Put the Larue advantage to work for you

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

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

LARUE 7460 dual engines, 775 HP, 4,400 tons/hour capacity, all wheel drive, available with the Larue A.R.S. (automatic rear steering all wheel steering system).

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

The Professionals Choice
For Specialized Equipment

LeeBoy 8615 Paver increase productivity and reduce operating costs with LeeBoy’s 8615 Conveyor Asphalt Paver. The 8615 incorporates big paver features into a heavy-duty, maneuverable package designed for production and reliability. It includes an 8-15-foot propane or electric heated and vibrating Legend™ screed system, powerful 87-hp Kubota diesel engine, dual operator controls and high-deck/low-deck configuration. LeeBoy, the world’s leading maker of asphalt pavers, produces models from the 7065 and 10000 tilt hopper pavers to the 5000, 7000, 8500, 8515 and 8816 conveyor pavers to meet the varied needs of today’s paving contractor.

LeeBoy 8815 25,000 lbs class 8’ to 18’ paver Cummins 130 HP engine, Legend™ screed system with 10% slope on extensions, variable speed 14” cast segmented augers, patented under auger cut-offs.

The Future on Residential and Commercial Construction Sites

Manufacturer of
Heavy Duty Snowblowers

LeeBoy products
for Quebec and the Maritimes

Financing Available at competitive rates on LeeBoy and Rosco Products

LeeBoy 705 Grader All-gear Dana tandem drive, 130 HP Cummins engine, 25,300 lbs static weight, 6 speed forward / 3 speed reverse powershift transmission, 12 foot sliding moldboard, articulated frame 40”.

Three models to choose from:

50 to 83 HP

Special offer on LeeBoy 785 Demonstrator

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In this issue of InfraStructures you should notice that we have added pages to offer our readers even more content.

As usual, you will find reports on trade shows, news product releases, financial news and technical articles that relate to the various aspects of our industry.

The wide array of applications in which heavy and specialized equipment are used is represented by the diversity of subjects found within the pages of InfraStructures.

We are currently working on our next issue which will include our annual focus on snow removal equipment and technologies. If you are in this industry, you have to be featured in the August issue of InfraStructures.

Take the opportunity to contact us to confirm your contact information, include a friend or colleague in our circulation or simply share an opinion or suggestion with us.

Enjoy your reading,

Editor/Publisher

On the cover: this three-axle tanker is used at a Lafarge quarry located in Montreal-East. The polished aluminum water tank has a 20 000 l capacity and is equipped with features that makes it suitable for many applications.

Montreal-based Certiflo designed and built the vehicle.
FRS, BEST FOR THE WEST!

Garlock Equipment Company has announced that effective June 1, 2007, FRS will be the authorized dealer for Alberta, Saskatchewan and North Western Ontario.

FRS, a U.K. based roofing and specialty products distributor has been the authorized Garlock Equipment and Safety Supplies dealer in Manitoba since 2005. This current announcement is in recognition of the commitment FRS has made to the Garlock product range.

“FRS brings Product Support and service capabilities to our customers, which is very important. As technology develops and machinery becomes more complex, downtime on commercial projects becomes critical”, according to Steve Guenther of Garlock.

“Our model of doing business is geared toward the after sales support of customers and their equipment, including parts and technical advice. Our customers have told us that our competitors tend to be more focused with materials and commodities than equipment and the life-cycle support of it”, added Richard Jones of FRS.

Garlock Equipment Company is the largest manufacturer of commercial roofing equipment in the world. Located in Plymouth, Minnesota Garlock is part of the Plymouth Industries family of companies which includes Cimline, Equipit, Kimble Mixer, and Durapatcher. Garlock is a leader in engineering and development of commercial roofing and related equipment and is supported by a network of independent dealers in Canada and abroad.

Source: Garlock Equipment Company

TIMBREN INDUSTRIES EXTENDS CUSTOMER SERVICE HOURS

In order to better serve customers, particularly those in later time zones, Timbren Industries Inc. has extended the hours that its friendly and knowledgeable Customer Service staff is available – from 8:00 to 19:00 Eastern Time.

Timbren Industries is also proud to have achieved a shipping rate of 99.4% line fill over the past 12 months. The company is an ISO 9001 registered company that manufactures suspensions and suspension enhancement systems for all truck, vans and SUV’s and trailers.

Source: Timbren Industries Inc., 1-800-683-5991

SNC-LAVALIN ACQUIRES AQUA TERRE SOLUTIONS

SNC-Lavalin is pleased to announce that it has acquired Aqua Terre Solutions Inc., a specialized environmental consulting practice with over 15 years of solid experience throughout Canada.

Aqua Terre Solutions is based in Ottawa with major offices in Toronto, Calgary and Saskatoon. Its services include contaminated site assessment, remediation, management, air quality modelling, and occupational health and safety.

“The addition of Aqua Terre Solutions to SNC-Lavalin Environment complements our existing multidisciplinary expertise, and provides strategic geographic coverage throughout Ontario for our established national blue chip clients,” stated Grant Byers, senior vice president and general manager, SNC-Lavalin Environment. “The added capacity in Alberta and Saskatchewan also substantially increases our market share...
Aqua Terre Solutions’ 110 employees bring SNC-Lavalin Environment’s combined technical resources to over 500 people from coast to coast.

“This acquisition is in line with our strategy to further develop our global environmental capacity and support other SNC-Lavalin divisions,” said Pierre Anctil, executive vice president, SNC-Lavalin Group Inc.

Source: SNC-Lavalin Group Inc.

ADF GROUP INC. HAS BEEN AWARDED AN ADDITIONAL CONTRACT AT RALEIGH-DURHAM INTERNATIONAL AIRPORT

ADF Group Inc. announces that it has been awarded an additional contract by its client at Raleigh-Durham International Airport in North Carolina, USA, where ADF is currently executing the fabrication of the complex steel structure for the new terminal. This new contract, evaluated at $9.5 million, consists of the engineering and fabrication of the complex steel structure for a new concourse. Delivery is scheduled for 2008.

Jean Paschini, chairman of the board and chief executive officer, indicates that “ADF’s ongoing contract at RDU’s Airport is progressing well to the client’s satisfaction. ADF’s know-how in the sector of airport infrastructures is recognized in the market leading to repeat business with the client. Negotiations are currently underway and we are confident that we will be able to announce new contracts in the near future.”

Source: ADF Group Inc.

PURE ANNOUNCES SUCCESSFUL SMART-BALL® TEST FOR LEAK DETECTION IN OIL PIPELINE

Pure Technologies Ltd. announced recently that it has successfully completed the first field trial of its SoundPrint® Smartball leak detection system in a crude oil pipeline. The test was carried out 17.7 km of a 25 cm crude oil pipeline in Texas operated by a major international oil company.

The results of the test indicated that SmartBall can detect leaks of less than 3.8 l/min at an operating pressure of approximately 8.6 bar. This compares with detection sensitivity on this line of approximately 190 l/min using conventional mass balance computational methods. The device was deployed and retrieved without incident by pipeline operations personnel using existing pigging infrastructure.

Commenting on the news, Peter Paulson, Pure’s CEO, said: “This successful test confirms that SmartBall represents a major breakthrough in loss control and environmental protection in the hydrocarbon pipeline sector. The technology allows operators to implement regular leak surveys of pipelines with diameters of 100 mm and greater, with unparalleled sensitivity and low cost. The equipment is very portable and can generally be shipped as checked baggage. It can operate for up to 40 hrs, which would typically allow it to traverse pipeline lengths of up to 100 km with a single deployment.”

“We are delighted with the results of the test and will be immediately commencing the implementation of a major initiative to market the technology internationally. This will complement the commercial deployment of SmartBall for water and wastewater pipelines, currently under way.”

Source: Pure Technologies Ltd.
POLYSIUS ACQUIRES A-C EQUIPMENT

Polysius, a ThyssenKrupp Technologies subsidiary, has taken over A-C Equipment Services Corp. of Milwaukee, Wisconsin.

A-C Equipment is a leader in the cement kiln market and supplies parts, construction services, technical assistance and engineering for rotary kilns and other key components of cement industry equipment. The company generated sales of around US$29 million in fiscal 2005/06.

Polysius is expanding its North American aftermarket business and the addition of A-C Equipment is a major strategic step enabling it to graduate to a full-service supplier on this market.

ThyssenKrupp Technologies is a manufacturer of advanced-technology plants, components and machinery.

With a highly skilled workforce, on the basis of foremost world market positions as well as innovative systems and engineering capabilities, the Group supplies facilities, components and systems together with the associated services.

The target is market leadership in high-performance areas of business, technological supremacy and the development of innovative products that deliver ample customer benefits.

Source: ThyssenKrupp Technologies AG

Halifax Metro Centre structural health monitoring system awarded to Smartec SA

Smartec SA, a wholly owned subsidiary of Roctest Ltd. announced recently that it is providing, in conjunction with its Certified Solution Provider, MacDonnell Group Consulting Limited, a monitoring system for the Metro Centre arena in Halifax. Smartec’s portion of the contract is valued at 140 000 CHF (approx. $128 000) and is being delivered during the 1st and 2nd quarter 2007.

MacDonnell has developed a Structural Asset Management solution for providing a comprehensive approach to manage risks involved in the operation of older arenas, stadiums and similar public structures affected by a significant increase in design snow loads for such structures due to the recent revisions to North American building codes. The solution includes structural investigation, analysis, design and installation of a Structural Health Monitoring system, data analysis, real time reporting and a series of notifications and alerts for building managers.

Since opening its doors, Halifax Metro Centre has become a first class multi-entertainment, sports facility and exhibition centre connected to the World Trade and Convention Centre, in a strategic downtown location at the centre of metro business activity. It is the largest arena in Halifax and is host to a range of entertainment and sporting events in the city. It currently has a seating capacity of 10 595 for ice hockey. Since the arena’s construction in the late 1970s, the design loads have increased substantially and there is an ever increasing use of suspended equipment for lights and sound for special events.

The owners of Halifax Metro Centre retained MacDonnell to conduct a structural investigation of the roof structure and provide means to effectively monitor the actual snow loads and manage the entertainment loads suspended from the roof. Based on the research and a recommendation by HRM staff to implement a Structural Health Monitoring System, the Halifax Regional Municipal Council voted unanimously to award a contract...
for the supply of Structural Health Monitoring System components for the Halifax Metro Centre to Smartec SA. MacDonnell will oversee the installation, commissioning and reporting for the fiber optics-based system together with an automatic laser scanner that will provide real time information on the status of the roof structure.

“Our products are conceived to provide data on the real conditions of any civil structure. The Halifax Metro Centre monitoring system is an evident example that shows how our technology can actively contribute to people’s safety by monitoring and detecting any anomalies or degradation of the building so as to prevent that a dramatic event may occur,” said Roberto Walder, sales manager of Smartec SA. “I expect this technology to be used on many other public structures.” he added.

“We congratulate MacDonnell on their demonstrated experience and technical competence of the use of our systems in the Structural Health Monitoring field, particularly this innovative solution for arena roof monitoring. We look forward to a growing relationship with MacDonnell”, said Nicoletta Casanova, CEO of Smartec SA.

Source: Roctest Ltd.

Cutting Will Never Be The Same

Life just got easier for pro-cutters.

The PS7060 series walk-behind pavement saw from Multiquip features unique stay-level handles (SLH) that remain level regardless of the saw’s operating position. These handles, coupled with the saw’s moving center of gravity for optimal balance in all cutting applications, minimize operator’s fatigue while boosting productivity.

This unit is equipped with an Automatic Parking Brake System, which requires no operator actuation. Brakes are released when engine is running and automatically engage when the engine is off. This feature delivers the benefit of increased operator safety when parked on slope surfaces.

The PS-7060 is fueled by a 60 hp Deutz diesel engine. It is designed with a Blade Spindle Assembly of 125 hrs and 500 hr Hydraulic System maintenance cycles, maximizing operating time. This unit has a 91 cm blade capacity and a maximum cutting depth of 15 inches.

The saw showcases a Vibration Isolated Console. Control console, belt drive guard and engine side guard are equipped with rubber isolation mounts for reduced vibration which significantly extends the overall lifetime of the components.

The PS series is designed with a Blade Shaft and Support Bearing Assembly which is fully enclosed in a dual sealed oil bathed design requiring no greasing while promoting accurate sawing and precise cutting.

Source: Multiquip Inc.

Atlas Copco’s TEX 10 Pick Hammer Ideal in Confined Spaces

The TEX 10 pneumatic pick hammer from Atlas Copco Construction Tools features a long piston stroke and relatively low impact frequency, making it an effective tool for light demolition and controlled chiseling of concrete and hard brick, especially close to walls and in confined spaces.

The compact TEX 10 weighs 10.7 kg and has a length of 50 cm. The unit accepts a 2.2 cm x 8.25 cm standard hex-shaped tool shank and features a kick-latch retainer that facilitates quick and easy tool changing on the job.

The TEX 10 requires 1 m³/min of air and delivers a modest maximum impact frequency of 1350 blows/min to allow for more efficient and controlled breaking. The pick hammer’s high power-to-weight ratio and long piston stroke combine to produce high impact energy, even in tight spaces.

Maneuverability and ease of operation of the TEX 10 are further enhanced by a slim profile and lightweight design. Other standard ergonomic features include a D-handle with outside trigger and an air cushioning system that substantially reduces machine vibrations when the hammer is running off load. Additionally, the working parts of the TEX 10 are housed within a slim silencer that reduces sound levels to 103 dB, well below European Noise Emission Directive (NED) limits.

Offering a wide range of steel tool accessories, the TEX 10 can be used for a variety of applications including breaking, chiseling, cutting, digging, driving and tamping.

Source: Atlas Copco Construction Tools
Heil Environmental has updated its popular Rapid Rail® continuous pack automated side loader to provide customers with improved durability, easier maintenance and smoother operation.

“The Rapid Rail has led the automated refuse and recycling collection movement for more than 30 years; and it remains in demand by fleets throughout North America,” says Shannon Harrop, Heil director of product management. “In order to ensure that we are offering our customers the best possible products, we frequently re-evaluate our vehicles for improvement opportunities. Over the past two years, as part of our Voice of Customer program, we have facilitated multiple meetings with Rapid Rail users to learn what they like about the product and what changes they recommend. Many of the improvements we have made are direct results of their valuable input.”

Heil’s product design team focused the improvement efforts on the Rapid Rail’s automated arm structure, electrical system and hydraulics. The continuous pack body, with its patented paddle packer design, is unchanged.

To strengthen the arm, engineers designed a tapered cross section main lift beam to better match the stresses imposed on the backbone of the lift. The cross section grows taller near the pivot point of the lift where maximum stress occurs. The lift beam is precision-cut using Heil’s unique laser technology. The grabber gears also have been beefed up. The teeth on the new grabber gears are 80% larger, providing a significant improvement in durability.

The Rapid Rail’s former electrical system used limit switches to regulate the arm’s hydraulics controls. These switches required frequent adjustment. Heil engineers have replaced the mechanical limit switches with modern proximity switches that need minimal adjustment.

The Rapid Rail is one of the only automated refuse collection vehicles to use electrical cab controls, which many operators prefer. The electric shift valve has traditionally produced a more abrupt motion. To keep the popular electric controls, but smooth out the arm’s performance, Heil replaced the old valve with a “soft shift” valve metered by advanced controls. As a result, the arm moves much more smoothly.

Heil also has added a cable carrier to the arm to house all of the hydraulic hoses and an electrical loom. The carrier allows the hoses to move and flex, while minimizing rubbing that can lead to wear. Other hydraulic hoses and electrical wiring were rerouted to better protect them against damage and improve access for service.

Other Service Smart™ enhancements include moving the lift valve from a position on the arm itself to a more easily accessible location on the stationary track along which the arm travels. The old coordinator board and impulse relays have been replaced with a modern PLC.
Led by the increasing demand of the mineral exploration industry, Fordia introduces a new sure value product, the Golden Bear 1400m NQ drill rig. Powerful and reliable, this Canadian surface diamond rig offers great performances and drills up to 1800 m with BQ rods.

The Golden Bear is designed intelligently for more efficiency and simplicity. Its modular structure facilitates assembly and manipulation, and accommodates most drill rods, including P sizes. It is also possible to upgrade the rig for even greater depth capacity (up to 2000 m), by changing the feed cylinder and rotary head and keeping the same structure.

The Golden Bear uses a technology that is simple, and that has proven its value and its reliability. In rare cases of breaking, it is easy to repair and does not require a specialized mechanic. Moreover, its pieces are standard sizes and are available easily throughout the world.

Manufactured in Val d’Or, a cornerstone in the mineral exploration industry, the Golden Bear has been developed by a team that has more than 20 years of experience, and this is what makes it such a reliable tool. Its five pulley system, ensures a better cable lifetime by distributing equally the weight, and is a great feature of its sturdy structure.

“The Golden Bear rig is the very first drill rig marketed by Fordia”, says Gabriel Allen, vice-president of sales and marketing “it is a great added value to our actual product line, since Fordia already distributes the Versadrill drill rigs, which are having a great success since many years”. The Golden Bear 1400m NQ complements perfectly the 0.4kmB, 0.8kmB and the 1.4kmB Versadrill rigs, actually sold at Fordia.

Source: Fordia Group

(programmable logic controller) which allows for more sophisticated electrical diagnostics.

The new parts have been designed to retrofit to the thousands of existing Rapid Rail continuous pack automated side loaders in the field. Retrofit kits are available through Parts Central, a Heil company.

“Most of the Rapid Rail features customers like are unchanged,” Mr. Harrop says. “The arm’s unique geometry provides a direct line to the hopper, with no ‘kick-out.’ Although the arm’s structure is more substantial, the vehicle operator retains the industry-leading cart visibility the Rapid Rail is known for. And all the specs are the same: 8 s cycle time, lift capacity up to 725 kg, 2.4 m reach and the ability to serve more than 1000 homes per day.”

All of the Rapid Rail continuous pack body’s popular features remain, as well. High-tensile steel construction makes the floor and hopper walls strong. Its paddle packer continuously sweeps the hopper and packs the load. Since this design requires no packer panel to slide into the body, there are also no shoes, guide tracks or guide rails to wear out, and it is never necessary to clean out behind the packer. All hydraulic cylinders are accessible from ground level. The packer cylinder is located under the body, which protects it from refuse contamination, and eliminates the need for technicians to crawl into the body to service it. There are also fewer cylinders to service: the Rapid Rail uses only two cylinders to raise, lower and lock the tailgate, compared to four on some other bodies.

The updated Rapid Rail will be available in the third quarter of 2007.

Source: Heil Environmental
The PicBucket® Excavates a Pool Site in Far Less Time!

Français Labbé, on assignment for Corporation Power Tech Inc. Special collaboration

Excavation Couville is a well-respected firm from the greater Montreal area, specializing in close quarter or hard-to-access excavation jobs, like in-ground pools in back yards. One of the area’s most popular pool installation companies relies on Couville to get the job done. Couville’s fleet of Kubota equipment includes two KX-121 mini excavators and a loader. In the words of Sylvain Villeneuve, president of Excavation Couville, “If you want to get ahead in this business, you need the right equipment.” Over the years, he has been faced with many challenges, and every close quarter excavation site has its own particular difficulties.

Mr. Villeneuve had heard about the PicBucket but was skeptical about the potential performance of a tool that combines the force of a hydraulic hammer with the digging power of a conventional bucket. After discussing it with PowerTech specialists, he understood the technical specs and capacities and how they applied to his work sites. “On paper it looked great,” he said, “but the real test was the work site.”

REALITY TEST...

In-ground pool excavation in tight work sites requires precise planning and execution. Generally, contractors would use two types of equipment for a job like this: an excavator to dig the whole and another to remove debris and shuttle back and forth between the hole and the dump truck in the front of the house.

Given the fact that it is the client who chooses the pool’s location based on aesthetics, contractors uncover unexpected surprises once the digging begins. In western Montreal, it is not uncommon to find sandstone, limestone, schist and even dolomite hiding beneath the surface – all of which can make the excavation difficult.

Sylvain Villeneuve was waiting for just such a surprise. He wanted to put the 31 cm, 1000 Series PicBucket to the test on the Kubota KX-121-2. It did not take long before he was convinced. First off, you do not need any special training to use the PicBucket, because it works just like a conventional bucket. The work was completed without a hitch and everyone on the site was amazed. The bucket acts like a hydraulic hammer with the digging power of a conventional excavator. You can even remove debris with it. “I saved a lot of time by removing debris as I broke the surface. There was less moving around with the equipment. Usually, with a conventional bucket all I can do is break new ground. With the PicBucket, I can clear the work area as well and keep better track of my progress.”

“I got the job done in far less time thanks to the PicBucket. For us, productivity means profit; for our clients it means the job gets done quickly and that keeps them happy.”

Sylvain Villeneuve, president Excavation Couville Inc.

THE IDEAL TOOL...

The excavating power of the 1000 Series bucket combined with its 200 ft lbs of striking power make the PicBucket an ideal tool for excavators ranging from 3,5 to 7 t. In contrast to mini excavators with conventional buckets that often lack power when it comes to hard, clay or frozen ground, the PicBucket gets the job done in record time.

CONCLUSION...

The Series 1000 PicBucket is an important accessory for any mini excavator. On jobs like trenching, excavation and light demolition, it will increase the productivity and profitability of your machines.
The next World of Asphalt Show and Conference will feature the co-location of the inaugural World of Aggregates Forum & Expo (WAGG), with the two events to be held March 9-12, 2009 in Orlando, Florida.

The co-location is the result of partnering efforts between the National Asphalt Paving Association (NAPA), which co-owns World of Asphalt, and the National Stone, Sand and gravel Association (NSSGA), which owns World of Aggregates, aimed at benefiting attendees and exhibitors of both events.

The co-located shows will offer access to more education programs, a broader array of exhibiting companies and products, and increased opportunities for industry networking, all with a maximum return on investment.

World of Asphalt features exhibits of the latest product technologies and innovations plus extensive industry-specific education. The event is targeted to a broad range of asphalt, highway maintenance and traffic safety industry professionals, from companies large to small, in the U.S. and worldwide.

NSSGA operates an extensive program of educational conferences and workshops, and its intention is to combine these into a central location through World of Aggregates, which will also include exhibits of the latest aggregates-related equipment, products and services.

“World of Asphalt has always offered a top quality exhibits and education experience, and this co-location will help us take it to the next level. The co-location is a logical next step as we continue to grow World of Asphalt and extend its value,” stated Mike Acott, president of NAPA.

“The industry segments of NSSGA and World of Aggregates complement those of NAPA and World of Asphalt, and we share a focus on industry education, so the co-location is a natural fit,” stated Rick Feltes, a past chairman for NSSGA and chairman of the WAGG management committee.

World of Asphalt is held annually except in CONEXPO-CON/AGG show years, and is co-owned by NAPA, NSSGA and the Association of Equipment Manufacturers (AEM).

“Both shows follow AEM’s philosophy of events run by and for the industry, and this co-location also illustrates that industry-first approach,” stated Dennis Slater, president of AEM.

Source: World of Asphalt
Volvo Selects Top Service Technicians for 2007

No one knows Volvo trucks better than the technicians at Volvo Trucks North America’s 325 dealerships. On April 12, the best of the best service and parts personnel from Volvo’s dealer network gathered at Volvo headquarters in Greensboro, North Carolina, to choose the North American winners of the Volvo VISTA competition.

VISTA is a hands-on competition to select the top dealer service and parts personnel and to highlight technician excellence. It is also an exciting and effective way to maintain a high level of technical skill and proficiency in the Volvo dealer network. Hundreds of people compete in the six-month program, which requires a significant dedication of time and effort by the participants. The VISTA competition is held every two years among three-person teams fielded by Volvo dealers, usually consisting of a mix of service and parts experts.

The 2007 North American VISTA competition was won by the team from Beaver Truck Centre, of Winnipeg, Manitoba. The team consisted of Dan Teleglow, Dennis Baehnk and Chris Dunn.

Another Canadian team – from Surgenor Truck Centre, of Ottawa, Ontario – finished in second place.

For winning the competition, each member of the Beaver Truck Centre team received a new Harley-Davidson motorcycle and top-of-the-line Snap-on tools.

There are three rounds of competition involving online technical questions to produce six teams of finalists – one from each of the four U.S. regions, and two from Canada. The six teams then traveled to Greensboro for the final round. All the answers for the written questions are contained in Volvo service and parts literature, and the finalists were tested on their knowledge of service bulletins and ability to look up parts and service information within the Volvo system. There was also a strong hands-on element to the competition.

Environmentally Friendly Dust Control Solution

Before considering using a traditional dust control product on gravel roads, which are renowned for their varied results and environmental issues, Cypher International Ltd. recommends its newly developed innovative Dust Stop product. Dust Stop is unique to any other product on the market today because of the advantages it possesses over the alternatives – including its availability in powder form, its environmental characteristics (toxicology reports are available upon request) and last but certainly not least, its unrivaled effectiveness.

In the past there have been many dilemmas regarding dust particulate emissions and the various dust control products that were available to combat these problems. Issues such as human health, the environment, application procedures, effectiveness and cost were all posing serious problems regarding the dust; and the prevention thereof. Dust Stop was designed specifically for ease of application, longevity of results and to be non-toxic to the environment, all of which specifically address the problems that once existed in the dust control industry that are noted above. Dust Stop is truly unique in that it can perform better than any liquid dust control products, but due to the savings in weight, the powder form of the product allows for significant savings in shipping/storage expenses as well.

Another major advantage that Dust Stop possesses is that, although it was developed in Canada, it has been formulated to be effective on a wide range of soil types and applications. Thus it can be utilized to combat hazardous dust on soils found all over the world, not just in North America alone. Therefore since the product is so highly versatile it should be considered as a valuable asset for any rural or urban dust control requirements found worldwide.

Dust Stop truly is a results oriented product that meets the needs of even the strictest dust control requirements. Not only will the product prevent dust, but it is also utilized for its soil stabilization/erosion control capabilities as well as on a wide range of applications other than roads.

Source: Cypher International Ltd.
Les Équipements Twin is very proud to congratulate Remorquage Rondeau for its recent acquisition, a brand new Challenger 9975 from Miller Industries. This new heavy duty wrecker is the first rotator manufactured by Miller for the Province of Quebec.

Michel Rondeau, the man behind this project, said to be extremely happy with his acquisition, but also very proud to be the first in Quebec. “The main advantage of this type of unit is the ability of its boom to rotate 360°, allowing it to do side recoveries while being parked parallel to the road, thus blocking less traffic lanes. A major advantage!, declared Mr. Rondeau. The wrecker can also be used as a crane in certain situations.

On the picture, we can see the unit on a podium at Miller Industries’ plant in Chattanooga, Tennessee, where its owner took possession.

Source: Les Équipements Twin - Montreal

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A Stolen Truck and its Cargo Quickly Recovered Thanks to Boomerang

In the evening hours of May 1st, 2007, Boomerang Tracking Inc. received an automatic theft notification signal from a Boomerang2 device installed in a 9900 International 2007. Within minutes of receiving the signal and confirming the theft with the owner of the transport company, a Boomerang tracking team was immediately dispatched to locate the vehicle, valued at approximately $130 000. It was an even more important recovery for the client, since there were also two containers attached to the equipment at the time of theft. The load of copper in the containers was valued at an additional $350 000.

Less than an hour later, the Boomerang Tracking team located the missing truck driving on Route 117 South and local authorities were immediately notified. The police intercepted the vehicle as it tried exiting to St-Jovite and took the driver into custody. Needless to say that the owner of the company was very happy to have his vehicle and his load of copper back so quickly!

If the thief had known that the truck was equipped with a Boomerang2 tracking device, he would certainly not have stolen it! Boomerang Tracking Canada’s leader in tracking stolen assets. Since its creation in 1995, Boomerang Tracking has recovered more than 5500 vehicles representing more than $280 million in total value. To date in 2007 Boomerang Tracking recovered more than 200 vehicles and has led law enforcement to the arrest more than 56 criminals.

Source: Boomerang Tracking Inc.
With Emmie 2, Changing Oil Is No Longer Needed

Alfa Laval has just released Emmie 2, an updated and enhanced version of their portable centrifuge. The operation and control of the Emmie 2 has been significantly improved over its predecessor.

The Emmie 2 mobile cleaning system for hydraulic oil comprises a trolley mounted centrifugal separator and a mobile electrical oil heater. Wheeled between hydraulic systems, Emmie 2 removes water and 99% of all particles in the size range 2 µm-5 µm.

It comes complete with its ancillary equipment and only requires a 230 v power point.

The result is a dramatic increase in the reliability of the hydraulic systems, the life time of the hydraulic oil is extended, filter cartridge consumption is reduced and there is less contaminated oil to dispose of.

Particles that contaminate oil come from different sources, including wear from metal, plastic, and rubber components, paint flakes, and even airborne dust. Left alone in the oil, these particles will wear down and clog the equipment.

The smallest particles, less than 5 µm, are the worst problem. It is not economical to catch such small particles with a filter. Water in oil is bad news, too. It deteriorates the oil’s properties. It also damages valves and pumps, due to oxidation of oils and additives, as well as corrosion.

Normally, these problems can be avoided by periodically changing the oil, usually based on the manufacturer’s recommendations. In between scheduled oil changes, oil filters are often changed to assist in keeping the oil as clean as possible.

However, changing oil and filters in dirty environments like experienced in mining is hard to achieve without introducing contaminants in the process. But, until recently, it has been the only real option used in the many industries like the mining industry.

It turns out that the use of centrifuges is a way to get around changing oil filters and oil, a way that can also save an incredible amount of time and money.

A centrifuge has the ability to remove contaminants including water from the oil, in many cases, even when the equipment is actually operating. In the maritime industry, it has been a standard practice for decades for ships to have centrifuges continuously cleaning engine lube oil and fuel.

Rather than bore you with the finer technical details, it will suffice to say that the centrifuge removes these contaminants down to the micron level by accelerating particle settling and liquid separation thousands of times. Some discs are used in the centrifuge to increase the particle separation area, making the centrifuges incredibly efficient.

Emmie 2 builds on the 5 years of success of its predecessor. The controls are now much more user-friendly. All the operator has to do is insert the viscosity grade of the oil and the machine will do the rest.

Alfa Laval is a leading global provider of specialized products and engineered solutions. The company operates in short supply.

Source: Alfa Laval

Ford Rolls Out Super Duty-Inspired 2008 E-Series Vans

Ford has grafted on a new front end derived from the 2008 F-Series Super Duty pickups that gives the commercial workhorse an aggressive new look.

The makeover includes new sheet metal from the A-pillars forward, including hood, fenders, radiator support, grille and bumpers. “We enlarged the front end of the E-Series with a bigger, bolder grille to showcase its strength and reliability,” said Pat Schiavone, Ford truck design director. However, the door and floor structures measurements are unchanged and the seat attachments are in the same location as those on the previous model making the new model compatible with existing outfitters shelving accessories.

The new braking system features larger front and rear rotors and calipers. Chassis and suspension improvements have resulted in an increase in the maximum gross vehicle weight rating from 6375 kg to what Ford says is a class-leading 6575 kg.

The E-150 and E-250 are equipped with a 4.6 L V8 while the E-350 and E-450 are equipped with a 5.4 L V8. Standard AdvanceTrac with roll stability control comes on E-350 wagons with the 5.4-liter V8. A Power Take-Off Provision is optional on 6.8L cutaways and strip chassis with 401 cm and 447 cm wheelbases. It provides an access panel in the transmission housing to connect a PTO system.

Source: Ford Motor Company
Carlisle SynTec Incorporated, the leading manufacturer of single-ply roofing systems, continues to offer innovative roofing solutions with its new, GreenGrid® Roof Garden System. Consisting of pre-planted, modular trays, Carlisle’s GreenGrid Roof Garden System is a simple, fast and cost-effective way to install beautiful, environmentally friendly roof gardens.

GreenGrid Roof Garden Systems are approximately half the cost of a traditional roof garden installation, saving building owners money and increasing profits for roofing contractors. The modular trays are lightweight and easy to handle, allowing roofing contractors to install the entire roof garden system without the need for landscape architects, further increasing profits.

Carlisle’s GreenGrid offers all of the benefits of a traditional roof garden such as aiding in storm water management and air purification. Roof Gardens have also been proven to lower a building’s heating and cooling costs while decreasing the urban heat-island effect in metropolitan areas that feature an excessive amount of concrete and pavement.

The GreenGrid System comes standard with four-inch deep trays available in 2’ x 2’, 2’ x 4’, 2’ x 2’ triangles and 40” by 40” sizes that support sedum and other plants. The trays are delivered directly to the jobsite and can be installed over Carlisle’s time-tested EPDM or TPO membranes. Eight-inch deep trays are also available in the 2’ x 4’ size.

Carlisle SynTec Incorporated, headquartered in Carlisle, Pennsylvania, has been investing in single-ply membrane roofing systems for more than 40 years.

Source: Carlisle SynTec Incorporated
Jungheinrich Introduces Energy-Efficient New Turret Truck with Standard RFID

The Jungheinrich Lift Truck Corp. has announced the introduction of a new, much more energy-efficient and versatile version of its EKX 513-515 electric man-up turret trucks to the North American market. Designed for very narrow aisle work in dense storage warehouses and distribution centers, the advent of these new 3-wheel high rack stackers is a significant development since this series also offers radio frequency identification (RFID) technology as a standard feature.

What users will get in this new 80 v electric is impressive, says Paul Moffatt, Jungheinrich’s product manager for the vehicle. “We took the previous EKX 513-515 series and substantially improved on its method of reclaiming energy from load and cabin lowering. It’s now 30% more efficient in terms of energy recovery. And another great strength of this new model is that our engineers made the conversion of the battery’s DC power to AC considerably more efficient, giving the truck even more hours of work output per battery charge. You’ll now get up to 13 hrs of run time versus 10 hrs on the previous model.”

Mr. Moffatt also points to the new truck’s RFID technology. “Jungheinrich has been working with RFID technology with our turret trucks for some time, but in this new model we implemented a much more advanced version of it for intelligent truck management - and it’s a standard, built-in feature. We place an RF transmitter and receiver underneath the truck and bury a small capsule-sized transponder in the warehouse floor. We can then program the capsule to be able to issue a range of commands whenever the truck passes over it – for example, slow down, limit lift height, sound the horn, and so on. We can change virtually any driving parameter of the truck that way, with appropriate programming in the capsule. In effect, we can tailor the truck to the application.

Moreover, through this technology the truck control system knows exactly where it is in the warehouse at all times. As such, we can tailor truck performance from spot to specific spot in the warehouse so that truck performance is maximized throughout the warehouse.”

Other impressive features on the new truck include an electrically-adjustable operator’s console. The entire console used by the operator to lift and lower loads and drive the machine can be adjusted to a position most ergonomically suitable to the particular operator driving the truck – or to suit the operation being carried out. A press of a switch adjusts the console position, and another locks it in place.

In addition, Jungheinrich can configure the truck’s mast in two or three different stages for various lift heights, as well as offer five basic chassis with a variety of axle widths. The company can also give the truck the potential to handle a variety of pallets. All of these configuration options add up to an extremely wide menu of features to choose from at the time of purchase. The advantage of this modular approach is superb adaptability to any warehousing and logistics operation.

Another great feature in the EKX trucks: Jungheinrich has built motorized stabilizers into the 3-wheelers. In the past stabilizers were fixed, but on these trucks as a load is lifted higher it is possible to power them down to the point where they are just off the floor. This gives the trucks more rigidity in their chassis, which means they can lift a heavier load higher.

The EKX trucks, like all Jungheinrich electrics, are based on the company’s proven, high torque and wear-free 3-phase AC technology. Many options are available, among them a personal protection system (PPS) to detect obstacles and pedestrians in the path of a vehicle, as well as capability for mechanical rail or inductive wire guidance, and an RFID transponder for recognition of warehouse areas.

Source: Jungheinrich Lift Truck Corp.

Merger Creates Global Strength in Forestry

Effective May 31 2007, the Swedish company Log Max AB merged with Rocan Forestry Inc. of Dieppe, New Brunswick, to form the Log Max Global Inc. group with headquarters in Canada. The companies will keep their separate customer markets, but the group which counts 16 companies will generate an annual turnover of 150 million $.

The merger creates a global manufacturer and sales channel for forestry and construction products. “We are convinced that the merger of the two companies’ leading product families increases our strength internationally and makes us grow especially on the global forestry market, but also in the construction machinery sector”, said Stig Linderholm, founder of Log Max AB and Alan Anderson, founder of Rocan Forestry Inc.

“Both companies are growing and have reached individual success even before the merger. However, the merger provides an increased co-operation and large synergies in the business area. Thanks to the companies high customer focus, we will now be able to locally increase our presence to be available to our mutual customers regardless of where in the world they are situated.”

Thanks to the concordant view on customer focus and service together with virtually identical markets and target groups, the synergy effects are many. Sales, technical training, service and support are factors that will be further improved, which the customers immediately will benefit from.

Source: Log Max AB, Rocan Forestry Inc.
In the world of highwall coal mining, success or failure is measured in high dollars per hour. A US$6 million mining machine can pull coal out of a mountain at a rate of 2500 t/day, so the wheel loader that supports that big miner had better be the most reliable and productive machine available.

Contour Highwall Mining Inc. in Summersville, West Virginia, found the perfect solution: a John Deere 724J Loader. Contour Highwall Mining uses the 724J to add or remove the 60 m long, 4.5 t push-beams that join end-to-end and extend under a mountain into the coal seam. Twin augers line up continuously inside the push-beams to bring coal from the cutter head to daylight, unaided by manual labor.

Highwall mining means drilling and blasting a 20 to 30 m 9 (or more) deep bench of overburden to expose a horizontal coal seam around a mountain. Earthmoving equipment then removes the overburden and carves the bench that gives mining equipment access to the coal seam. The process starts when the John Deere 724J Loader delivers a push-beam section to a table on the highwall miner. Next, lift arms on the miner grab the push-beam and set it into the miner’s belly, behind the last beam. A worker locks it into place, and huge twin hydraulic rams push the continuous line of beams steadily into the coal seam as the cutter head mines deeper into the mountain.

Contour Highwall Mining’s 724J loader sets the bar high for reliability and uptime, according to Dave Bundy, Contour’s owner. In fact, by February 2007 the machine had chalked up 17 400 hrs with only a couple of minor issues since the company bought it in 2003.

“I’m depending on that loader to keep our operation moving. It’s unheard of to have a loader last this long without touching the engine’s top end,” Mr. Bundy said. “It’s like having a car that lasts 500 000 km.”

Last year, the loader cost Contour just US$0.04/t of coal produced, not counting fuel. Repairs totaled one injector pump and one fan motor.

“The loader’s operating cost is right where it should be,” Dave Bundy said. “And now that it has many hours on it, the cost is probably lower than normal, because we’ve had virtually no breakdowns on it and next to no oil consumption between changes.”

Both Dave Bundy and loader operator Greg Arthur like the way the 724J handles when carrying the big push-beam sections. “We’ve used competitive loaders, and this John Deere is a little heavier and handles the beams better,” Mr. Bundy said.

“The loader is very stable when carrying the push-beam sections,” Mr. Arthur added. The 724J is still running on three of the four original tires, and have a lot of wear left. L5 tires have tread that is 2,5-times deeper than standard L3 tires and use a harder, more tear-resistant rubber compound. “The tires have worn like iron,” Mr. Bundy said.

While the mining application is mostly a load-and-carry operation, the loader also cleans rocks from the push-beam auger sections after the miner extracts them from the mountain. Typically, each push under the mountain extends for 250 to 300 m before the mining machine pulls them back out again.

In response to an ever-increasing demand for coal, Dave Bundy added a second highwall mining machine in May. He also purchased a new 724J loader to support it.

“The John Deere loader has earned our respect,” he said.

Source: Deere & Company
At the ripe old age of 24, Joe Cinelli Jr. has already learned what most old-timers know about how to make his recycling business successful. It is all about uptime.

“We’re not like one of the big port operations,” says Joe Cinelli Jr. “We’ve got no spare equipment in the yard. If a crane goes down, our shear isn’t working; we lose that production.”

He began working in the family business, Cinelli Iron & Metal Co., when he was 18. His father, Joe Cinelli Sr., started the recycling operation in the 1970s, hauling scrap to recyclers in his pickup truck from machine shops in Jersey City. By the late 1990s, Cinelli Iron was collecting, processing and brokering a full range of scrap metals through its facility in Hackensack, New Jersey.

Joe Cinelli Jr. entered the business as an equipment operator. Today, he is responsible for the operation of Cinelli Iron’s brand new site in Secaucus, New Jersey. The former location in Hackensack continues to process specialty materials, but the company’s large volume of ferrous is focused on this new 2 ha yard.

In Hackensack, the Cinelli yard is just a half-acre in size but, as the business grew rapidly through the past 15 years, it drew considerable traffic through its largely residential neighborhood. The Cinelli family decided that moving to another larger location would be best for both the business and the town.

Joe Cinelli Jr. is very proud of the site he manages. “This is a state-of-the-art facility,” he says. “All five acres is paved. We have underground sewers beneath it with separators to clean storm water runoff. We have plenty of space now, and we meet all the new state environmental regulations. We’re shipping a couple of thousand tons a week and we process all types of steel, right up to I-beams.”

While much of the heavy equipment from the Hackensack location was moved to Secaucus, Cinelli has also been adding new equipment to handle the expanded capacity. When the company went looking for new machinery, it also made a key decision about its service requirements.

According to Joe Cinelli Jr., “We were looking for options after our experience with some of the older equipment. We wanted to get all the equipment we needed from one company. That way, if there are any problems, we don’t have to call 100 different suppliers.”

Joe Cinelli Jr. knew Binder Machinery as the Komatsu equipment dealer servicing its wheel loaders and, more recently, as New Jersey’s distributor for Sennebogen scrap handling machines. He has been working with Binder Machinery for about 6 years and, on closer inspection, decided that Binder Machinery was the “single source” he was looking for.

When Cinelli opened up the idea of designating Binder as their single source for equipment, Steve Mazzarella, Binder’s sales representative, was ready. “I asked our senior people in the region to get involved,” says Mr. Mazzarella. “Kirk Chagnon, our North Jersey sales manager, and Roy Corriveau, our product support manager, were able to provide the assurances that the customer needed.”

The Binder team works together to keep service simple for customers. In one instance, Cinelli had a recurring problem with a grapple. A change had been made in the type of hoses it used, and hoses started breaking. Roy Corriveau came in and he saw what the problem was and got it fixed himself instead of going to the manufacturer.

Setting up the Secaucus yard required investment in primary equipment including a Komatsu PC400 with a 4500 LaBounty Shear and a Sierra 700 bale/logger. Binder recently supplied Cinelli with a Komatsu WA320-5 wheel loader, which has also proven to be a wise acquisition. Cinelli Iron & Metal Co. also maintains a fleet of 15 trucks, with 11 roll-offs and has over 1000 containers in service. The move to the new site also included relocation of two Sennebogen scrap handlers, and a third machine has already been added.

All three Sennebogen machines are rubber-tired models, well suited to mobile service throughout the large, paved yard.
They are also equipped with Sennebogen's elevating cab, which can raise the operator an extra 6 m above the chassis for a clear look into the equipment being loaded. An 835 M model scrap handler is dedicated to feeding material to the shear, while an 825 M equipped with a magnet, shifts between loading or unloading trailers and feeding the burner. The newest unit, another 825 M, is fitted with a grapple to load trailers. In a typical day, the Secaucus yard will send out over 10 loaded trailers to customers.

The switch to Sennebogen has also led to maintenance advantages. “They are well built and the service areas are very accessible,” Joe Cinelli Jr. explains. “On the other machine, you had to take apart the whole back end to reach the radiator; now just open the doors and everything is right there. We try to keep a good stock of parts on hand, but Binder is also good on having what we need.”

The close relationship Cinelli is building with Binder Equipment is also a good fit for the company’s family focus. The Cinelli business embraces several family and close friends. While the Secaucus site has a young staff overall (all of the equipment operators are under 26 years old!), Joe Cinelli Jr. believes that traditional “family values” are important to the business and he sees a common ground with the family roots at both Binder and Sennebogen.

“Erich Sennebogen was here from Germany a couple of weeks ago,” he recalls. “He is a really nice guy; we took some pictures together with the cranes all up. But you can tell he really cares about his equipment. His name’s on it. When you put your family’s name on your equipment or business, it’s the same for all of us. It’s your personal promise of dependability.”

Subaru Introduces Rugged Diaphragm Pump

Adding to its successful lines of centrifugal, high pressure, trash and semi-trash pumps, Subaru introduces the PTX301D diaphragm pump. Featuring 7.6 cm suction and discharge ports, the self-priming PTX301D pumps up to 950 l/min at a maximum pressure of 1.45 bar. It boasts a maximum suction lift of 7.6 m and a maximum lift head of 15 m.

The design completely isolates the pump mechanism from the fluid being moved, making the model ideal for pumping abrasives, slurries, re-circulated water and other high-solid-material content, up to 12.7 cm, that cannot be handled by a centrifugal pump. There are no moving parts, so the pump can run dry indefinitely. The positive displacement-type, hermetically sealed compression chamber prevents loss of gases and liquids being moved, while the large shock-reducing air cushion chamber decreases shock on the hoses.

The pump is powered by a 7 hp Subaru EX21 overhead cam air-cooled four-cycle gasoline engine, which meets the strictest environmental regulations. A pent roof combustion chamber provides a high compression ratio, while an automatic decompression system allows for easier starting, reducing the required recoil pulling force by 30 to 40% over other engines. The 3.6 l tank allows for a 2 hrs run time at full load. A low-oil shutdown system prevents the engine from running should lubrication levels drop, protecting the engine from potential damage. A U.S. Forestry Service-approved spark arrester also comes standard, lessening noise and the chance of igniting nearby combustibles.

Designed to handle the rigors of construction and rental applications, the PTX301D’s inner casing is constructed of hard cast iron and the entire pump is enclosed within a steel roll cage for further protection. The pump uses a high-quality silicon carbide mechanical seal, and the durable diaphragm is replaceable, adding to the pump’s long service life. The engine’s heavy-duty piston rings and cast-iron cylinder liner resist wear, and a dual ball bearing crankshaft support offers maximum stability.

Source: Robin America, Inc.
A New “Spin” on Site Remediation

Nestled in the heart of the Greater Toronto Area, the Town of Richmond Hill is not only one of the fastest growing communities in Canada, it is also one of the most affluent. This means that the investment potential of any available property in the town is continually on the rise. For Rick Sova, the owner of Cornerstone Landscaping, the challenge was to help a leading developer in the area to get full value from the property.

Rochon Building Group saw plenty of opportunity in a parcel of 6 ha it had purchased there. Plans were in place for a large residential project. But years ago, long before today’s stringent regulations on land use and waste management, the site that Rochon had planned. We had no choice but to dig it all out.”

Established in Brampton, Ontario, over 21 years ago, Cornerstone Landscaping came into the world as a landscape design/build firm. Over the years, the company has expanded its activities to include, among other ventures, processing its own soil. This experience provided Rick Sova with a solid grounding in screening equipment which, in turn, led Cornerstone into “green” services such as waste processing and recycling operations.

THE RIGHT IDEA; THE RIGHT EQUIPMENT

At the Richmond Hill dump site, Mr. Sova’s approach was not to simply clear out the dump site, but to “mine” it for recyclable materials. With the right equipment, he could reclaim much of the value of the buried materials along with the value of the property itself.

Rick Sova tested his remediation system by bringing in excavators and loaders to dig out the materials, plus a McCloskey 621 trommel to separate the various materials for recycling. “We had the trommel fitted with a vibrating grizzly, which scalped off any materials larger than 10 cm before it entered the hopper,” he explains. “The remaining material was screened through the trommel drum with a 5 cm mesh. Screening it this way allowed my crew to separate out the larger materials to be recycled, including anything from 10 to 5 cm in diameter. The remaining material, anything under 5 cm, was fine enough to recover and use to backfill the excavated area.”

The sorted materials turned into a number of recycling streams. Chunks of concrete and asphalt were put through a grinder for re-use. Wood waste was chipped for mulch or composting. Metals and clean plastics were sorted for delivery to recycling operations. In the end, Cornerstone had to send only a small percentage of the total material to a landfill site.

“The principle is simple enough, but the amount of material to be processed was huge, and the developer was on a timeline. Cornerstone ramped up with additional equipment, including a second 621 trommel Mr. Sova purchased for the project. With the process in full swing, the two trommels were running 10 hr shifts, with four excavators and two wheel loaders operating continuously to feed them, plus two stackers to pile the screened materials.

“BRUTAL” BUT SUCCESSFUL!

Start to finish, Cornerstone processed close to 38 000 m³ of dirt and debris over a period of 10 weeks.

“We cleaned out a pretty big hole,” Mr. Sova admits. “The remediation area covered a full acre, and we excavated a good 9 m deep! As we backfilled the site with the fines, we were also compacting it in 15 cm lifts, and brought the whole thing back up to grade.”

“It really was brutal work for those trommels,” he continues. “They really took a beating from the kind of material we put through it, over very long duty cycles. But they did the job, and they’re still producing for me.”

Rick Sova credits the onsite support he received from the McCloskey factory as an important part of his success with the project.

“We needed some help getting set up when we first started; we had some very heavy, sharp, nasty material going through! But McCloskey had its people onsite quickly. They also looked after weekly maintenance service and they were always right on schedule.”

BUILDING ON RECYCLING

The two trommels that Rick Sova took to Richmond Hill are now working at two Cornerstone soil-processing locations.
As demand for urban development meets increasing pressures to conserve green spaces, Rick Sova sees another growing opportunity for Cornerstone, recycling compromised properties into valuable real estate.

McCloskey International Limited designs and manufactures innovative trommel screeners, vibrating screeners, stacking conveyors and picking stations. Since 1985, McCloskey International Limited has been exceeding customer expectations with reliable, durable and high performing products. McCloskey equipment is used by topsoil producers, landscape contractors, composting facilities, waste management and recycling operations, and quarry operators to help achieve profitable volumes.

The resulting demand for soils spurred the expansion of Cornerstone’s waste recycling services for other contractors and landscapers. The two sides of the business support each other, and both support the landscaping business. Anytime Cornerstone excavates and grades a jobsite, the material all goes back to the composting facility to be screened, processed, bagged and retailed, instead of just dumping it.

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John Deere Power Systems Offers Tier 3, Interim Tier 4 and Stage III A Ready Engines

John Deere Power Systems has announced that many of its engines under 100 hp are now U.S. Environmental Protection Agency (EPA) Tier 3, Interim Tier 4 and European Union (EU) Stage III A ready.

“With some of our PowerTech M and PowerTech E engines below 75 hp, we chose to go straight from Tier 2 to Interim Tier 4. Because our 2,4 l engines have demonstrated Interim Tier 4 and Stage III A capabilities, we’ve met our 2008 deadline. This demonstrates that the technology we have developed is a great foundation for our Tier 4 solution,” said Gita Rao, product manager of strategy and long-term planning for John Deere Power Systems.

John Deere Power Systems will leverage the technology developed to meet Tier 3 /Stage III A emissions as the basis for meeting future emissions regulations. John Deere is exploring various technology options, including advanced in-cylinder and aftertreatment solutions.

John Deere Power Systems is also optimizing the combustion system for reduced emissions. This includes the use of multiple injections, increased fuel injection pressure, modified combustion bowl and fuel injector geometry. The company is reviewing a number of aftertreatment technologies, including diesel oxidation catalyst and diesel particulate filter systems. John Deere is also working on NOx adsorbers, lean NOx catalysts and selective catalytic reduction solutions. Homogeneous charge compression ignition continues to be explored as an alternative solution.

Source: John Deere Power Systems
Every waste water treatment plant is different, so no 'one-size-fits-all' solution is available. Each individual plant must be custom designed to meet the needs of the area it serves – though, of course, the principal processes follow a similar pattern.

The key challenges at Anglian Water's plant at Caister include the dramatic variation in demand. Caister, and Great Yarmouth to which it is virtually joined, are relatively cold in winter – but hot and dry in summer. They are in the centre of the caravan/holiday park/tourist site area of the East Anglian coast, with the Norfolk Broads just inland, and the summer population peaks around 200,000, very much higher than the winter numbers.

The site is also below the level of the sea's natural flood plain – that is, left entirely to its own devices, Caister Waste Water Treatment Centre (WWTC) would be under water. The site has not flooded, but it could, so it has been constructed with some buildings raised a few feet from the ground, and others surrounded by a protective bund, designed to hold back flood waters.

It is a realistic threat. A short drive up to the North Norfolk coast brings you to Weybourne, where coastal erosion has already seen a sewage treatment plant lost to the sea, in an active and planned retreat of the protected tidal barrier.

But this low level in itself also creates other challenges. The site is largely reclaimed alluvial ground, and very soft; weighty structures need to be firmly anchored to prevent them from sinking.

Finally, the 8 ha site is close to residential areas, and has to allow for some possible future expansion. The land is there, as not all the site is currently used, but planning issues require Caister to be as compact a plant as can reasonably be achieved.

A LITTLE BIT OF HISTORY

Caister WWTC, on the south eastern tip of Norfolk's coastline, was built on the site of a former local sewage works which undertook preliminary screening then pumped residues first to the edges of the tidal estuary, then by increments further offshore.

"In 1986 the headworks were built for a better scheme," describes Anglian Water's Dave Steward, who is responsible for Caister from the company's nearby Stalham offices.

"It was designed to take in all of the Caister catchment area, and part of Yarmouth, and pumped the treated water 4.5 km from the site, ending up 1.5 km out to sea. But this was still just preliminary treatment. Screening removed detritus and inorganic solids, and the rest was pumped away.

"The next substantial change took place over the mid to late 1990s, when the existing plant took shape. The catchment area increased, taking in the rest of Yarmouth, Gorleston, and the villages around. The goal at that time was to meet current and anticipated legislation, with a design life to 2015."

Rob Lewis is the process optimiser for the Caister Partnership which operates the site. "Wastewater flow comes from the headworks past rotating fine drum screens. Then we can dose it with ferric sulphate coagulant to help settlement in the Lamella tanks – we have three of them, each with six plate packs. Secondary treatment mixes the Lamella outflow with RAS (return activated sludge) at the ASP (activated sludge plant) which distributes it between one on four aeration lanes.

"From here flow continues to the Final Settlement Tank, where we can remove any scum as well as scrape out any remaining sludge, before the treated water goes on to the outfall pumping station, and out to sea.

"In terms of outputs, during the summer we remove of 14 m$^3$ of screenings per week, and much the same amount of grit; these go to landfill sites. We pump 27 000 m$^3$ of treated water out to sea each day, and truck..."
out up to 60 t/day of thickened dewatered sludge, which has been through pasteurisation and anaerobic digester plants – but only just over half that volume during the winter off-season months. This Biosolids product is recycled on local farmland under the ‘Safe Sludge Matrix’, current legislation and Maff guidance. The product is sold to farmers, as a soil conditioner and replacement for artificial fertilizer, containing a range of key nutrients and organic matter. It is a design configuration that meets Caister’s unique challenges, described above.

The seasonality is addressed by flexibility in the process flow. Initially, flow to the works is governed to permit 850 l/s in summer, and 570 l/s in winter. Six pumps control this; summer settings provide for five working pumps, winter settings provide for up to four. There is also flexibility in the degree of chemical dosing prior to the Lamella separators, and in the degree of aeration employed in the secondary treatment.

The weight and compactness issues are addressed in part by the choice of the Lamella separators. “The main advantage of the Lamella separator is its space saving, offering up to 90% saving on the space taken by conventional settling tanks. They are also proven in this application – reliable, low maintenance, and with low operating cost due to having few moving parts,” explains Roger Clark, process director of Cambridgeshire based Vexamus Water, UK agent for Nordic Water Products, who installed the system at Caister in the 1998.

“Caister is a conventional type of sewage works, although the Lamellas are housed in a building. There are 18 plate packs, each providing 119 m² of protected plate area, with the pvc plates held in an epoxy coated mild steel frame supported on beams across the width of each tank.”

Rob Lewis and Dave Steward confirm the Lamella’s suitability for the task. “The Lamellas are very effective, but it is their footprint on the site which is the key factor,” claims Dave Steward. “The reduction in the number of tanks required, compared to conventional methods of clarification, resulted in a substantial saving in construction costs. Even so, the two concrete tanks at Caister are very heavy, and on this ground it was a challenge to fasten them solidly in place. Each comprises thousands of tonnes of concrete, and each contains over 1000 m³ of water. We had to concrete pile down 27 m to provide a solid foundation, as the ground is soft for the first 24 m.”

Whilst the Lamellas are effective, this creates different working practices on site, says Rob Lewis. “They easily outperform their design specification,” he says, “removing up to 89% of solids. They are so simple, and so effective. It works so well we don’t always need to add ferric sulphate coagulant to aid solids removal, though we treat more in the summer, when the flows are greater, and also that is the sea bathing season when we aim for the highest quality outflow.

The requirement to be able to expand the plant is met through, first, the availability of space. “The site is some 8 ha, but there is capacity within that for new plant,” says Dave Steward. “Although the existing plant has a design horizon of 2015, and nothing immediate has been identified as necessary, it’s likely we’ll need at some stage to expand and enhance the site – perhaps new legislation will drive this. And it’s possible we will be looking at new sludge mix facilities at some stage.”

The compact nature of the site has driven its design parameters, enabling a powerful and flexible operation to sit comfortably on the edge of a busy tourist area. Effective odor control, alongside efficient running with plenty of spare capacity, makes Caister WWTC a good neighbour, as well as a good business.

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**New Hurricane Product, Watersafe™, Solves Water Woes**

In conjunction with Hurricane Awareness Week, M.R. Crafts, Inc. is launching their new emergency water storage product, Watersafe™, which is available at www.mywatersafe.com. Inventor, Michael Nevils developed the Watersafe, after witnessing his 90 year-old neighbors struggle upstairs with buckets full of pool water in the aftermath of a hurricane. The product is a solution for homeowners to keep up to 246 l of water in the bathtub or sink, avoiding the pre-hurricane rush for bottled water. Nevils’ invention was awarded the Grand Prize in the 2007 Inventor Search Contest.

“Alone, bathtubs are unreliable as emergency water containers,” said Mr. Nevils, explaining how they leak, get dirty and are hazardous to small children. The Watersafe is a large, food grade, plastic bladder that is placed in the bathtub first and then filled with potable water. It comes with a hand siphon pump to dispense the water as needed. The Watersafe will protect the stored water from contamination and make it safe to drink.

The Watersafe’s patent pending design is also available in two other models, the Watersafe Mini, which holds up to 19 l of water in a sink. And, The Watersafe Heavy Duty, which holds up to 208 l of water and can be used to deliver water to disaster areas.

Source: M.R. Crafts, Inc.
Cortec Corporation Launches its MCI Mini Grenades

Cortec Corporation’s Migrating Corrosion Inhibitors (MCI) Mini Grenades consists of Cortec’s proven MCI 2006 NS which is pre-measured and packaged in water-soluble Poly Vinyl Alcohol (PVA) bags. The product has Cortec’s name and logo printed on them, guaranteeing authentic MCI at the proper dosage rate.

The PVA bag dissolves easily when in contact with water during mixing of concrete or mortar, allowing the inhibitors to disperse evenly.

When incorporated into repair mortars and grouts, MCI Mini Grenades not only protect metal they are in contact with, but will migrate into adjacent areas providing effective corrosion protection and reducing the insipient anode effect. One MCI Mini Grenade protects 0.015 m³. This product is covered under United States Patent number 6,306,210 B1.

Source: Cortec Corporation

Amvic to Release a New 12” ICF

On June 1, 2007, Amvic Building System released a new 31 cm Insulated Concrete Form (ICF) to complete its current line of 6 cm, 15 cm, 20 cm and 25 cm forms. The new form will be available in a straight form and in a 90° form.

Amvic ICFs are manufactured using very rigid panels, therefore maintain shape, remain straight and plumb and require less bracing during concrete pouring and curing. Amvic is one of few ICFs on the market that can withstand internal vibration which ensures proper concrete consolidation and creates a structurally superior wall.

Amvic ICF also features the unique, fully reversible FormLock™ interlocking system which has considerably deeper grooves than competing products. This provides greater connection strength and eliminates the need for gluing or taping.

Not only does Amvic provide a superior product which provides many benefits to the builder and occupant, it is also Green. Amvic ICFs use 60% recycled materials, reduce deforestation and Amvic ICF structures reduce energy consumption by 30-50% on average as well last for over a hundred years with limited maintenance.

These recent progressive investment decisions clearly indicates that Amvic is determined to increase sales in the commercial segment of the ICF industry and is dedicated to meeting the needs of their customers.

Source: Amvic Building System

Appointments

Venetor Equipment Rental Inc., the largest 100% Canadian privately owned equipment rental company in south-central and southwestern Ontario, is pleased to announce that Mike Fraser has joined Venetor as an account manager in the Oshawa branch. Mike will be responsible for helping to grow the Eastern Greater Toronto area.

Vince Oddi, sales manager of Venetor Equipment Rental Inc. says “Mike brings a strong work ethic and sense of integrity with him to the role. His knowledge of the construction industry makes him an asset to Venetor and to our customers.”

The Venetor Group of companies has been family-owned and operated serving Hamilton’s Industrial Core and the Golden Horseshoe Area since their inception in 1975.

Source: Venetor Equipment Rental Inc., 1-888-664-5007

Sakai America, is pleased to announce the appointment of Karl Rowan as district manager for their Mid-Central territory. This area includes the states of Indiana, Michigan, Ohio, Kentucky, West Virginia and Ontario, Canada.

Karl Rowan has an extensive background in heavy equipment, both hands-on and managerial. His career began as a field service technician, then production supervisor, parts specialist and culminated in dealer training and technical support. With experience in purchasing, inventory management and customer service, he will be an asset to Sakai in many critical areas.

Mr. Rowan’s hiring supports Sakai’s long-term plan for market development in North America. Initially, his responsibilities will include support and training of dealer sales and applications teams which are already in place and recruitment and set-up of new dealers within the territory. He will also oversee dealer parts and service department set up and training for all new and existing dealers in this territory.

Manufacturing and shipping more vibratory compactors worldwide, Sakai currently offers the widest range of vibratory soil and asphalt rollers in North America.

Source: Sakai America

Cortec Corporation Launches its MCI Mini Grenades

Amvic to Release a New 12” ICF

Appointments
Richard Tindale, sales and marketing director for UpRight Powered Access, said: “The order book has grown directly in line with the increase of our global network of independent distributors.

“Our strategy of appointing high quality, full-service distributors like Système APM means end users and rental companies know they have a high level of support for their machines in the field and ready access to spare parts.”

Following a successful Rental Show in Quebec earlier this year, Système APM has taken delivery of an innovative aerial work platform from UpRight.

The UpRight SL30SL works like a conventional heavy duty scissor lift but utilizes a sigma arm type lift mechanism with a unique self-leveling chassis, for use on rough and uneven terrain.

Système APM, UpRight’s official distributor in Canada, ordered its first three SL30s after a demonstration model at the Quebec Rental Association show won new admirers.

The SL30SL Speed Level provides a working height of up to 11 m and automatic platform levelling on slopes or uneven ground. Rough terrain features include 4WD, an oscillating front axle and high grip tires, providing 19°/35% gradeability.

“Innovative, practical and simple to use machines help UpRight stand out from the rest of the access equipment manufacturers,” said Martin Beaudet at Système APM.

“UpRight is a company with a long heritage, which has gone through some rough times. But the new owners have a real focus on customer service, which makes it easy to sell UpRight machines,” he added.

The Tanfield Group Plc, a UK-based company, acquired the aerial lift division of UpRight International in June 2006. The re-branded business, returning to its original name of UpRight, has since enjoyed phenomenal success under its new owners.

Machines are manufactured at a 23 000 m² facility in the UK which has increased output six-fold since June 2006.

The number of access platforms in the revived UpRight range has more than doubled – to over 20 – and the company is on course to have a full line of products – in all volume sectors – in production by early 2008.

The product range to date includes trailer mounted boom lifts, small to medium scissor lifts and small to medium articulated boom lifts. A range of push-around personnel lifts, plus unique machines like the ultra-compact TM12 and the all-terrain SL26 and SL30 complete the current offering.

UpRight has also reintroduced machine assembly in North America – presently from a 6500 m² facility in Fresno, California. A larger facility of between 23 000 m² and 28 000 m², which will manufacture a full range of UpRight products for North America, is planned to open later this year.

“This gives them the confidence to buy UpRight, because they know we can keep their lifts working,” concluded Martin Beaudet.

Source: UpRight Powered Access
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