Any farmer will tell you that Mother Nature is all about balance, and this winter is a good example.

The snow blew in early in 2010 and wasn’t keen to go away in the spring of 2011. Now, people in most of the country are down to their last few spring squalls. Not a bad balance after what we experienced last year, and good news for contractors chomping at the bit to get projects underway for 2012.

The sooner the job starts, the sooner it finishes, and in pure economic terms the sooner you get paid. Then the ball starts rolling, now you can hire workers, buy equipment, cover your overdraft and oil the wheels of what has seemingly been stodgy economic growth.

Also, with a mild winter season, many municipalities have been able to get on top of operations budgets. This shouldn’t be construed as “spending the winter’s savings”. Quite the reverse, spending much needed money on infrastructure repairs and maintenance at a critical time, spring.

It looks as though Mother Nature could be the biggest thing in Canadian economic recovery that nobody is talking about. As an industry we have to work with whatever she throws our way. This year she seems to want to “play nice”.

On the cover: in its quest to own the most powerful and performing hydraulic breakers on the market, Excavation L. Martel inc. recently added an Atlas Copco HB 7000 to the three HB 5800s already in its fleet.
THE TORO COMPANY ACQUIRES UTILITY TRENCHERS, VIBRATORY PLOWS AND DIRECTIONAL DRILLS

The Toro Company announced recently that it has acquired certain utility and underground product assets of Astec Underground, Inc., a wholly-owned subsidiary of Astec Industries, Inc. Terms of the transaction were not disclosed.

Through the acquisition, Toro has acquired Astec Underground’s equipment line of vibratory plows, trenchers and horizontal directional drills for the underground utilities market. Typically used in the installation, repair and replacement of utilities with minimal impact on surrounding landscapes or structures, these products are designed for power distribution, telecommunications, utility companies, and landscape and irrigation contractors.

“This acquisition helps further grow Toro’s product presence in the landscape and ground engaging markets, along with providing access to a new category close to our core businesses,” said Rick Rodier, general manager of Toro’s Sitework Systems Business. “The underground utilities space represents a market in which we don’t compete today, but one we believe provides great opportunity to drive global share growth in these new categories.”

Based in Chattanooga, Tennessee, Astec Industries, Inc. is a manufacturer of specialized equipment for asphalt road building, aggregate processing, pipeline and utility trenching, and wood processing. The products Toro is acquiring, which does not include Astec’s Trencor product line, are manufactured at the Astec Underground facility in Loudon, Tennessee.

Source: The Toro Company

DESSAU JOINS FORCES WITH MARITIME TESTING

Dessau Inc. recently announced that it has acquired Maritime Testing Ltd., a company based in Halifax, Nova Scotia, that specializes in geotechnical, materials and environmental engineering.

“Dessau now has a solid standing in Atlantic Canada, thanks to Maritime Testing’s 27 years of experience and outstanding reputation. This acquisition strengthens our service offering in geotechnical, geoenvironmental and materials engineering, while extending our presence from coast to coast with a total of nearly 80 offices in Canada,” stated Jean-Pierre Sauriol, president and CEO at Dessau.

“We are very pleased to join Dessau, one of the country’s leading firms in the engineering-construction field, as it will allow us to broaden our expertise and offer clients new services. What is more, our employees will have the opportunity to work on exciting, large-scale projects and advance their careers within a major company,” added Kim Strong, president of Maritime Testing.

The firm will become part of LVM, Dessau’s largest subsidiary, which employs more than 1,400 people and provides geotechnical, materials and environmental engineering services.

Source: Dessau Inc.

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SNC-LAVALIN NUCLEAR AWARDED CONTRACT IN ROMANIA

SNC-Lavalin is pleased to announce that SNC-Lavalin Nuclear has signed a contract with Societatea Nationala “Nuclearelectrica” (SNN) to install reactor containment filtered venting systems (CFVS) at the Cernavoda Nuclear Power Plant in Romania. The value of the contract is approximately $48 million.

“The units at the Cernavoda plant are rated among the best in Europe and this project is part of an industry-wide upgrade strategy for nuclear plant safety in the event of serious accidents or natural disasters, such as those that occurred at Fukushima in Japan,” said Patrick Lamarre, executive vice president, SNC-Lavalin Group Inc. “This contract with SNN leverages SNC-Lavalin Nuclear’s expertise in nuclear power plant retrofits and in executing projects with challenging logistics. It also provides a platform for SNC-Lavalin Nuclear to build on its 45 years of experience as opportunities grow in the European nuclear market.”

Engineering and procurement activities are underway and construction is scheduled to begin immediately, with preparations for the work to be carried out in the next unit outages. The expected completion date is late 2013.

Source: SNC-Lavalin Group Inc.

GENIVAR ACQUIRES AN ENGINEERING FIRM IN COLOMBIA

GENIVAR Inc. is pleased to announce the acquisition of Consultores Regionales Asociados S.A.S. (CRA), an engineering firm of 340 people based in Bogotá, Colombia, with additional offices in Medellin and Barranquilla. Active in civil engineering, environment, energy and telecommunications, CRA is expected to contribute 2012 net revenues of approximately $10 million to GENIVAR.

“We are pleased with this acquisition, which is an integral part of our international growth strategy. We have been working in Colombia for the past two years and we have come to appreciate the opportunities offered by this country. In line with our emerging market strategy, we have identified CRA, a top tier Colombian firm in terms of size and reputation, as being the ideal platform in the region to build and grow our activities in all our market segments. Indeed, CRA meets all of our criteria with a reputation of great client service, a broad portfolio of projects as well as a strong management team,” stated Pierre Shoiry, president and CEO of GENIVAR. “Our objective is to develop a long-term local presence in Colombia and expand in the neighboring countries where we see good growth potential,” he added.

“GENIVAR is the perfect alliance for us. GENIVAR’s experience and reputation will enhance CRA’s capacity to bid on larger projects, enabling us to compete with international firms. We believe that uniting our teams will create tremendous opportunities for both our clients and employees,” said Pedró Rojas Castro, president of CRA. Source: GENIVAR Inc.

WÄRTSILÄ TO SUPPLY COMPLETE PROPULSION SYSTEMS WITH INTEGRATED SCRUBBERS FOR SIX GREAT LAKES VESSELS

Wärtsilä has been awarded the contract
to supply fresh water integrated scrubbers for a series of 6 vessels with an option for a further 2, being built to transport bulk commodities on North America’s Great Lakes and St. Lawrence Seaway, for the Canadian owner, Algoma Central Corporation.

The integrated scrubber order is the last one of a series of Wärtsilä supply contracts awarded for these vessels. In addition to the unique integrated scrubber system, the complete solution provided by Wärtsilä includes engineering support, highly fuel efficient engines, propulsion machinery and a bilge water system. The orders for these various systems were booked on an incremental basis in 2011. All equipment included in the Wärtsilä solution will be supplied in co-operation with the company’s global licensee and joint venture partners.

Wärtsilä combines the parts of the complete solution in an optimized way, which will result in savings for the owner and a significantly reduced environmental footprint. In addition, the scrubber will be the first integrated scrubber to be supplied by Wärtsilä. The Wärtsilä Oily Water Separator is the first bilge water separator unit approved without a filter.

Source: Wärtsilä Ship Power

Metso to Supply Bulk Materials Handling Equipment in Australia

Metso will supply a tandem rotary railcar dumper to Hamersley Iron Pty Ltd in Australia. The equipment will be delivered to Hamersley Iron’s Cape Lambert, Port B iron ore operation in North Western Australia. The order also includes spare parts, technical assistance during installation, pre-commissioning, commissioning and performance testing.

The design of the equipment allows for lower maintenance and higher, more efficient material output flow, and ease and safety of maintenance is also improved through a reduction of overall components.

This is the second equipment of this kind delivered to Hamersley Iron for this project. The previous equipment was delivered in 2011. The design of the equipment was achieved by working closely with Rio Tinto and the engineering team of this project.

“One of Metso’s commitments moving forward is to work together with our customers in partnership so that we achieve the best outcome, and we look forward to supporting Rio Tinto on this project”, says Max Wijasuriya, Metso’s vice president, Capital Equipment for Australia and New Zealand.

Delivery is scheduled for the second quarter of 2013. Hamersley Iron Pty Ltd is a member of Rio Tinto Group, one of the world’s leading iron ore producers.

Source: Metso

CGC RELEASES THE STATE OF THE CANADIAN GEOTHERMAL HEAT PUMP INDUSTRY 2011

The Canadian GeoExchange Coalition (CGC), Canada’s national industry association for geothermal heat pump technology, announces the release of an extensive statistical report entitled The State of the Canadian Geothermal Heat Pump Industry 2011 - Industry Survey and Market Analysis. The document is available on the CGC website at www.geoexchange.ca.

The State of the Canadian Geothermal Heat Pump Industry 2011 - Industry Survey and Market Analysis is the second document published by the CGC to present a comprehensive, credible picture of the Canadian geothermal heat pump industry. This year’s report presents for the first time ever provincial installation statistics over a four-year period, 2007 to 2010.

The report shows that the market for geothermal heat pumps grew by more than 40% in 2005 and by more than 60% annually in 2006, 2007 and 2008. The market increased by an additional 5% in 2009 before declining in 2010, the first decline since 2003. Early estimates tend to show that the markets stabilized in 2011 for Canada as a whole.

Together, Ontario, Québec and British Columbia represented about 87% of the GHP market in 2010 compared to 76% in 2007. Manitoba is the only Canadian province which experienced annual market decline in each of 2007, 2008, 2009 and 2010. In fact, the market for GHP crashed by 64% between 2007 and 2010, by far the worst performance of all Canadian provinces.

“As more statistics become available, and as our analytical capacity improves, the CGC is increasingly in a position to draw interprovincial comparison and identify or qualify market failures and market successes” said Denis Tanguay, CGC’s president and CEO. The CGC analytical skills and industry knowledge have already proven to be of great help in assisting provincial government in their policy and regulatory work. The CGC will soon publish a technology roadmap for geothermal heat pump along with policy recommendations. The present statistical report is timely.

The statistics presented in the report have been gathered from different sources over a period of more than five years. Sources include three CGC annual industry surveys and market data collected directly from close to 500 installation companies through the CGC Company Qualification Market Survey. It also includes the CGC certification database, which includes technical information on over 16,000 residential systems installed by more than 800 companies. Additional information was taken from selected companies’ annual reports as well as from documents published by government agencies.

Source: The Canadian GeoExchange Coalition
In the Middle of Nowhere,
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preVenTion is The key To reduCing The Cost To your business

The potential impact of a major loss to your equipment fleet can be more far-reaching than you might expect – it could impact your ability to retain current and future project mandates, not to mention costly financial penalties associated with project delays. While insurance protects you against some of the financial shortfalls related to the malfunction, breakdown or theft of equipment, prevention is one of the most effective things you can do to ensure your business is not affected by delayed or cancelled projects. It also goes a long way in influencing your insurance premiums.

Contractors’ equipment insurance provides coverage for damage due to loss of mobile equipment, including tools and machinery. The more responsibility you take in preventing these types of losses, the better your insurability, and the lower the impact to your business. If you need guidance, an insurance broker can be a good source of information that makes sense for your needs.

In the contractors’ equipment world, three of the most common threats to your bottom line are theft, breakdown and fire. Here are a few important things to consider:

THEFT

Theft is a significant concern and accounts for over 50% of all causes of heavy equipment losses. Although theft may seem difficult to control, you may be surprised to know there are several things you can do to reduce the risk of stolen equipment.

Your first line of defense against theft is to install fencing around your storage area. Where possible, ensure equipment is anchored and immobilized. Consider anti-theft devices such as locked hood side plates, locked ignition, locking steering wheel devices and locking filler caps for fuel, oil, radiators and hydraulic tanks. Maintain minimum fuel levels for equipment in transit.

Consider assigning supervisory security responsibilities including supervision of all trash removal activities. You can also hire a security guard, install video surveillance systems or put in a request with local law enforcement for regular drive-by checks of the site.

A detailed inventory control system should be established to track equipment at all times; there are a number of good theft protection devices on the market, including unique owner-applied numbering systems and GPS trackers. These types of devices can be incredibly useful and have helped with the successful recovery of stolen equipment even in cases where the machine has been shipped halfway around the world. Customizing equipment with unique colors is another useful way to easily identify retrieved equipment.

Do not forget that theft is not always an “outside job”; prior to hiring, all personnel should go through an appropriate screening process. Instate a key control program to limit the distribution of keys within your company.

BREAKDOWN

Since the economic downturn, regular equipment upkeep has stopped or slowed remarkably; while this may help defer costs in the short term, the long term implications can be debilitating. Failing to keep up with regular maintenance leads to higher wear and tear, which means your equipment becomes ineffective more quickly. At the end of the day, ongoing maintenance is a lot more affordable than a complete overhaul or replacement.

Insuring your Equipment Against Major Losses

Domingos Lopes and Rob Cruicksank
Special Collaboration
sometimes parts are not easily replaceable. With a limited number of parts suppliers in many cases, owners often find themselves needing to replace a part that is either out of stock or discontinued – at best, it could mean a delayed job, at worst it could mean replacing the whole machine and even a lost contract.

Equipment breakdown is best avoided with a comprehensive and sound equipment maintenance policy, which is usually based on the manufacturer’s specifications. This should include a regularly scheduled preventive maintenance program, with details recorded in maintenance and inspection logs. Make sure you also have a proactive troubleshooting program in place; in particular, parts that are prone to extreme wear require close and regular inspection. Ultimately, time spent on regular checks and preventive maintenance will help avoid wear-point failure and other potential problems.

Take special care when selecting your equipment as well as the people who will operate it: good quality equipment and reliable, well-trained operators are essential to preventing injuries to workers, costly damage and project delays.

FIRE

A fire risk is hazardous to both your equipment and your people. Common causes of fire include lack of proper preventive maintenance, improper fueling of equipment, use of equipment around open fires, or improper storage of equipment and material (i.e., poor housekeeping). Nonetheless, fire is another threat that can be easily mitigated by applying some proper planning and common sense.

Equipment should be kept away from hazardous locations and potential sources of fire, such as gasoline and flammable liquids and gases found in tanks and other containers. Make sure equipment is always parked away from dry grass or bush areas.

Preventive maintenance against fire risk should include immediate repairs to fuel leaks, periodic checks of battery cables, connections, ignition wiring, motors and
engines. Periodic pressure washing and cleaning is also vital.

Make sure your site is firefighter-friendly. An adequate water supply and accessible hydrants are primary requisites for fire protection. If this is not possible on your site, ensure some type of static water storage is available and reserved for firefighting purposes. A filled operable fire extinguisher should be mounted on all heavy equipment units, and located away from the fuel system during refueling.

High value and high hazard equipment should be strongly considered for installation of special automatic fire extinguishing and suppressing systems. This type of installation is a good idea for equipment used in the oilsands, for example.

Protecting your equipment means investing in the profitability of your business. A comprehensive review of your equipment assets and some thoughtful planning will go a long way in advancing your success. Making smart decisions with your equipment can also make it easier for you to find an appropriate insurance partner and can assist with insurance rates. If you have not yet established a loss prevention plan and need some advice, contact an insurance broker who can point you in the right direction.

RSA is a trade name of Royal & Sun Alliance Insurance Company of Canada. Domingos Lopes is director, National Risk Control Services at RSA. He has more than 23 years of experience in Loss Control. Mr. Lopes holds his Professional Engineering (P.Eng.), Chartered Insurance Professional (CIP) and Canadian Risk Manager (CRM) designations.

Rob Cruickshank is the Practice director, Construction & Renewable Energy at RSA. Mr. Cruickshank has over 25 years of experience in the property and casualty insurance sector and is a member of the Canadian Construction Association (CCA), Canadian Construction Documents Committee (CCDC) and Nuclear Insurance Association of Canada (NIAC).

On January 31, 2012, it had been 150 years to the day since Göran Fredrik Göransson’s new company was formed in Sandviken, Sweden. At that time, Sandvik was first in the world to use the Bessemer process which would revolutionize steel manufacturing. The company quickly became one of the world’s leaders in its industry. For 150 years, Sandvik has successfully operated and evolved by continuously being innovative and identifying new opportunities in the markets and through various shifts in technology.

Source: Sandvik
Volvo CE Breaks the Ice (and Snow) in the Prairies

Saskatchewan is no stranger to wintery conditions – but imagine this, it is the middle of winter, it has been snowing for days, the temperature has dropped out of sight and you need to get to town… enter Volvo Construction Equipment (Volvo CE).

Winter temperatures in Saskatchewan range from an average “high” of -8°C to an artic low of -20°C. Add bitter winds to this and the result is enough to make your teeth chatter, and normal life comes to a freezing halt.

The wind and snow tends to pile up in rock-hard drifts – often in the most inconvenient of places, calling for Volvo CE’s proven line of snow-fighting motor graders to come to the rescue.

With its Scandinavian heritage, Volvo CE has a hard-won reputation for providing rugged construction equipment that does not stop when the mercury plunges, so it is no surprise that it offers some of the most popular snow removal machines in the industry. In the northeast of Saskatchewan, Volvo CE is a popular provider of motor graders – one of the tools most often used to move snow.

“The lighting and visibility on these graders is excellent. As soon as it stops storming, regardless of the time of day or night, we are out working. We couldn’t do that with the other grader brands the municipality has owned in the past,” says Don Dancey, an operator in the Rural Municipality of Star City, northeast of Saskatchewan.

Mr. Dancey is anxious for the arrival of the municipality’s new Volvo G970B and Volvo G976B all-wheel drive graders. “The older 970’s have served us well. On each machine we put an average of 2,000 hours on yearly between road maintenance in the summer and snow plowing in the winter.

We have well over 500 km of road to keep open in the winter and we can usually open everything up in a day and a half,” he adds.

Volvo provides the option of two different cab configurations for their graders and Mr. Dancey, being over six feet tall, loves the taller cab.

In another area of Saskatchewan, the Rural Municipality of Efros has a population of approximately 480 people and over 600 km of roads to maintain and keep open in the most extreme weather. Thankfully the town owns a pair of Volvo G970 motor graders to set upon the snow.

“It’s a great machine. It’s the best that I have ever operated, and it has lots of power. When you need to move something this grader will do it easily,” says grader operator Marcus Elphinstone, who really appreciates the power and stability of the Volvo G970.

Mr. Elphinstone’s partner, Terry Torgerson, is a 33 year veteran motor grader operator. “I also really like this grader for plowing snow. With the 11-speed transmission I can easily maintain a plowing speed of 40 km/h and it has the power and weight necessary when the going gets tough,” he says.

A few kilometers down the road, Reeve Council of the Rural Municipality of Star City have just placed an order with Eric Katarey and Redhead Equipment for two new Volvo CE motor graders to replace their ageing Volvo G970 fleet.

In northeast Saskatchewan alone there are over 46 rural municipalities and more than 100 motor graders owned, the majority of them sporting Volvo branding – and that number is growing. There are also thousands of kilometers of roads, over 100 happy operators, and 30 very pleased municipal councils, residents and taxpayers.

Source: Volvo Construction Equipment booth 6 C 041-042

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Compactsaphalt® in Canada

Dynapac Canada has debuted the Compactsaphalt® road paving technology last summer in the region of Midland, Ontario on Highway 12. The technology combines the installation of both the binder and wearing courses simultaneously, in one single paving operation.

The core of this process is a Dynapac paver DF 145 CS with an added module and 2 screeds used at the same time. The first screed applies the highly-compacted binder course. The second screed lays the wearing course – Hot on Hot – directly behind the first. The initial compaction is carried out by a static roller with a low linear load. The funnel-shaped 28 t (31 tons) front hopper contains the binder material which is designed for uniform emptying without segregation. The 15 t (17 tons) upper hopper holds the wearing course material.

The unique CM 2500 module is powered by a Deutz TCD2013 engine. Located in the front of the paver, it allows the drive system to act as a counterweight balance. To carry the module, the Dynapac DF 145 CS paver is built with various modifications, reinforcements and special control units. The DF 145 CS can be used with the CM 2500 Compactsaphalt module, and without the module as a conventional paver.

The Compactsaphalt working with varies from 2.5 m to 7.5 m. A patented excenter adjustment lever is designed to enable the screed to be set quickly to the top, binder or base course.

With the project realized in Midland Ontario, Dynapac Canada is the leader in paving innovation in North America. Dynapac products are distributed in the provinces of Quebec and Ontario by J.A. Larue Inc. The complete Compactsaphalt® unit will be on display at EXPO Grands Travaux, in Montreal, April 13 - 14, 2012.

Source: Dynapac Canada

Roadtec’s New 3 meter Tier 4i Pavers

Both of Roadtec’s 3 m standard asphalt paver models have received a major redesign, which comprises Tier 4i emission technology and many additional upgrades and improvements. The new pavers carry the designation “e” behind the model numbers and are called the RP-190e rubber-tired highway class paver and the RP-195e track highway class paver. The pavers are powered by Cat® C7.1 Tier 4i engines. Models that are sold into certain export markets without Tier 4i standards will carry the designation “ex” behind the model number.

Improved operator visibility and easier access to service points are among the improvements found with the new models. Moreover, the operator stations have been redesigned to provide the operator greater efficiency and comfort, including hydraulic-pivot consoles and selectable seat positions. Among the numerous design refinements are new adjustable delta plate design, redesigned hydraulic tunnel panels for improved accessibility, and increased fuel capacity from 454 l to 511 l.

Conveyor chains have been beefed up and are of the heavy-duty offset type. Tough floor plates are made from wear resistant chromium carbide and drop in without bolts. A new dual hinge apron plate design allows easy access and clean-out. Access to hydraulic filters and test ports has been greatly improved by clustering these components in one easily accessed location.

Release agent spray-down systems are now standard and include a dual system; one for diesel, the other for release agent.

Source: Astec Industries Company

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booth 3 E 011
Swiss lubricant producer Panolin introduced its Greenmachine concept which consists of a full line of biodegradable lubricants, also called Environmentally Considerate Lubricants (ECLs).

Bernard Rosset, Panolin’s business development manager, said that all Panolin ECLs are fully synthetic lubricants with good wear inhibition and a superior oxidation stability with a longer life span compared to mineral oil products. They are also biodegradable and show a low toxicity.

“Our Greenmachine concept is a credo to the environment and sustainability,” said Mr. Rosset. “A product like our Panolin HLP Synth hydraulic fluid, for example, effectively helps to reduce CO₂ emissions, thanks to its much longer oil change intervals, almost a ‘life filling’.”

Mr. Rosset explained that studies have been made, and are available for consultation, on how much CO₂ emissions can be reduced, taking into consideration the lubricant production chain, its logistic and transport, the fuel saving with optimized engine oils, and the waste oil disposal.

Panolin HLP Synth is a zinc-free fully synthetic hydraulic fluid especially used on earthmoving, forestry and industrial machinery. The Panolin HLP Synth E version, based on saturated ester from renewable resources is labeled with the European ECO label, granted only to biodegradable lubricants made of at least 50% renewable natural raw materials.

Panolin’s portfolio also includes a line of engine oils for heavy-duty and high performance diesel engines and a line of gear oils that encompasses everything for the drive train in off-highway and industrial machinery.

Source: Panolin International
The IHIMER brand is confirmed as a synonym of innovation and eco sustainability. Providing proof of IHIMER’s unwavering focus on critical issues of innovation and eco sustainability, the company received the Innovation Award in the Sustainable Development category for its Carry 105 Electric Power (EP) minidumper.

IHIMER S.p.A., is a joint venture between IHI Construction Machinery Limited, a member of the giant Japanese IHI Corporation, and the Italian IMER Group.

In the words of IHIMER vice president “The Intermat Innovation Awards are one of the key appointments on the agenda for Intermat 2012 and they provide a world-level recognition for companies that have achieved excellence in the four categories covered,” said Paolo Venturi, vice president of IHIMER. “I am immensely proud that our company has been chosen to receive this international recognition. IHIMER today confirms its international standing among the leading companies able to offer the market reliable and innovative products that are also respectful of the environment and the operator, reducing or even eliminating gaseous emissions and minimizing noise levels.”

The Carry 105 EP minidumper is the ideal solution for transporting materials in enclosed spaces (such as greenhouses, schools, hospitals and areas with reduced ventilation), in garden centers, on beaches, and any poorly ventilated enclosed space. The ecological spirit of the machine is supported by a DC motor coupled to a hydraulic pump.

With an overall width of 690 mm, the Carry 105 EP can enter previously inaccessible spaces inside buildings and negotiate standard width doors and structures to gain access to hard-to-reach interior gardens. The complete absence of exhaust fumes, combined with very low noise levels protect the operator’s health and safety and ensure full respect for the environment.

The Carry 105 EP minidumper provides maximum ground speed of 2 km/h. A selector provides a choice between two different operating modes: Fast or Slow, thereby optimizing manoeuvrability and minimising power consumption.

Thanks to the use of lithium-iron-phosphate batteries (widely used in electric vehicles) it was possible to achieve high charge capacity, a high number of charge-discharge cycles, full power also with low charge levels, modest weight and zero maintenance requirements compared to traditional lead acid batteries. Operation is controlled by an electronic battery management system (BMS) complete with display for diagnostics, continuous monitoring of functions and residual charge information.

Source: IHIMER S.p.A.
New Brokk 100 Demolition Machine Launched at World of Concrete

Brokk AB officially introduced the Brokk 100 Demolition Machine at the World of Concrete in Las Vegas. Featuring a more compact design, yet 35% greater breaking power, the all-new Brokk 100 replaces the best-selling Brokk 90 machine. The Brokk 100 enhances the company’s already-extensive line of remote controlled demolition machines, designed for use in a variety of industries including cement and metal processing, construction and demolition, mining and tunneling, and nuclear, as well as other specialty applications.

The compact design of the Brokk 100 permits operation in the tightest, most confined spaces. The low-profile configuration, less than 122 cm high, allows access into smaller openings, while the lower center of gravity provides greater stability. Improved driving capabilities further enable the machine to offer smooth transportation and operation on the most challenging jobsites.

Though the overall design is smaller, power and reach were not sacrificed. A new load-sensing hydraulic system with improved hydraulic capacity helps generate 35% greater breaking power when paired with the included SB152 breaker. Maximum horizontal reach is 3.7 m, while vertical reach is 4.3 m.

The Brokk 100 is powered by a 20-hp electric motor, allowing safe, emissions-free operation. Two power levels are offered: 16- and 32 A. When electric power supply is limited, the machine offers the option to “gear down” and work using only 16 A.

Excluding attachments, the Brokk 100 weights in at 990 kg. Recommended maximum weight of attachments such as breakers, crushers, drills and shears is 150 kg. The unit features a height of 116 cm and width of 79 cm.

In addition to the new 100, Brokk offers eight models, ranging in size from the Brokk 50, at just 500 kg, up to the Brokk 800, at 10 t. The company also engineers and builds custom machines with special equipment such as cameras, extended arms, side-angling devices and cable drums.

Source: Brokk AB
DemANDING Tunnel Contract ComPLETED Using Hydrodemolition Robots

A project to remove concrete from the Kingsway Tunnel under the River Mersey, which was greatly restricted by the hours possible for working, has been completed by Buxton Water Ltd using an Aqua Cutter HVD robot from Swedish specialist Aquajet Systems.

Hydrodemolition specialist Buxton Water Ltd has used an Aqua Cutter robotic hydrodemolition machine to remove large patches of concrete from the road deck of the Kingsway Tunnel under the River Mersey in Liverpool, England. The Project on the 2.4 km long twin road tunnel could only be undertaken at weekends to minimize disruption to traffic, which consequently required a very fast working technique that could not be achieved by the more traditional methods.

Use of a robot cutter also reduces the manpower needed on site, and greatly increases the safety factor as the machine is operated remotely.

The work was undertaken over 26 weekends within a seven-month period, concrete removal averaging 0.74 m³/h during 520 hours of work.

Buxton’s managing director Mark Hothersall said the company used the Aqua Cutter HVD robot on large patches that had an area of 0.25 m² or more.

Buxton Water operates the largest UK-based robotic hydrodemolition fleet from Aquajet Systems in Sweden, the company saying that this system of concrete removal provides the opportunity for more
than five times greater productivity than conventional methods.

With the robotic Aqua Cutter remote controlled and able to operate within restricted access areas, there is no need to have any personnel within the demolition area while the work is being carried out, a significant benefit in improving safety.

Using a high pressure jet of water, the diesel-powered Aqua Cutter robot cuts through the concrete without causing any damage to the structure or the reinforcement bars.

On each weekend the Kingsway Tunnel was closed after the Friday evening rush hour, and the challenge was to remove as much concrete as possible within a 20-hour period, allowing time for the main contractor, Volker Laser, to complete the repairs with sufficient curing time for reopening early Monday.

Mr. Hothersall says the works schedule allowed for a gradual build up in weeks one and two to ensure the systems and processes worked, and thereafter the target was a minimum removal of 13 m³ on each weekend.

“Repair patch sizes varied from less than 0.1 m² up to 80 m², cutting to an average depth of 110 mm to expose the embedded steel,” he says.

Actual productivity per weekend varied according to number and sizes of patches to be removed.

“We were always confident of exceeding the minimum requirement, and what really interested us was to know just what could be achieved in such a short working timeframe,” says Mr. Hothersall. “We actually achieved an average removal rate of 14.8 m³ per 20-hour weekend shift, and peaked at 17.9 m³. Such consistently high levels of productivity demonstrate the effectiveness and efficiency of the Aqua Cutter hydrodemolition system, particularly when coupled with effective management of logistics and an outstanding contribution from our jetting crews.”

Issued on behalf of Aquajet Systems AB by Joem Promotions

Aquajet Systems has launched the next generation of Hydrodemolition robots

Without changing the proven concepts that have made Aquajet the leader in innovation for Hydrodemolition techniques, its key principles are maintained.

Versatility
Mobility
Flexibility
Efficiency
Quality

...but even better

www.aquajet.se
Allison Transmission Releases New 1350 Model

Allison Transmission, Inc. announces the release of the new 1350 model, a new option within its 1000 Series models for towing capacity of up to 13,600 kg.

The 1350 will be offered within the Highway Series (HS), Rugged Duty Series (RDS) Emergency Vehicle Series (EVS), Pupil Transport/Shuttle Series (PTS), Motorhome Series (MH) and the Specialty Series (SP).

Previously, the maximum Gross Combination Weight (GCW) approved in the Allison 1000 Series was 11,800 kg. This new 1350 model provides end users with increased towing capability. Additionally, the 1350 model comes equipped with a park pawl. This means no air brake is required and the driver will experience ease of use comparable to an automotive pick-up truck.

Source: Allison Transmission

ZTrak Locates and Tracks Important Equipment Assets

Zonar’s new ZTrak reduces liability of sensitive cargo, recovery of missing equipment and helps asset managers coordinate logistics and track the locations of valuable material.

ZTrak is an easy, affordable solution for companies wanting to track construction equipment, shipping containers, hazmat trailers, rental equipment, high-security items and more.

The tracking unit is sealed within a rugged enclosure designed to withstand harsh outdoor environments. ZTrak also features a battery life of over five years, which can be extended to over 10 years.

Companies monitor asset locations through Zonar’s Ground Traffic Control. This web-based asset management portal provides pinpoint location reports with just a few simple clicks.

Source: Zonar Systems
Rotary Lift introduces the latest addition to its line of mobile column lifts, the RCH4 mobile column lifting system. The RCH4 has an easy-to-use, operator-friendly design that makes it up to 30% faster than competitive lifts, for greater bay productivity and reduced vehicle downtime.

The RCH4 is sold in sets of four, six or eight battery-operated columns. Each column is identical and has a rated capacity of 8,165 kg, for total lifting capacity of up to 65,317 kg. The speedy RCH4 can lift a vehicle 178 cm in just 78 seconds. The RCH4 also features Rotary Lift’s automatic steering system which makes it faster and easier to position the columns for service. Fixed forks fit most large tires without time-consuming adjustment, so technicians can get the vehicle up in the air for service more quickly.

Every column is equipped with Rotary Lift’s patented control panel. These intuitive controls include a graphic layout of the column set-up, real-time height reading and error display, battery indicator, programmable height limit settings and one-touch controls. Lifting and lowering of all columns is automatically synchronized, and there is a slow-lowering function for precision vehicle positioning. Technicians can operate the entire lift from whichever column is most convenient.

Some mobile column lifts only work when the columns are connected by a complete circuit of communication cables all the way around the vehicle. But the RCH4 needs just three cables connected in a horseshoe shape. As a result, one end of the lift is always open, making it easier to quickly position vehicles on the lift. The lightweight cables feature a quick-connect design and are 10 m long for added flexibility.

The RCH4 is battery-operated with an internal charger, eliminating the need for power cords and improving the lift’s portability. Its hydraulic cylinder is inverted so the chrome piston rod is protected from debris and damage at all times, extending the life of the lift and reducing maintenance costs.

The RCH4 mobile column lifting system has been third-party tested by ETL and ALI certified to meet industry safety and performance standards.

Source: Rotary Lift
Hydraulic dump cylinders are fundamental components to the safe and reliable operation of dump trucks and trailers. Properly maintained, they will last the life of the vehicle. Unfortunately, maintenance is all too often overlooked, and cylinders suffer abuse in key areas, which can affect both their safety in operation and also their reliability. The core problem seems to be one of time constraints. Tight schedules prevent operators taking vehicles out of service, even for a few hours, to perform routine maintenance. One can understand this reticence, with the cost of an inoperative truck. However, on the other side of the equation, there is the fact that, if a truck is taken out of service for preventative maintenance, then the maintenance is scheduled; the operator is in control and can determine the most opportune time for the work to be performed. The alternative could be a breakdown at much higher cost. Larger fleet operators appreciate this reasoning and usually have preventative maintenance schedules. Lacking the resources of larger organizations, smaller fleets and owner operators are not generally able to afford dump cylinders the same levels of attention. As a result, there is more onus on the driver of the vehicle to undertake the simple day-to-day tasks that keep the dump cylinder in good working order.

This is not a problem if the driver is aware of what is required; unfortunately, he often is not. Here the problem is not related to the supplier. Rather, it is whether the manual finds its way from the body builder into the hands of the truck operator or driver – the people who most require it. The operator’s manual is crucial because it provides key information that enables the driver to learn the do’s and don’ts of cylinder operation. It also enables him to familiarise himself with and check the key areas of the dump cylinder system before he puts it to everyday use.
The general areas that require checking include: hoses and fittings, for abrasion and leaks; hoist and hinge mountings for security and wear; oil level; detachable hose couplings for tightness; the PTO engaged warning system; and the body raised warning system.

In addition to familiarisation, the driver must be aware of the safety code for tipping, and how compromising the code affects the operation and life of the dump cylinder. Prime examples are inordinate loading of the dump cylinder past its recommended capacity which in turn helps to resist the effects of tipping on uneven ground, especially with what are known as “sticky loads”.

So-called “sticky loads” are those that refuse to slide from the body once the tipper is raised. In many cases the drivers reaction to this problem is to “shunt” the load – that is to drive the vehicle forward with the body fully raised, and then brake suddenly to provide inertia to release the load. Unfortunately, this process can cause a dump cylinder to buckle, sometimes with disastrous results, such as piercing the cab of the vehicle.

The second problem for dump cylinders resulting from sticky loads is that they can adhere to just one side of the trailer body as the body is raised. The result is that the body tips to the load side, moving the center of gravity outside of the centerline of the vehicle. This, in turn, can cause the vehicle to roll over.

In addition to the state of the load itself, another contributory factor to this problem is the failure to regularly regrease hinge points both on the dump cylinder and body. Many operators use power wash equipment that blasts under body areas of the trailer, in the process often removing grease from these critical hinge points.

What can result from this is that the hinge points on one side of the body often become looser than those on the opposite side, causing an imbalance, which can contribute to a roll over situation. To avoid this problem, it is essential to regularly grease the brackets that fix the dump cylinder, and check them for any signs of excess wear.

Finally and importantly, any malfunction in the operation of tipping cylinders should be reported promptly to the relevant service agent.

Source: Edbro Plc
**New CF1 PRO Vibratory Plate Compactor with Honda Engine**

Weber MT, the industry authority of high-quality machines for the construction industry, unveils a new small and efficient vibratory plate soil compactor: the CF1 PRO. This new design concept was developed through intensive measuring and testing, resulting in a machine that combines dependable operation and thorough compaction in a small package.

The CF1 PRO is ideally suited for compaction of sand and gravel, no-slump concrete, and insulating materials. Additionally, the optional polyurethane pad and water sprinkler system allow for the compaction of block and asphalt paving materials – making the CF1 PRO a truly versatile machine.

The new CF1 PRO is a complete redesign of Weber MT’s original CF1 soil compactor, and includes numerous improvements over the original technology. These include a redesigned base plate that offers higher rigidity and a raised front edge to reduce the accumulation of debris during compaction, resulting in smoother operation; a rear beveled edge in the back to promote linear compaction and stability; tempered construction to ensure superior compaction near the edges of the working surface; and slots on the front and rear of the base plate to allow for optimal positioning and tension for the polyurethane pad. This new model also comes with a dedicated lifting eye for easy transportation, as well as an available water tank with a 3+ gallon capacity.

The compact design of the CF1 PRO – which includes a folding guide handle – allows the machine to be easily transported, even in the trunk of a car. At only 145 pounds, this compactor provides an impressive 2,500 pounds of centrifugal force – 10% more than the previous model. It also comes with adjustable handles that help reduce hand and arm vibrations.

Weber MT’s vibratory plate compactors are designed to handle the toughest of worksite conditions with ease. Not only that, but their fully closed V-belt guards meet the industry’s highest safety requirements. All of their compactors are built using first-class technology in the company’s state-of-the-art facility in Germany. Weber MT also offers a range of optional accessories that enable the use of the CF1 PRO to meet nearly every light to moderate compaction need.

Source: Weber MT

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**Appointments**

The Asphalt Pavement Alliance, a partnership of the Asphalt Institute, the National Asphalt Pavement Association, and the State Asphalt Pavement Associations, has named Robin Klinefelter director of marketing and communications.

In this new role, Klinefelter is responsible for developing and implementing a communications plan incorporating various media strategies and communications vehicles, including print and electronic publications, social media, media relations, events, and website, to maximize the visibility of APA services, messages and documents.

Klinefelter brings an extensive communications and public relations background to the APA. Employed for more than 20 years at Chester River Health System in Chestertown, Md., Robin served as vice president, communications and development. In this role, she was responsible for public relations, strategic planning and fund raising.

Source: The Asphalt Pavement Alliance

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To enhance customer and distributor support, Terex Roadbuilding announces the appointment of Mike Rodriguez as the as the full-line road building equipment district manager for the western Canadian provinces and territories. Throughout his 20-year career in the industry, Mr. Rodriguez has gained broad-based equipment experience from positions ranging from service support and product management to regional sales manager and national sales director.

Mike Rodriguez is now the single-source contact for customers and distributors for all Terex® road building equipment lines, making it easier and more efficient to do business with Terex Roadbuilding, thanks to new simplified sales and support processes for equipment manufactured in Canton, South Dakota, Fort Wayne, Indiana, and Oklahoma City, Oklahoma.

Mr. Rodriguez has equipment sales and support responsibilities for the provinces of Manitoba, Saskatchewan, Alberta and British Columbia as well as the Northwest Territories, Nunavut and Yukon. His expansive background includes experience with crushing and screening equipment, cranes, concrete and asphalt equipment, and landfill compactors. For the past four years, he has served as the western Canadian district manager for Terex Roadbuilding.

Source: Terex Corporation

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March 16 - 25, 2012
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2012 Quebexpo
March 27 - 28, 2012
Saint-Hyacinthe, QC Canada

CEMENTTRECH 2012
March 28 - 30, 2012
Beijing, China

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

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

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

INFRATECH 2012
April 16 - 21, 2012
Paris, France

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

The Steel Conference & World Steel Bridge Symposium
April 18 - 21, 2012
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AQEI's 3rd Annual Convention
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