run a train into this and it wouldn't budge."

In addition to the hundreds, if not thousands, meters of steel rerod of varying diameters, within the silos are thick steel beams and below grade is a round, steel vessel, which was meant to contain the nuclear material. Also, stainless steel tanks inside the facility are nearly four stories deep, sunk into the ground. Mr. Nicol said, "Basically, this is an amazing amount of thick steel."

Diane Brown said the structures were all well built and it was obvious that quality

workmanship was a focus for the engineers as well as contractors.

While the story of Marble Hill has not

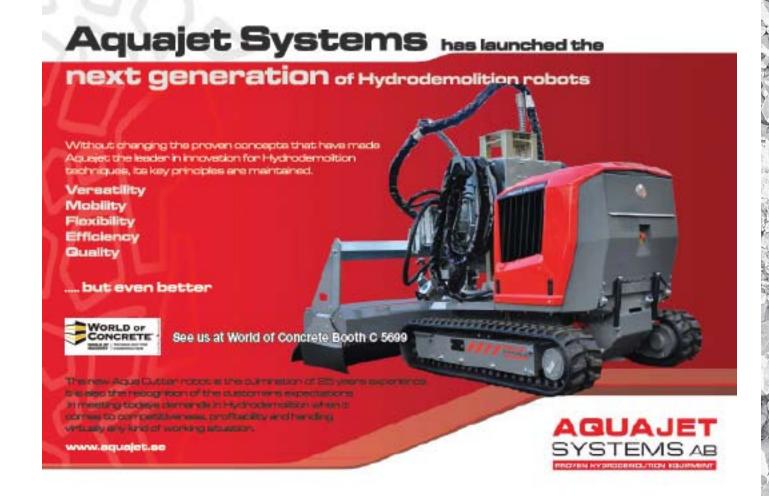


been positive to date, that is about to turn around. Since it was never activated and never contaminated, almost all of the materials on site will be recycled. We can all look forward to what the future of the riverside property might bring.

Source: Atlas Copco



**((6)** booth 6657



### **New Bergkamp Mobile Stockpile**

Bergkamp Inc. will display its new Mobile Stockpile at Conexpo. A fully mobile material transfer and storage trailer, the Mobile Stockpile dramatically increases paving time for less cost and eliminates the possibility of truck overweight citations. Truck-mounted micro surfacing pavers can easily connect to the Mobile Stockpile and be fully replenished with aggregate and emulsion. Bergkamp will display two other pieces of equipment that can work with the Mobile Stockpile to complete the slurry seal and/or micro surfacing process. The M310 truck-mounted slurry seal and micro surfacing paver allows operators to easily calibrate the machine, control production rates and simplify maintenance. The Variable Width Spreader Box (VSB) attaches to the M310 and allows contractors to quickly adjust paving widths from as narrow as 2,7 m feet to as wide as 4,3 m.

The same number of pavers can do

significantly more work in less time because the Mobile Stockpile eliminates the need to drive away from the immediate job site to reach a stockpile location. By using existing standard dump trucks to load the Mobile Stockpile with aggregate and tankers for emulsion, contractors avoid the risk of receiving overweight citations due to overloaded pavers driving to the job site from a stockpile location. Water is replenished via a separate source. The Mobile Stockpile is designed to use a minimal footprint of one lane width of roadway for an entire stockpile operation. Trucks can bring materials to it directly from the supplier, reducing coordination issues associated with finding stockpile locations and simplifying job management while lowering job cost.

Bergkamp's M310 truck-mounted slurry seal and micro surfacing paver uses the EMCAD System to help operators easily



calibrate the machine, control production rates and simplify maintenance. It electronically self diagnoses control system or engine problems and displays a simple error code, reducing troubleshooting and repair time. Connecting to the micro surfacing paver, the VSB easily replaces standard spreader boxes and can expand and contract while paving to match roads that fluctuate in width. It is available in 2,4 to 4,0 m, 2,7 to 4,3 m and 3,0 to 4,6 m models. Widths up to 4,9 m are available by special order.

Source: Bergkamp Inc.



booth 700

### W.S. Tyler to Unveil Advanced Solutions At Conexpo

W.S. Tyler will display three pioneering aggregate and mineral processing equipment solutions at Conexpo. Making its first North American appearance is the new Haver Pelletizing Disc, which converts fines into marketable pelletized product. The second is the Haver Hydro-Clean™, a high-pressure washing unit that successfully cleans heavy clay-contaminated material while using less water than standard screws and log washers. The third solution is W.S. Tyler's recently introduced Computerized Particle Analysis System (CPA) that analyzes particles as small as 10 µm to determine exact size, shape and quantity. All three solutions exemplify W.S. Tyler's Redefining Technology trade show theme.

The Haver Pelletizing Disc transforms wasteful fines into a transportable and salable product for various fill applications and other uses. The proprietary Haver technology minimizes recirculation loads typical of traditional discs by up to 20%, resulting in significant production and profit increases. Designed to offer variable side wall height, speed and inclination, no other similar technology is as adaptable to the customer's product. The pioneering direct-

drive technology works without a gear box and hydraulic coupling, eliminating the maintenance required for traditional components. The efficiency of the drive minimizes energy losses within the system and reduces total energy costs up to 5%.

Capable of handling feed material up to 150 mm in size, the Haver Hydro-Clean employs rotating, high-pressure nozzles to spray clay-contaminated material with pressures up to 2900 psi (200 bar). The washing unit removes silt and clay particles as small as 63 µm from mineral mixtures and, with its short retention times, can process up to 400 t/h, depending on model size and application. Due to its compact size and weight, overall operating and structural costs are considerably less than with traditional washing systems - which also require more equipment and a greater footprint. Using up to 90% recycled water, the Hydro-Clean is the most environmentally positive washing system on the market today.

W.S. Tyler's CPA technology uses a digital line camera to measure particles up to 10 times faster than with conventional sieve methods. With up to 20 000 scans



per second, the CPA's high-resolution line camera captures particle shape and size and records the quantity. CPA technology eliminates manual calculations and keeps results between operators, shifts and plant locations consistent. Using an automatic sample feeder, the CPA can be automated to run operator-free. CPA equipment is available in multiple sizes.

Source: W.S. Tyler



booth 901

### Volvo CE Receives Additional EPA Tier 4i Certification for **High-Horsepower Engines**

Volvo Construction Equipment has received Tier 4 interim emissions certification from the Environmental Protection Agency (EPA) for its Volvo D13 and Volvo D16 engines. EPA certification for Volvo's D11 engine was received in August, 2010.

Implementation of Tier 4i emissions regulations begins January 1, 2011 for engines in the 175-750 hp range. These regulations require a 90% reduction in diesel particulate matter (PM) and a 50% reduction in nitrogen oxide (NOx).

The EPA-certified Volvo D11, Volvo D13 and Volvo D16 Tier 4i engines with V-ACT (Volvo-Advanced Combustion Technology) are built with ultra high pressure variable fuel injection systems, super efficient cooled exhaust gas recirculation (EGR), precise variable-geometry turbo (VGT) turbocharger controls, a powerful new engine management system (EMS), and an integrated exhaust after-treatment system, equipped with a particulate filter and thermal regenerator.

"Volvo Construction Equipment is meeting the emission requirements of the new standards by continuing to engineer and develop engines of the highest quality and reliability and with the greatest performance and productivity accomplishments on the market today," said John Bartz, director, Product Assurance and Regulation, Volvo Construction Equipment North America.

When fully integrated with the rest of the Volvo powertrain, these engines offer even greater market-leading advantages in construction equipment operations. The results from highly-advanced engineering achievements have been increased combustion efficiency, engine response and performance, power capacity, and the



required emissions reductions.

Similar emissions regulations have already been enforced in the on-highway truck sector since 2007 and, as one of the world's largest manufacturers of diesel engines in the 9-18 liter range for both on-road and off-road operation, Volvo has previously developed EPA certified technological solutions for sister companies Volvo Trucks and Volvo Penta. This vast experience - not to mention the millions of hours of real world testing - has proven invaluable in producing off-highway engine systems to comply with the Tier 4i emissions legislation.

At the heart of Volvo's technology is its new generation of electronically controlled diesel engines, using the highly acclaimed V-ACT system with enhanced engine monitoring, greater control capabilities, and higher torque. The EPA-certified engine features exhaust gas recirculation (EGR), which lowers the amount of oxygen in the combustion chamber. This reduces combustion peak temperatures, which lowers the formation of nitrogen oxides (NOx). Ultra-low sulfur fuel, required by Tier 4i regulations, permits the safe and efficient use of a new cooled EGR system, designed to allow more exhaust recirculation than previous generations of engines.

The reduction of particulate matter (PM) from diesel engines is the major target of the EPA Tier 4i regulations. The new Volvo system uses a special filter traps the particulates (black soot from the exhaust) and holds them to be removed by oxidation or what is called "regeneration". Volvo's regeneration system operates while the machine continues work, keeping productivity high.

Source: Volvo CE North America, Inc.

🔊 booth 1641

## **Screen Media Innovations at Conexpo**

Montreal-based Major Wire Industries Limited will display its multiple innovative screen media solutions at Conexpo. The

company offers many uniquely different screen media options to choose from, so customers can fine tune each screen's production resulting in the most tons per hour of in-spec products for the least cost possible.

Major Wire's revolutionary

Flex-Mat 3 High-Performance, Self-Cleaning screen media technology is available in a Tensioned version as an alternative to traditional woven wire and a Modular version designed to replace polyurethane and rubber modular screen panels. Flex-Mat 3 panels provide up to 30% more screen capacity than woven wire and up to 50% more screen capacity than polyurethane and rubber panels. Independently vibrating wires increase product throughput by up to 40% over traditional woven wire or polyurethane panels by increasing open area and eliminating blinding, pegging and clogging. Major Wire's OptimumWire Woven Wire has a unique chemical makeup that

provides up to 40% longer wear life when compared to traditional woven wire of the same diameter. Delivering the industry's



best combination of ductility, hardness and tensile strength, OptimumWire is less susceptible to breaking in high-impact conditions and with highly abrasive materials, so it lasts longer and minimizes labor, maintenance and lost production costs. In addition to these two popular screen media solutions, Major Wire will also be showcasing the LFM Harp Wire, the Double-Weave Woven Wire, the HyperSlot, and Flex-Mat 3 Double-Wire.

Source: Major Wire Industries Limited

## "Hot on Hot" Plus Conventional Paving With the Same Machinery



Contractor Kemna Bau Andreae GmbH & Co. KG used its new Vögele InLine Pave® train for the first time for pavement rehabilitation on the B 95 federal highway near Leipzig, Germany. The core element of the "hot on hot" paving method for asphalt roads is the SUPER 2100-2 IP paver for binder course equipped with the AB 600-2 Extending Screed in TP2 Plus version for extremely high precompaction.

The B 95 federal highway east of the town of Rötha close to the gates of Leipzig was in need of repair. Extending over a length of 4,7 km in all, the project was divided into four sections. Three of them were rehabilitated using the economical

InLine Pave® technology from Vögele. On the fourth section, the roadworks were carried out in the conventional manner as the binder course was still intact.

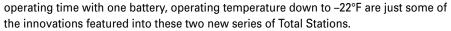
MODULAR DESIGN CRUCIAL FOR VERSA-TILE APPLICATION AND HIGH UTILIZATION

The InLine Pave® Machine Technology

offered by Vögele shows off its skills on just this kind of job site, where paving is performed both "hot on hot" and in the conventional manner. This is due to the fact that the paving train uses machines of standard design, with only the SUPER 2100-2 IP paver for binder course being slightly modified. With the SUPER 1800-2,

## GeoMax Introduces New Total Stations Zoom30 and Zoom20

GeoMax announces the release of the all new GeoMax Zoom30 and Zoom20 total station series. With these two new series, GeoMax now offers an even wider range of total stations for the surveying, construction and mapping industry. Designed in Switzerland and manufactured in our facilities, the GeoMax Zoom30 and Zoom20 series "works when you do". The class leading accXess™ reflectorless measurements technology measuring up to 600 m, integrated Bluetooth®, USB memory stick port, 36 h



Source: GeoMax NAFTA



applied by contractor Kemna for placing surface course in the InLine Pave® train, the MT 1000-1 Mobile Feeder and the SUPER 2100-2 IP for binder course, the company now has three Vögele machines that are perfectly matched to one another, but can nevertheless be used for other paving jobs

manager of Kemna's Leipzig branch, when justifying the purchase decision.

#### FIRST INLINE PAVE® JOB WITH NOT A SINGLE INTERRUPTION

One important factor for the success of "hot on hot" paving is smooth job site

> logistics. A reliable organization of the mix supply, for instance, is crucial and should be well planned and executed by an experienced team. And the team from Kemna fulfilled these requirements exceptionally well. The pave speed was matched to the

rhythm of mix supply and, intentionally, was about 2 m/min. slower than usual. Nevertheless, the roadworks on the B 95 were completed in considerably less time than would have been possible using conventional paving, as binder and surface courses were both laid in a single pass.

The AB 600-2 Extending Screed in TP2 Plus version is a crucial element when paving two layers with the InLine Pave® train. Combined with SUPER 2100-2 IP for binder course, the screed represents the heart of the "hot on hot" paving technique.

It guarantees the extremely high precompaction of the binder course required for "hot on hot" paving, with values of over 98%. The AB 600-2 Extending Screed in TP2 Plus version achieves this high precompaction due to altered tamper stroke lengths, a special tamper geometry and, of course, the use of Vögele pulsedflow hydraulics with two pressure bars for high compaction.

The high precompaction creates conditions that allow the paver placing surface course to travel on the freshly laid binder course. When built up with bolt-on extensions (for this job 2 x 1,25 m), the screed handles pave widths up to 8,5 m. On the job site near Leipzig, this enabled Kemna to pave in full-road width.

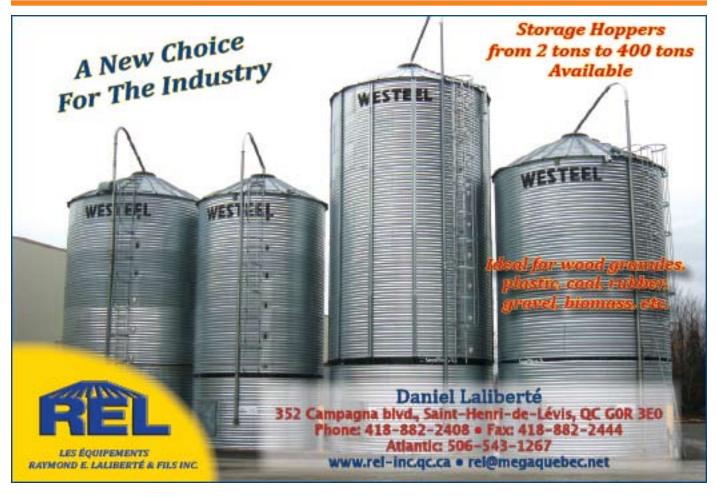
Source: Joseph Vögele AG Wirtgen Group





at all times.

For contractor Kemna, modularity was a major point in favor of the Vögele InLine Pave® technology. "This significantly increases the utilization of the machines in our equipment pool and the profitability of the investment," explained Michael Kaiser,



### **CON-E-CO Expands ALL-PRO Product Line**

CON-E-CO, an Oshkosh Corporation company, recently introduced the CON-E-CO® ALL-PRO 5 and ALL-PRO 12 decumulative batch plants engineered for global markets. The company also announced that ALL-PRO® batch plants have been sold and placed into service by ready-mix producers in the countries of Colombia, Nigeria and Russia.

"We're very excited to expand our ALL-PRO batch plant line-up to include these two new decumulative models to meet growing worldwide demand for trouble-free batch plants that are maneuverable,

easy to install, and that have a smaller

footprint," said Neil Smith, CON-E-CO general manager. "These additions to the ALL-PRO line give our international customers more choices, and at an excellent value. That's why producers from around the globe are choosing CON-E-CO."

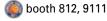
The ALL-PRO 5 and ALL-PRO 12 decumulative batch plants feature 180° access truck charging, a patented LO-PRO® blending cement batcher and an aggregate batcher configured with either two or three compartments. The mixer charging conveyor is available in either 61 cm or 76 cm widths.

The ALL-PRO 5 decumulative batch plant is available with an optional cement storage silo, while the ALL-PRO 12 offers either 400-bbl capacity or to 1230-bbl capacity. In addition, an available overhead truck dust collection system recycles material directly back into the cement batcher.

"With a width as narrow as 2,4 m, the ALL-PRO line-up is very easy to transport – which is another big benefit to our international customers," said Chris Zuniga, CON-E-CO international sales manager. "ALL-PRO has been a very successful product, and with these new models we expect the momentum to continue."

Concrete Equipment Company (CON-E-CO) is a subsidiary of Oshkosh Corporation, and engineers, manufactures and supports North America's leading line of portable and stationary batch plants. CON-E-CO's products have a well-earned reputation for quality, durability and reliability. Around the globe, CON-E-CO batch plants are operating in the U.S., Canada, Mexico, Australia, New Zealand, Israel, Costa Rica, Colombia, Venezuela, Ecuador, Peru, Indonesia, Trinidad, Puerto Rico, and El Salvador.

Source: Oshkosh Corporation



### JW Jones Offers Multiple Aggregate Equipment Options At Conexpo

JW Jones Company, based near Indianapolis, Indiana, will exhibit at Conexpo. Since 1967, producers from around the world have worked with JW Jones to assemble the right mix of refurbished, new, used and customized

aggregate processing equipment to meet their production goals within budget. The company also provides spare parts for all brands of aggregate machinery and can design and deliver a competitively priced spare parts package to match nearly any operation. At the show, producers will see how JW Jones' extensive equipment, parts and service offering can improve their operations' bottom line.

JW Jones specializes in the remanufacturing, refurbishing and customization of all crushing, screening and washing equipment. To offer customers more options, JW Jones is also an Authorized Dealer of new equipment for TRIO Engineered Products, McCloskey International and Lippmann in



Latin America and Indiana and for Eagle Crusher in South America.

Founded in 1967 by former multiquarry owner John W. Jones, the company employs more than 60 people, operates its own trucking transport service, buys and sells used and new crushing, screening and washing equipment throughout North America and maintains an average of \$10-12 million in equipment inventory at all times. JW Jones works with customers direct and in cooperation with dealers, brokers and agents throughout North America, Latin America, Africa, Europe and Asia.

Source: JW Jones Company



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### **Gotthard Tunnel Cut-Through with Leica Precision**

A new world record was established on October 15, 2010, when the miners working on the Gotthard Base Tunnel shake hands after the breakthrough between the Sedrun and Faido access points.

The 57 km Gotthard Base Tunnel will be the longest rail tunnel in the world. That day was also a special day for Leica Geosystems as the Heerbrugg-based company's surveying instruments were used in all areas of the Gotthard Base Tunnel.

Specialists engaged on a wide range of activities in the construction of the Gotthard Base Tunnel placed their trust in the reliability of Leica Geosystems surveying instruments and solutions.

One of these specialists is Ivo Schätti, a senior engineer for the surveying consortium Vermessungsingenieure Gotthard-Basistunnel (VI-GBT). As the surveyors for AlpTransit Gotthard AG, the consortium was responsible for ensuring the correct position, level and direction during the driving of the megatunnel.

"Put simply, our duty was to see that the hole was built in the right place," says Ivo Schätti. With the help of high-performance total stations, digital levels and optical plummets from Leica Geosystems, the position of the "hole" was continuously checked to ensure that it was within the accuracy required by the client – 10 cm transversely and 5 cm vertically over the whole 57 km length of the tunnel!

Adrian Ryf, who is now head of geomatics with AlpTransit Gotthard AG, set a world record of his own at Gotthard. In the summer of 2005, using 28 Leica Geosystems GPS systems simultaneously, the former lecturer at the Swiss Federal Institute of Technology (ETH Zürich) and his students carried out what was then the largest-ever surveying campaign for an engineering project. The aim was to check the permanent station network. It had never been surveyed using GPS, which was a completely new technology in 1995 when the tunnel project started.

"With a construction time of almost 20 years in a tectonically active Alpine region, it was extremely important for the success of the project to check these permanent stations," explains Adrian Ryf. "We did not discover any shifts or differences – and thanks to the successful resurvey of the

principal station network, the work at Gotthard could progress to completion on the basis of first-class survey data."

The contractors' surveyors, the special-

ists in the companies directly involved in driving the tunnel, also depended on the reliability and precision of Leica Geosystems instruments. As Reinhard Deicke, the surveying engineer responsible for the Bodio-Faido and Faido-Sedrun sections for Consorzio TAT (Tunnel Alp Transit-Ticino), explains: "I have

worked with Leica Geosystems instruments for over 30 years and it has always been a good experience. Correctly performed maintenance and servicing are crucial to us. With Leica Geosystems as a partner, we were able to call upon excel-

lent customer service." Over the whole of the construction period, TAT made use of several generations of high-performance total stations and levels, primarily for the control of the tunnel boring machine (TBM), setting out, profile measurement and levelling. "The instruments were subject to punishing conditions in the tunnel, having to operate 24 h/day while retaining their

precision in dirt and dust, and at extreme temperatures of up to 35°C or even higher. In spite of all that, not one of them failed – which speaks admirably for the quality of the instruments themselves, and for the good service provided by Leica Geosystems," he adds.

Leica Geosystems instruments are in use above ground as well, as the Gotthard Base Tunnel passes directly under three water reservoirs. "A tunnel always influences the water balance in the mountain. The loss in pressure due to the water extracted from the rock could result in the mountain literally collapsing," explains Ivo Schätti. To prevent this from occur-

ring, we monitor the movements of the valley sides near the dam walls and in the areas leading up to them. High-precision total stations and Leica GeoMoS monitor-



ing software were used to measure the movements. "The instruments have been in use since 2000 and always performed perfectly," says Ivo Schätti.

"The breakthrough in the Gotthard Base Tunnel, which is being built more or less



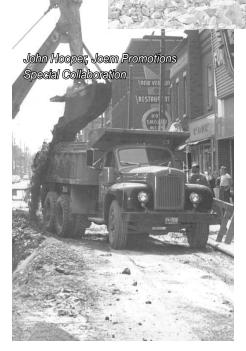
directly on our doorstep, is yet another source of pleasure for Leica Geosystems. On the one hand, we are a Swiss company, and on the other hand our instruments have carried out most of the measurements and ensured that the required precision could be achieved. We are proud to play a part in this engineering project, the most prestigious of this century, and are delighted with its success, along with our customers and the rest of the project participants," states Jürgen Dold, CEO of Leica Geosystems.

Source: Leica Geosystems AG



dooths 3133, 3139, 557

# Record Raise Boring Technique for 23 Shafts in Hong Kong



Four Sandvik SR530 reaming heads will be used by the raise – drilling division of Australia's mining and construction contractor Macmohan – for 23 shafts on the Hong Kong West drainage Tunnel (HKWDT) scheme in Hong Kong's largest raise boring application.

The HKWDT scheme has been designed to alleviate serious flooding from stormwater run off across Hong Kong Islands Mid-Levels and, overall features 32 intake shafts feeding adits and an 11 km drainage tunnel exiting at sea level close to the Cyberport.

Main contractor, the Dragages-Nishimatsu JV (DNJV) appointed Macmohans Raisedrilling Division to use raise boring techniques for 2,4 m and 3,154 m diameter shafts to a variety of depths ranging between 40 – 181 m.

The raise boring method was selected due to the isolated shaft intakes on the hillsides across mid-levels with difficult access and the restricted weight loadings of the adjacent pathways.

It was also considered to be the safest shaft option – with no people required in the shaft during boring – and ensured the least environmental disturbance. The technique will also ensure the fastest construction time over known methods.

Raise boring is widely used for shaft excavation on construction and mining projects around the world.

Macmahon will start each shaft with a 35 cm pilot hole using Sandvik Pilot bits and 28,6 cm drill pipes and, together with a number of Macmahon controls, will contribute towards critical hole straightness.

The pilot hole will then be reamed to the final shaft diameter from the tunnel below using a Sandvik SR530 extendable reaming head. This particular head used in the Hong Kong project is a CRH8E which is extendable from Ø 2,4 – 3,5 m by using different types of segments fitted to the base head.

The raise boring technique was also felt to be the best option for fast mobilization and penetration rates.

The Hong Kong project features 29 surface shafts; each requiring painstaking preparations, including in some cases, traffic diversions. Since many of the shafts are relatively short, most of the time will be spent setting up, dismantling and relocating to the next location.

The Sandvik SR530 reaming head is considered to be easy to assemble and dismantle, which will help to minimize this essential but unproductive time and has been designed

to handle the region's hard, abrasive granites and volcanic tuffs – some of which have compressive strengths greater than 250 MPa.

All Sandvik reaming heads are designed to ensure that optimum thrust can be applied and to operate with smooth rotation to reduce strain on the entire system and ensure energy savings.

The system offers a flat cutting profile, robust segmentation, easy assembly, strong bolted unions, reduced and more effectively placed cutters, standard components and no requirement for special tools.

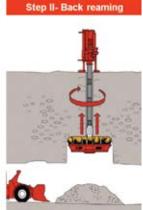
#### SANDVIK RIG FOR STUBBS ROAD INTAKE

A compact Sandvik DC300 Series drill rig and tools is being used by the DNJV on the projects Stubbs Road intake, one of a series of shafts using drill and blast techniques.

At the surface an excavation and lateral support chamber has been excavated measuring 6,4 m x 9,4 m to a depth of 30 m. Due to its close proximity of residential towers and schools, it was necessary to use "splitting" techniques when encountering rock down to a depth of 25 m; to eliminate noise and vibration issues before a drill and blast method is adopted.

Drilling approximately 90 holes per blast to a depth of 1,5 m, DNJV is currently not experiencing any drilling problems in the predominantly fractured hard rock - although harder granite is anticipated before reaching the bottom at 30 m.





"The Sandvik DC300 rig is ideal for this type of operation due to its compact build and ease of mobility on the restricted size shaft bottom," said Kenny Chan, Sandvik Hong Kong's sales manager.

Weighing just 5000 kg, the rig is easily lifted out of the shaft following drilling operations allowing removal prior to blasting.

The drill rig is a hydraulic self-propelled drilling unit on a 4-wheel oscillated drive carrier. It drills holes with a maximum recommended diameter of 64 mm and a maximum practical length of 15 m, utilizing 25, 28 or 32 mm extension rods.

It is a completely self-contained drilling unit and easily maneuvrable with good rough terrain capabilities. It is also easy to transport between job sites on a truck or on a trailer.

With a total length of 5,6 m x 2,6 m high x 2,3 m width the rig offers a very compact footprint making it ideally suited for drill

and blast duties on the shaft project.

The rig is equipped with HL 300 hydrau-

lic top hammer rock drill, mounted on an

aluminium chain feed. This is attached to

age of 10 m<sup>2</sup>.

A 73 hp diesel engine supplies power both for hydraulic pumps and for an onboard compressor.

#### **DRILL TOOLS**

The DC 300 rig is fitted with Sandvik RT300, 45 mm diameter bits and drill rods.

"Regrinding will then allow the contractor to achieve a further 200 plus drill meters before regrinding for a third time. Depending on the rock conditions, the DNJV should be able to achieve 5 or 6 regrinds to considerably extend the life of each bit," he added.

At a shaft depth of 28 m, the Sandvik

rig is being used for horizontal drilling techniques to excavate the 9,4 m x 7 m high x 5 m wide Stilling Chamber, intended as a temporary works area for "mucking out" of the adit tunnel at the bottom of the shaft.

The DNJV contract includes a total of 32 shafts; with the

Stubbs Road shaft being the only one to be excavated using the Sandvik DC 300 rig.

Sandvik Mining and Construction booths 6333, 911, 951





"DNJV is generally achieving 270 drill meters every two blasts with the drill bits in the hard rock conditions before sending them to Sandvik's workshop for regrind-





### **AggFlow with Terex Finlay Track-Mounted Equipment**

announce the addition of Terex Finlay
Track-Mounted equipment to its AggFlow
simulation program. BedRock, working
with Terex Finlay engineers has developed
and introduced the complete Terex
Finlay line of track-mounted crushing
and screening equipment. "The addition of Terex Finlay mobile equipment
to AggFlow, along with our recent
expansion in the wash and water simulation capabilities of the program, are
important steps for the benefit of our

customers and the industry globally"

BedRock.

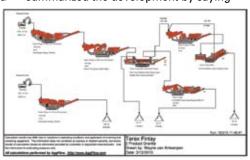
said Robert Teller, managing partner of

BedRock Software, LLC is pleased to

AggFlow is used by aggregate producers, equipment manufacturers and dealers in more than 90 countries to simulate aggregate and mining operations. AggFlow users can calculate mass aggregate and mass water balances flowing through a plant simulation using both stationary and mobile equipment. Thus optimizing

and maximizing production of desired products.

Wayne Van Antwerpen, Terex Finlay's Product Support & Training manager summarized the development by saying



"We always need to recommend the best possible plant layout for our dealers and customers. AggFlow helps us achieve this. AggFlow is a valuable tool that is fast and easy to use. For many years the program has played a key role in our business. Now, the inclusion of our mobile equipment range in AggFlow will benefit our dealers and customers time and again with ac-

curate machine layouts and calculations."

AggFlow simulations help improve profitability by identifying inefficiencies and bottlenecks; by accurately assessing the impact of proposed changes or new equipment before they are made; and by reducing plant down-time and production errors. The program is popular because it provides quick access to technical data; the ability to conduct unlimited "what-if?" scenarios, accurate unbiased answers and it is easy to use.

Users can select from the pre-populated equipment data library or install their own equipment models in the program using the generic equipment application. Currently, the program provides calculations for more than 4000 models of aggregate crushing, screening and washing equipment. BedRock is constantly adding to the data library and will add equipment upon request.

Source: BedRock Software, LLC





### **KPI-JCI** and Astec Mobile Screens Honors Dealers with **Prestigious Presidents' Awards**

KPI-JCI and Astec Mobile Screens honored authorized dealers - Amaco Equipment Company of Mississauga, Ontario; Goodfellow Corporation of Boulder City, Nevada; and GW Van Keppel Company of Kansas City, Kansas - at the companies' annual dealer meeting this Fall with the companies' top honor for Overall Dealer Excellence - the Presidents' Awards. The recipients of this award are selected from the entire KPI-JCI and Astec Mobile Screen's dealer organization based on all areas of excellence in service, sales, parts, marketing, and stewardship.

Other awards recipients that were recognized at the September dealer meeting were:

Sales Excellence in Material Handling Products - Goodfellow Corporation of Boulder City, Nevada and General Equipment of Fargo, North Dakota.

Sales Excellence in Washing and Classifying Products - American State Equipment

of Little Chute, Wisconsin and Lonetrack Equipment and Chieftain Recycling Equipment of Langley, British Columbia, and

Edmonton, Alberta, respectively.

Sales Excellence in Crushing and Screening Products - Les Équipements Manuquip Inc. of Quebec City, Quebec, and Goodfellow Corporation of Boulder City, Nevada. Sales Excellence in Track-Mounted Products - Amaco **Equipment Company of** Mississauga, Ontario, and Road Machinery Supplies of Savage, Minnesota.

Service Excellence - Goodfel-

low Corporation of Boulder City, Nevada, Amaco Equipment Company of Mississauga, Ontario, and General Equipment of Fargo, North Dakota.

Parts Excellence - Amaco Equipment

Company of Mississauga, Ontario, and Goodfellow Corporation of Boulder City, Nevada.



Marketing Excellence Award - Road Machinery Supplies of Savage, Minnesota. Steward Award - Road Machinery Supplies of Savage, Minnesota.

Source: Astec Industries **((iii)** booth 5133







### **Cooperation Creates New Water Expertise**

Outotec Oyj and Kemira Oyj decided to join their complementary expertise last September. The companies began collaborating in developing solutions for the mining industry and oil sands processing, as well as associated sustainable industrial water treatment.

"The companies' expertise and business operations complement each other, creating excellent prerequisites for cooperation. Both companies operate globally, with the same value base," emphasises chief

technology officer Kari Knuutila from Outotec Ovi.

Outotec markets separation technologies and equipment for the mining and metallurgical industries. Kemira manufactures and delivers water chemicals and water chemistry expertise for the process industry.

"By combining these areas of expertise we are able to offer significant added value and new solutions to our customers," adds Mr. Knuutila.

According to Kari Knuutila, Kemira's water chemistry expertise and Outotec technologies help to optimize mining



and metallurgical processes and improve the operation and profitability of these processes. Cooperation is divided into commercial and research cooperation.

"In our commercial cooperation we are looking for solutions to meet the needs of our customers. The cooperation comprises problem-solving for our current customers, process improvements, and process solutions required by new industrial investments," continues Mr. Knuutila. "Through our research-related cooperation we will work towards introducing new equipment and chemical innovations to enhance separation technology in the process industry. This way we also develop both companies' competitive advantages over other competitors."

The cooperation serves also both companies' interest to find new openings in different application areas and new solutions for topical environmental challenges, such as the handling of oil sands in Canada.

"We also cooperate in funding a five-year long research program at the University of Alberta, which works towards enhancing the sustainable use of water in the processing of Canada's oil sands. Through water professorship we expect to gain basic knowledge on the behavior of oil-water-sand emulsions, information which can be utilized directly in practical applications," concludes Mr. Knuutila.

The companies have long-term experience of research cooperation and workshops. The recently launched collaboration utilizes also the research programs of the Center of Water Efficiency Excellence, established in March 2010 by Kemira and VTT Technical Research Centre of Finland.

Source: Outotec Oyj

# Research Chair at the University of Alberta to Focus on Sustainable Water Use in Canadian Oil Sands

Kemira Oyj has joined an industrial research program of the University of Alberta intended to foster sustainable water use in Canadian oil sands extraction. Kemira collaborates with companies Outotec and Suncor Energy Services, the Government of Canada and the Alberta Water Research Institute to establish a Natural Science and Engineering Research Council of Canada (NSERC) industrial research chair at the University of Alberta in Edmonton, Canada. The industry research chair is titled "Water Quality Management for Oil Sands Extraction". Dr. Subir Bhattacharjee, in the Department of Mechanical Engineering at the University of Alberta, has been appointed chairholder.

The five-year long research program focuses on water quality management studies to address water consumption, reuse and recycling by the in situ oil sands extraction industry. It will also contribute to the science of water treatment, particularly related to physical and chemical processes for removal of water from oil-water-solid systems.

"Kemira led the creation of this industrial research chair. We believe that our global water chemistry expertise will provide essential contribution in developing water quality and quantity management in the oil and gas sector. Proper recycling and reuse of water resources are crucial to the long term viability of the Alberta oil sands. This research investment is part of Kemira's Center of Water Efficiency Excellence programs we started earlier in 2010. We are looking for business growth based on new technology in the most rapidly growing water technology application areas," says Harri Kerminen, president and CEO of Kemira.

"By leading research in water quality management issues we can promote the development and upgrading of Alberta's natural resources in an environmentally sustainable manner," said Dr. David Lynch, Dean of the Faculty of Engineering. "The establishment of this research chair will also help educate a new generation of engineers who integrate knowledge across disciplines, working in teams in partnership with industry."

"Our goal is to strengthen Outotec's energy and water-related businesses by acquisitions, alliances and research partnerships. The research program of the University of Alberta fits well with our strategy. It also aims to solve a very topical environmental challenge of the oil sands industry. We believe that with Outotec's expertise in solid liquid separation technologies sustainable solutions can be created for water management in oil sands extraction," says Pertti Korhonen, president and CEO of Outotec.

The research chair is funded jointly by the industry, the Alberta Water Research Institute, part of Alberta Innovates - Energy and Environment Solutions and the Natural Sciences and Engineering Research Council of Canada over five years.

Source: Kemira Oyj

### Oshkosh Tackles 1000-Mile Off-Road Desert Race

Oshkosh Corporation's Extreme Racing team has completed the 43rd Annual Tecate SCORE Baja 1000 off-road race course in Mexico. The Oshkosh Extreme Racing team ran its Light Concept Vehicles (LCV) through the rugged 1061-mile (1707 km) desert course.

"Off-road racing teams compete in the Baja 1000 to push the limits, and we're absolutely thrilled to see our vehicle overcome the difficult desert terrain," said Chris Yakes, Oshkosh Corporation vice president of Advanced Products Engineering and Oshkosh Extreme Racing team leader. "Our team's performance on this world-renowned course speaks to both the quality of our technologies and the expertise of our drivers and technical crew. I couldn't be more proud of our team."

The two Oshkosh Extreme Racing vehicles, numbered M1 and M2 for the race, were driven by members of California Gold Racing (CGR), led by legendary race driver Glenn Harris. M2 reached speeds of nearly 130 km/h and completed the course approximately 6,5 hours over the limit for scoring purposes.

According to Glenn Harris, "There are so many unknowns going into the SCORE Baja 1000 race because of the extreme nature of this event. By finishing one of the toughest off-road races, Oshkosh is demonstrating that this new powertrain and suspension technologies are ready for almost anything."

The Oshkosh LCV M1 was unable to meet a checkpoint time requirement, causing the vehicle to receive a "did not finish"

The LCV includes the next-generation of TAK-4® independent suspension systems. The new system expands on Oshkosh's patented TAK-4 suspension by increasing off-road mobility, improving vehicle

> of electrical power. Source: Oshkosh Corporation

maneuverability and providing a smoother

ride. The Oshkosh ProPulse® diesel-electric

powertrain design delivers improved fuel

economy and can export significant levels

🥘 booths 812, 9111

result. **Mercedes-Benz Vito E-CELL Picks Up** 

## **Postal Technology International Award 2010** The Mercedes-Benz Vito E-CELL has

made an impressive mark thanks to its innovative strength and performance. An independent specialist jury made up of industry representatives from the postal and logistics sector has awarded the Vito E-CELL top honors in the "Transport/Logistics Innovation of the Year" category of the Postal Technology International Awards 2010. Launched in 2009, the awards also pay tribute to other excellent initiatives in the areas of logistics, automation technologies, delivery innovations and environmental protection.

The award was presented in October 2010 at the annual Post Expo logistics exhibition held in Copenhagen, Denmark. Post Expo has become the venue for the world's postal and logistics operators to gather and discuss the challenges and solutions of this expanding sector.

Commenting during the presentation of the award, Volker Mornhinweg, Head of Mercedes-Benz Vans, said: "I am extremely pleased that we have been able to raise the profile of our innovative Vito E-CELL even further among what for us is an important

customer base. At this point I would like to thank everyone involved for their efforts in helping us to achieve this."

As the first purely electric-powered van to be introduced ex-

factory by any automobile manufacturer, thanks to its emission-free drive system the Mercedes-Benz Vito E-CELL is ideally suited to logistics operations in inner-city areas and therefore also in particularly environmentally sensitive areas. The first Vito E-CELL vehicles have already been handed over to customers, and it was expected that around 100 vehicles will have been delivered by the end of 2010. A further 2000 units are already planned to be delivered up to 2012.

Providing a range of approximately 130 km, the Vito E-CELL is capable of meeting the typical customer requirements for vans making frequent short journeys. At the same time there is also no limit on using the available load space. With a

payload of around 900 kg, the Vito E-CELL really is a fully functioning courier, express and parcel services van.

The batteries housed under the load compartment are lithium-ion units with a high performance and load capacity. Thanks to intelligent technology, the charging times can be defined according to the vehicle's operating profile. As such, each Vito E-CELL can be charged precisely when the respective energy providers supply "green" and cost-effective electrical power. Furthermore, the batteries are also charged while driving thanks to regenerative braking, i.e. by converting braking power into electricity.

Source: Daimler AG



### bauma China 2010 Exceeded All Expectations

bauma China 2010, the 5<sup>th</sup> International Trade Fair for Construction Machinery, Building Material Machines, Construction Vehicles and Equipment, has again broken all records with regard to exhibition space, exhibitor numbers

and visitor numbers. Once more, bauma China has further consolidated its position as the leading trade show for the Chinese and Asian construction industry.

More than 150 000 visitors from 165 coun-



tries attended this year's bauma China, an increase of 33% compared to the 2008 edition. After China, the top ten countries and regions of origin among the visitors were Korea, India, Japan, Russia, Malaysia, Brazil, Singapore, Thailand, Indonesia and Australia – in that order.

Covering 230 000 m<sup>2</sup> of exhibition space, bauma China 2010 was 10% bigger in area than in 2008. All in all, 1858 exhibitors from 37 countries took part in bauma China 2010.

A further highlight at bauma China were the national pavilions from Austria, Finland, Germany, Great Britain, Italy, Korea, Spain and the United States, all showcasing state-of-the-art technology produced in these countries and informing on research and development trends.

The next bauma China takes place from November 27-30, 2012.

Source: Messe München International

### **Perfect Timing IRE 2011**

The second International Rental Exhibition (IRE) will be held at the RAI exhibition centre in Amsterdam on June 7, 8 and 9, 2011.

IRE is the world's leading event for the international rental sector and is perfectly timed for rental companies who are starting to invest in their fleets again after several low-spending years.

Alongside the exhibition, the European Rental Association (ERA) will be holding its annual conference and the prestigious European Rental Awards dinner will also take place. The combination of exhibition, conference and awards, makes IRE a truly world class event.

IRE 2011 is being held at a time when the industry is emerging from more than two years of recession. With fleet sizes down and equipment aging, IRE 2011 comes at the start of what should be a new buying cycle for the rental industry.

Exhibitors will include global companies and small local suppliers of equipment as well as suppliers of specialist services to the rental sector such as software and asset tracking technology. In equipment, the focus will be on compact equipment and tools. Companies already confirmed include big name suppliers such as Ammann Group, Atlas Copco, Haulotte, Hilti Corporation, Manitou, Volvo and Wacker Neuson.

Source: BV Industrial Promotions International

## **Appointments**

MB S.p.A. announces the appointment of Veronica Guerra as the Area manager for the Canadian market.

Ms. Guerra, who has been with MB for several years now, began to follow the Canadian market in May, attracted by both a new challenge and by the



opportunities that this specific market has to offer. She is cooperating with Roberto Mesiano, Area manager for British Columbia.

Canada represents a new and highly ambitious goal for MB S.p.A. The company headquartered in Breganze, Italy, is getting ready to make its debut on the Canadian market with its crusher buckets.

MB S.p.A. is already working with Denis Gauvin Inc. in Quebec and is currently closing other deals in Ontario.

Source: MB S.p.A.

Martin Lindqvist has recently been appointed as the new CEO of SSAB. He was previously head of the company's largest business area, SSAB EMEA, and succeeded Olof Faxander, on January 1, 2011. Olof Faxander will become the new CEO of Sandvik AB.



"Martin possesses solid experience of the steel industry and SSAB. The Board believes that he is well suited for the task to lead SSAB's continued development," says chairman of the Board Sverker Martin-Löf.

"Olof has successfully managed the transformation of SSAB into a modern and increasingly global steel company. At the same time, the specialization towards quenched steels has been strongly developed," says Sverker Martin-Löf.

SSAB is a world-leading producer of high strength steels. SSAB offers products developed in close cooperation with customers, in order to create a stronger, lighter, and more sustainable world. SSAB has employees in more than 45 countries, with production plants in Sweden and the United States.

Source: SSAB

### **Snowed Under Down Under**

Think of Australia and snow is not likely on your list, but in Perisher Valley, NSW it is a very welcome and important form of precipitation.

The Kosciuszko National Park is home to Australia's most popular alpine-style resorts tucked in the mountains roughly midway between Sydney and Melbourne. Like any tourist destination, amenities and conveniences are valued equally to activities and scenic vistas. It is reportedly the largest ski and snow activity resort in the Southern Hemisphere.

Supporting and servicing these facilities within a national park's setting falls to the Municipal Services Unit of the NSW National Parks and Wildlife Service, personified by Steve Hansen supervisor of Operations and Maintenance.



Steve and his cadre of specialists ensure all municipal services are provided to the resort village including refuse collection, thoroughfare maintenance and, in a nordic region, snow clearing. Until recently this latter function had been carried out with an aging rubber tire skid steer with a standard fixed bucket.



That may be OK to keep your driveway clear, but it had proven inadequate to maintain the level of customer service Hansen is obliged to provide.

Fortunately for NSW Parks an answer was close at hand in the guise of the

> Takeuchi TL 240 tracked skid steer with high flow hydraulics. "We were drawn to the Takeuchi because of the very low ground pressure and excellent traction, particularly on snow. This allowed us to maneuver in and around obstacles with a noticeable increase in efficiency and a reduction in damage and rutting."

But the prime mover is only part of the story. Not only did the TL 240 represent a superior trac-

tor, the high flow hydraulics and universal

coupler permitted the quick and easy fitting of high production attachments. In particular the Westa 650 hydraulic snow blower supplied by Stadelmanns in Bright, Victoria, and recommended by Takeuchi after successful field trials in Japan.

"The blower was the clincher for us. To Canadians, our snow problem likely doesn't seem much, but when we get a storm we need to get it clear and let people enjoy our unique resort. The Westa/ Takeuchi combination means we can quickly respond and do a neater job of clearing parking, walkways and general access to the resort," says Steve Hansen.

Sometimes innovation in snow and ice control can be found in the most unlikely places and to most snow removal specialists, Australia would seem to be the most unlikely of all. R.H.







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### **Agenda**

#### **CONGRESS 2011**

January 11 - 13, 2011 Toronto, ON Canada

#### World of Concrete 2011

January 17 - 21, 2011 Las Vegas, NV USA

#### **BAU 2011**

January 17 - 22, 2011 Munich, Germany

#### GEOTHERMA France - Expo & Congress for Geothermal Professionals

January 20 - 21, 2011 Paris, France

#### LogiCon 2011

February 1 - 3, 2011 Amsterdam, The Netherlands

#### **bC India International Trade Fair**

February 8 - 11, 2011 Mumbai, India

### INFRAASSETS2010 - Exhibition on Infrastructure Asset Management February 22 - 24, 2011

Kuala Lumpur, Malaysia

#### The Rental Show

February 27 - March 2, 2011 Las Vegas, NV USA

#### Samoter

March 2 - 6, 2011 Verona, Italy

## National Heavy Equipment Show March 3 - 4, 2011 Toronto, ON Canada

### CONEXPO-CON/AGG & IFPE

March 22 - 26, 2011 Las Vegas, NV USA

### 20th Annual NASTT No-Dig Show

March 26 - 31, 2011 Washington, DC USA

### **INTERMAT Middle East**

March 28 - 30, 2011 Abu Dhabi, United Arab Emirates

#### Journée Expo-Bitume, Roadbuilding equipment show

March 31, 2011 Saint-Hyacinthe, QC Canada

#### The Brazil Road Expo April, 4 - 6, 201

Sao Paulo, Brazil

SMOPYC 2011 April 5 - 9, 2011

Zaragoza, Spain

## Expomatec Spain 2011 May 17 - 22, 2011 Madrid, Spain

### WINDPOWER Conference & Exhibition

May 22 - 25, 2011 Anaheim, CA USA

### 2011 International Bridge Conference®

June 5 - 8, 2011 Pittsburgh, PA USA

#### 2<sup>nd</sup> International Rental Exhibition (IRE)

June 7 - 9, 2011 Amsterdam, The Netherlands

September 14 - 16, 2011

#### Maastricht, The Netherlands

ICUEE - The International Construction & Utility Exposition

### October 4 - 6, 2011 Louisville, KY USA

#### **WaterSmart Innovations Conference and Exposition** October 5 - 7, 2011

Las Vegas, NV USA

April 16 - 21, 2012 Paris, France

### **DEMO International® 2012**

September 20 - 22, 2012 Saint-Raymond, QC Canada

#### Bauma 2013

April 15 - 21, 2013 Munich, Germany



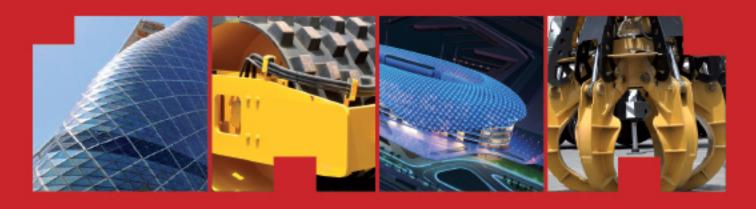




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