



PARIS23 - 28 APRIL 2018

INTERNATIONAL EXHIBITION FOR CONSTRUCTION AND INFRASTRUCTURE



Volume 23 Number 2 February 2018

PUBLISHER

Jean-François Villard editor@infrastructures.com

CONTRIBUTING EDITORS

Rob Holden Robert Marenger toronto@infrastructures.com

ADVERTISING SALES

sales@infrastructures.com

TELEPHONE 514-233-1295

613-862-1295 416-795-1295

FAX: 514-528-9932

ADDRESS CHANGES

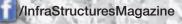
Send us your address changes by E-Mail to: subscriptions@infrastructures.com

MAILING ADDRESS

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

INTERNET

www.infrastructures.com





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

The cost of a subscription for either edition for one year is \$50 for Canadian residents and US\$75 or €75 for Ú.S.

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Publications Mail Agreement #40052183

A Brief Word...

Well it may be the "Month of Love" but I am sure there are many in our industry who are not sharing the feeling this month.

The collapse of Carillion has been taken up at the highest levels including an emergency cabinet meeting in the UK and calls for government sponsored job measures.

Meanwhile in Canada it has barely made the news. With 6,000 industry jobs at stake no major political figure has been put under the hammer. As a major contractor to the MTO, Queens Park should be in uproar. A government that is widely unpopular should be facing collapse and the polls.

Vendors are clenching their teeth and hoping for the best as the Canadian arm flounders along and could be sold to generate funds for the debtors.

But who will be the savior? Miller is in the midst of takeover itself and other probables will be hesitant to take on a competitor's potential problems.

It will be a nervous few weeks for many. Those not affected directly should express their support for their colleagues in this uncertain time.

Spring may well bring new flowers and new opportunities when it comes. Hopefully it comes swiftly.



On the cover:

rehabilitation works on Laurier Avenue in Outremont, Quebec, include the reconstruction of sewer and water mains, technical networks (gas, telecommunications and electricity) and road infrastructure (pavement, sidewalks, lighting and traffic lights) posed a multitude of technical challenges in terms of execution and methods to limit the impact on the urban surroundings.

TOPCON AND BENTLEY SYSTEMS ANNOUNCE KICK-OFF OF CONSTRUCTIONEER-ING ACADEMY

Topcon Positioning Group and Bentley Systems announce the kick-off date of their collaborative Constructioneering Academy initiative. The first session is scheduled for February 13, 2018 in Livermore, California.

Topcon and Bentley have joined efforts to provide opportunities designed to allow construction industry professionals to

learn best practices in constructioneering, a process of managing and integrating survey, engineering, and construction data, to streamline construction workflows and improve project delivery.

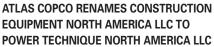
"The courses are designed in a dialogue format to allow Topcon and Bentley personnel to interact directly with attendees to cater the experience for their specific questions and demands," said Ron Oberlander, senior director of Topcon Professional Services. "The future of construction automation continues to move forward with constructioneering digital workflows, which make the work of surveyors, engineers, and construction professionals automated, continuous, and continuously more valuable, throughout project lifecycles and beyond completion."

"Topcon and Bentley's federated constructioneering technologies enable firms to gain unprecedented digital visibility and insights into their project outcomes, as compared to traditional construction workflows. Attendees of our Constructioneering Academy will learn how their organizations can improve project delivery by leveraging constructioneering technology, methods, and best practices to execute their projects more efficiently, monitor construction performance and progress, and reduce project costs," said Vinayak Trivedi, Bentley Institute vice president.

The Constructioneering Academy will continue with additional sessions throughout learning centers located worldwide designed to reach industry professionals with hands-on training in real-world scenarios and workflows.

Source: Topcon Positioning Group





Atlas Copco has announced Power Technique North America LLC as the new name of Construction Equipment North America LLC, effective January 1st, 2018.

Power Technique was chosen as the name because U.S. and Canadian customers recognize power as the defining characteristic of the core product categories in the portfolio: air, power (including light) and flow.

The business area will serve multiple segments, including construction, industrial, drilling, oil and gas and petrochemicals. It will continue to comprise the Atlas Copco, Chicago Pneumatic and American Pneumatic Tools brands.

"Our commitment to the construction industry is as strong as ever," said Scott Carnell, president of Power Technique North America. "However, we also serve customers in many other segments. The Power Technique name more accurately encompasses this and our overall product offering."



Moving forward, Power Technique North America will offer products including portable compressors, generators, light towers and pumps along with dedicated construction products such as handheld pneumatic, electric and hydraulic tools, and customized solutions.

The name change follows 3 moves Atlas Copco made in 2017:

- The divestment of the Atlas Copco Road Construction Equipment Division – including Dynapac rollers, pavers and planers – to Fayat Group.
- The announcement of a planned 2018 split into 2 companies, with Atlas Copco and new company Epiroc focusing on mining, infrastructure and national resources customers.
- The agreement, announced December 22nd, to divest its concrete and compaction business to Husqvarna Group's Construction Division. The divestment is subject to regulatory approvals and is expected to be completed during the first quarter of 2018. Products include complete ranges for concrete and compaction.

"The evolution to Power Technique will enable us to focus on our 3 pillars – air, power and flow," Mr. Carnell said. "We will continue to provide on-site products and solutions that power sustainable productivity for our customers."

The Power Technique North America corporate office remains at the company's new facility in Rock Hill, South Carolina and continues to support customers through dedicated service centers throughout North America.

Source: Atlas Copco

MORBARK ANNOUNCES ACQUISITION OF RAYCO MANUFACTURING

Morbark, LLC recently announced it had completed the acquisition of Rayco Manufacturing, Inc. This transaction represents the first addition since affiliates of the private equity firm Stellex Capital Management LP acquired Morbark in 2016. The purchase of Rayco represents a significant move towards the Company's strategic focus on broadening the range of tree care and industrial equipment, aftermarket parts, and service offered to their Customers

Rayco was founded in 1978 in Wooster, Ohio, by John M. Bowling who, as the owner of a tree care service identified the unique needs of the tree and landscape industry and began to build equipment to meet and surpass those needs. Today the company is dedicated to the design and production of an incredibly innovative line of environmental equipment. The current range of Rayco products includes: stump cutters, crawler trucks, forestry mulchers, multi-tool carriers, and attachments, brush chippers and the all-new AT71 aerial trimmer.

"Our family is very proud of the legacy we have established and nurtured over the past 39 years," stated John Bowling, CEO of Rayco. "As a family-run and -owned business, we view today's transaction as an opportunity to continue growing our business while joining an even larger family."

"We are thrilled to welcome Rayco to the Morbark portfolio of companies," commented Dave Herr, CEO of Morbark. "Rayco is a company that our senior management team has admired for a long time. We value the long-standing success of Rayco and are committed to providing the Bowling family and their dedicated employees the resources they need to continue the success they have built."

The transaction is a positive, strategic fit for both companies. Rayco brings a lineup of innovative equipment into the Morbark family across multiple product categories. In particular, Rayco stump cutters, aerial trimmers, forestry mulchers and crawler trucks will enhance and complement the existing Morbark family of products.

Rayco founder, John Bowling, will continue his work with the team to develop new products and help improve the company's existing product lines. He will continue to have an economic interest in the combined business and will be a member of Morbark's Board of Directors.

Morbark will operate Rayco as a new division maintaining its brand identity. Rayco's experienced management team will continue to manage their operations. Teams from each company will work together to determine how to be more efficient and leverage each other's strengths.

"Rayco has a well-deserved reputation for providing customers with the equipment and service they demand and the value they deserve," continued Dave Herr.



"That product innovation and dedication will continue without interruption. We are excited by what we can bring to Rayco in the way of our experiences, our dealer network and products to complement current Rayco equipment owners."

Source: Morbark, LLC

BRANDT ADDS MAJOR MANUFACTURING CAPACITY IN THE U.S.

The Brandt Group of Companies has announced a major expansion into the U.S. market with the acquisition of a state-of-the-art 18,580 m² manufacturing plant and equipment from Kongskilde Industries A/S. The plant, located in Bloomington-Normal, Illinois, was previously employed in the manufacture of agricultural equipment for the American market.

"We are very excited at the opportunity to expand our manufacturing footprint directly into the American market," says Shaun Semple, Brandt president. "This is a world-class manufacturing facility and we are delighted to add it to other recent major investments in Regina and Saskatoon (Sasktchewan), Calgary (Alberta), and Fort St. John (British Columbia)."

While Brandt has maintained a strong and growing presence on the Canadian manufacturing scene since 1932 and currently sells its products in over 20 countries around the world, this acquisition represents the company's first manufacturing venture in the U.S. It augments an aggressive growth strategy currently underway in Canada.

The Bloomington-Normal facility is situated on 16.2 ha of land and is fully equipped with the latest tooling, including a modern powder-coat paint line. It will be used by Brandt to produce agricultural equipment for the American corn and soybean markets in the U.S.

Source: Brandt Tractor Ltd.

ABB AND SNC-LAVALIN JOIN FORCES TO DELIVER ELECTRICAL SUBSTATION PROJECTS GLOBALLY

ABB and SNC-Lavalin have signed an agreement to form a joint venture for the execution of engineering, procurement and construction (EPC) projects for electrical substations. SNC-Lavalin will have majority and controlling interest in the joint venture. By combining ABB's world-leading technology and its market leadership position in power transmission and distribution with

SNC-Lavalin's strengths and in delivering infrastructure projects, the joint venture will help meet the evolving need of power grids across the globe for safe, reliable and state-of-the-art electrical substations.

"We are proud to partner with SNC-Lavalin to tap the vast opportunities of power infrastructure investments. Together, we intend to grow our businesses by complementing each other's strengths in unique customer services for substation projects," said Claudio Facchin, president of ABB Power Grids division. "Strategic partnerships like this are a core pillar of our Next

Level strategy and help us to drive growth while mitigating risk."

Substations are key elements in power grid infrastructure that facilitate the efficient transmission and distribution of electricity. They control and protect power flows, connect power stations to the grid and link transmission and distribution networks as well as end consumers.

ABB is a world leader in air-insulated, gas-insulated and hybrid electrical substations with voltage levels up to 1,200 kV. These substations facilitate the efficient and reliable transmission and distribution



Ammann has released the RSS 120-M Shredder, Iron Separator and Screener. It is a mobile machine that prepares recycled asphalt for use in an asphalt plant. It is essentially a 3-in-1 machine with its ability to function as a shredder, iron separator and screener.

The machine is the ideal solution for recycling asphalt that ranges in size from millings to larger pieces/slaps. Protective processing also maintains desired grain sizes.

The Ammann RSS 120-M can go from installation to production in as quickly as 30 minutes. The machine is track-mounted for maximum mobility on all types of terrain.

A single operator can run the machine, which is comprised of a shredder that utilizes 2 low-speed, electrically-driven shredder-rotating shafts. The RSS 120-M features milling cutters with interchangeable teeth that crush the material. This patented technology significantly reduces the power requirement, which leads to substantial fuel savings. The technology also enables crushing of hard and soft materials, such as clays, and can perform in all types of weather.

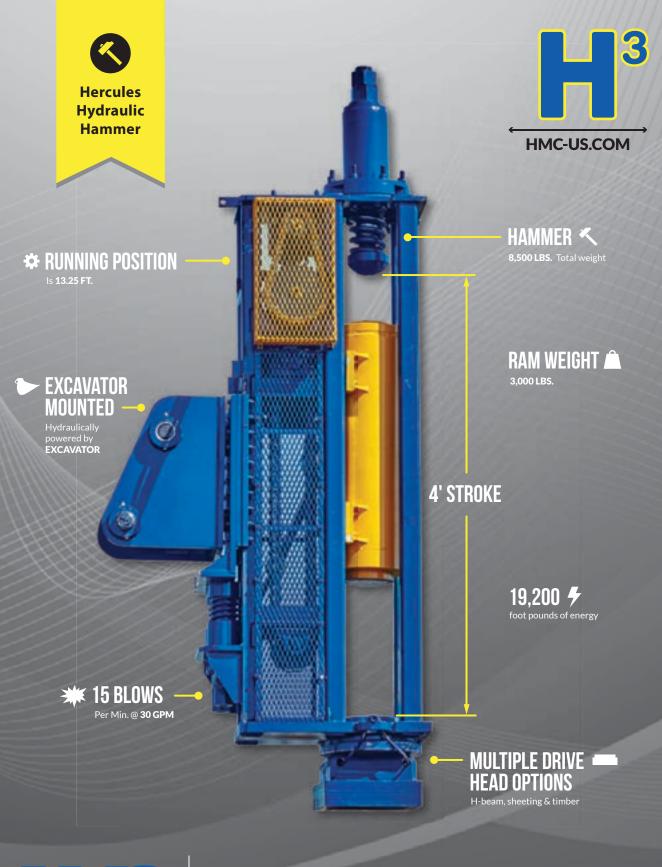
The electric motors ensure consistent crushing and screening, regardless of the working environment. The machine is able to process up to 180 t/h of recycling materials.

A variety of green efforts are built into the machine, including a dust reduction system and minimized sound and emission levels.

The Ammann RSS 120-M has been designed for easy maintenance and improved safety. It also utilizes components that make it possible for all shredding and screening parameters to be managed and adjusted remotely. This enables the machine to quickly adapt to the various types of material being processed.

Routine maintenance is simple, and all parts and components are easily accessible during maintenance or repairs.

Source: Ammann, Ammann America Inc.





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Source: ABB Inc.



ASTEC EXHIBITING AT WORLD OF ASPHALT 2018

Astec, Inc., an Astec Industries company, will exhibit at the 2018 World of Asphalt Show and Conference in Houston, Texas, March 6-8. Attendees to the World of Asphalt are invited to stop at the Astec booth to learn more about the complete range of options available from Astec, including:

- The Double Barrel® XHR Astec Inc.'s premium counter-flow aggregate drum dryer with an external asphalt mixer. An exclusive package of features on this drum can produce up to 363 t/h of mix with up to 65% RAP/RAS content.
- The Astec Warm Mix System the latest generation of the Astec warm mix system simplifies production of warm mix asphalt. The benefits of warm mix asphalt, such as reduced energy consumption, lowered emissions, and elimination of visible smoke, are well-known in the asphalt paving industry. The Astec warm mix system achieves a lower temperature at a lower cost by eliminating the need for additives or special asphalt cement. Instead, the Astec warm mix system injects a small amount of water into the liquid AC to create microscopic steam bubbles. These small bubbles act to reduce the viscosity of the liquid AC, allowing the mix to be worked at lower temperatures.
- · Astec Burners Astec offers the most technologically advanced burners in the industry with the Phoenix® and Whisper Jet® burner lines.

The Whisper Jet burner delivers unmatched reliability and hassle-free maintenance. The Whisper Jet burner cleanly and efficiently burns oil or gas and has a compact flame.

The Phoenix Talon burner sets the standard



- for power and efficiency, while maintaining very low emissions. With the optional silencing package, it is quiet enough to have a phone conversation on the burner platform while it is firing.
- Astec Controls Astec provides the software and hardware required to control and manage asphalt production facilities and constantly evolves better and simpler systems. Astec's own programs run through Microsoft Windows and efficiently control all material flows, processes, weighing and ticketing of continuous or batch asphalt production facilities. These controls can be supplied as retrofits for existing installations or as complete systems in a fully equipped control house. Source: Astec, Inc. 3124

HIRSCHMANN MCS TRANSITIONS TO WIKA MOBILE CONTROL

Following successful negotiations between WIKA and Belden Inc., Hirschmann MCS will be detached from Hirschmann Automation and Control GmbH to join and strategically bolster the WIKA Group. Since January 1st, 2018, Hirschmann Mobile Machine Control Solutions (MCS) assumed the new name of WIKA Mobile Control GmbH & Co. KG.

The new WIKA Mobile Control business unit includes Hirschmann MCS in Ettlingen, Germany, and Chambersburg, Pennsylvania, as well as a 50% share of a joint venture in Xuzhou, China. All existing production sites and other facilities will continue to operate.

"We greatly value the experience and expertise of our employees, and are therefore going to retain all 373 of them: 98 in Ettlingen, 27 in Chambersburg and 246 in China," explained Axel Kaltofen, executive vice president of WIKA. "By acquiring Hirschmann MCS we are adding both technologically sophisticated products to our portfolio and many highly qualified and motivated staff to our team."

The establishment of the new WIKA Mobile Control business unit will make it possible to offer a much broader and more flexible range of tailored application solutions for mobile machines from one source.

WIKA's product and application competence in pressure, temperature and force measurement will be supplemented by the experience and know-how of Hirschmann MCS in system integration and safety

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applications in the demanding arena of mobile machinery.

Thanks to this intelligent combination of system and components under one roof, customers will derive enormous benefits from a flexible portfolio of quickly provided, future-proof, targeted safety and end-to-end solutions. International collaboration will enhance the new organization's innovativeness while facilitating access to markets and opening up fresh growth opportunities.

"WIKA and Hirschmann MCS are an excellent fit," said Mr. Kaltofen. "Within the context of this repositioning, we are going to leverage the synergies from merging solution-oriented and component activities to drive the long-term expansion of our system business and strengthen our international market position."

"WIKA Mobile Control will operate as an independent organization within the WIKA family," explained Alexander Wiegand, managing director. "We have the vision it takes to draw on the united competencies of both organizations and offer our customers an optimal automation platform for mobile machinery. They can obtain complete safety systems from us that are perfectly tailored to their particular requirements."

"This strategic move will strengthen our hand and excellently position us for the future," said Axel Kaltofen. "It will enable us to continue growing while also providing opportunities for our employees to extend and hone their skills."

Source: WIKA Mobile Control, LP

TOP LIFT ADDS AMMANN EQUIPMENT TO ITS LINEUP

Top Lift Enterprises has been named the new Ammann Dealer for light and heavy compaction equipment in Quebec.

Top Lift has branches in Saint-Laurent (Montreal) and in Sherbrooke. Top Lift's branch in Ontario already carries Ammann equipment.

Top Lift will have access to all Ammann light compaction equipment. The lineup includes rammers, vibratory plate compactors, add-on compactors, walk-behind rollers, and trench rollers.

The company will also offer soil compactors and asphalt tandem rollers, and pneumatic-tired rollers.

Top Lift is a leader in heavy equipment sales and distribution in Canada – and has

been for more than 26 years. The company offers a wide range of new and pre-owned heavy equipment for sale and rental, and services a diverse range of customers in several major industries.

Ammann is headquartered in Switzerland and has an extensive lineup of light and heavy compaction-related products in North America.

Source: Ammann

CONSTRUCTCONNECT ACQUIRES QUOTE SOFTWARE

ConstructConnect recently announced that it has acquired the assets of Quote Software, Inc., a privately-held software company based in Eugene, Oregon. Quote Software focuses primarily on estimating and building information modeling software and services for plumbing and mechanical contractors.

"The acquisition of Quote Software which includes its award-winning Quote-Soft® product line is a natural fit that gives us the ability to offer a more complete and actionable preconstruction solution to our combined customers," explained Dave Conway, CEO of ConstructConnect. "This is an important transaction for us, and is a key component of how we continue to serve the industry by combining relevant construction information with easy-to-use software."

Quote Software's 26-year history was founded on the principle of "no 2 metal

shops are alike," so its software would not be a "one size fits all" model. The company's QuoteSoft Pipe and QuoteSoft Duct estimating software was developed in accordance to fit each customer's unique needs.

"We're excited to be part of the ConstructConnect family," said Kerry Brainard, president of Quote Software. "We share the same philosophy about maintaining strong customer relationships, by letting our customers drive the development of our products."

ConstructConnect is a leading provider of construction information and technology solutions in North America, and a whollyowned subsidiary Roper Technologies, Inc. Through the combination of its legacy brands (iSqFt, Construction Market Data, BidClerk and Construction Data), ConstructConnect brings project participants together with the most complete, accurate and actionable construction data and tools to drive success in national, regional and local markets. Its collaborative network empowers the construction industry to be more successful with access to relevant information through easy to use technology.

Source: ConstructConnect

BIOGEN ACQUIRES ANAEROBIC DIGESTION PLANT IN SCOTLAND

Ancala Partners LLP, an independent mid-market infrastructure investment



manager, has acquired a 1.5 MW operational anaerobic digestion facility located in Millerhill, Scotland, from Kelda Water Services for an undisclosed sum.

The facility will be integrated into Ancala's UK anaerobic digestion platform, Biogen, a leading owner and operator of anaerobic digestion plants in the UK.

The facility is an important long-term component of the Zero Waste Plan being delivered by The City of Edinburgh Council and Midlothian Council to meet the Scottish Government target of no more than 5% of waste being sent to landfill by 2025.

Discarded food collected by the 2 partner councils plus additional waste from local businesses and industries are recycled at the facility. Methane gas is then produced and converted through a CHP engine into electricity. The process generates enough electricity to power approximately 3,300 homes. In addition to producing renewable green electricity, the facility converts food waste into a nutrient-rich biofertilizer that is PAS110-certified.

"The Millerhill facility is an excellent asset serving an important market. By being integrated into our Biogen platform it will benefit from the resources and expertise of the Biogen team," commented Spence Clunie, Managing Partner, Ancala Partners LLP. "This acquisition is another example of our ability to secure add-on investments to our platforms and promote businesses that benefit local communities."

"The Millerhill facility is an ideal addition to the Biogen portfolio and marks the first step of growth for the business since we became a part of Ancala last year," added Adam Feneley, managing director, Biogen. "We look forward to working with the Edinburgh & Midlothian councils to facilitate their recycling targets, benefiting both the local community and wider Scottish environment."

Scotland's Zero Waste Plan sets out the Scottish Government's vision for a zero-waste society. This vision describes a Scotland in which all waste is seen as a resource and the amounts put into landfills are minimized. Ancala actively supports this vision.

Source: Ancala Partners LLP

SHAPING THE EVOLUTION OF HYDRODEMO-LITION

In 2018, Aquajet celebrates its 30th birthday. The celebration will be an essential part of the Hydrodemolition days in April this year, as the pinnacle of 3 decades of innovation. During the popular event in Sweden, Aquajet will unveil several groundbreaking products to the world, and thereby strengthen their position as the market-leading provider of safe and sustainable hydrodemolition equipment.

The story of Aquajet Systems began as a hydrodemolition contracting company in Sweden. Some of the entrepreneurs that embarked on this amazing journey are still with the company today. They started out as ambitious visionaries and ended up as global leaders. In 2018, the story continues, as Aquajet writes a completely new chapter in the history of hydrodemolition.

Over the years, Aquajet has manufactured some of the industry's most advanced, versatile and sustainable hydrodemolition products.

Festivities will last throughout the year, but the celebration itself will be held during the Hydrodemolition days in April at Aquajet's headquarters in Sweden.

Source: Aquajet Systems AB

Hardox Wearparts® Launches New and Enhanced Website

SSAB recently announced the launch of a newly enhanced Hardox Wearparts® website. Visitors to the site will now find it easier to select the right steel and other wear materials and parts for their applications as well as more efficient tools for sending in their quote requests.



"The Hardox Wearparts® website is a next step in building up a strong digital footprint," says Nancy Matos, head of Market Development for SSAB Services. "With the new website as the foundation, our focus is to give companies that are subject to intense wear such as mines, quarries, cement plants and others, easy access to the knowledge they need to select the right material and design for their applications in order to optimize uptime for their operations."

Hardox Wearparts® is a growing network of certified workshops – now 340 centers strong – that provides wear parts and wear services all over the globe. A part of SSAB, Hardox Wearparts® has significant experience in the wear arena having developed the industry-leading Hardox® wear plate.

With centers located all over the world, there is always a Hardox Wearparts® center nearby. And with the new website, it will be easier for customers to find the right center to do business with – not only by the nearest location but by production capabilities as well. Customers will be able to go to the site and select the nearest center that offers the services they are looking for – by wear part, fabrication needed or by specific industry expertise.

The website is also optimized for mobile phones as the number of smartphone users continues to rise. "We want to make it convenient for our customers wherever they are to find the best solution for their applications," said Ms. Matos.

Hardox Wearparts® focuses on providing a complete solution for its customers from quality, well-known steel brands such as Hardox®, Strenx™, Toolox® and Duroxite™ overlay to thousands of wear products, consulting services, in-house production, onsite services and uptime management.

Source: SSAB Inc.



New BOMAG BM 2200/75 Cold Mill **Built for Power, Production and Efficiency**

With its powerful 760 hp (567 kW) diesel engine, the BOMAG BM 2200/75 delivers high-performance milling of half-lane widths reaching 2,2 m at precise milling depths of up to 350 mm. Offering a range of quick-change milling drums options and efficient transition of engine to milling power, this largest cold mill in the BOMAG product line is ideally suited for high performance applications such as major county roads, highways, interstates and airports.

Perfected over decades of design research and field experience, BOMAG's unique BMS 15 milling tooth holder system delivers superior milling productivity with low wear. The base tooth holder features a maintenance-free bolt-on design that does not require retightening to reduce service time. Featuring a low-resistance profile, the tapered tooth retainer claw delivers more cutting power with less wear. When cutting tool changing is required, the



holder's quick-change design requires approximately 25% of the time required to change a full set of teeth compared to conventional systems, increasing machine uptime availability.

Built with high quality hardened materials, the milling drums for the new BM 2200/75 feature optimized cutting tooth arrangement for high efficiency asphalt removal. The base section of the cutting tool holder is identical for all drums, giving contractors a lower cost for replacement parts. Material ejector plates boast a symmetrical design, so they can be rotated

and used twice, cutting replacement costs in half. The drum's heavily loaded edge cutter is protected by high-performance hardened chromium carbide wear elements to increase service life, and easy access to the tool edge shortens the time for tooth exchange. With the machine's quick-change drum design, contractors can easily switch from the standard drum for general milling to a fine milling mandrel for close tooth spacing to the power drum for demanding applications.

Source: BOMAG Americas, Inc.



Dynapac Introduces New CC1100/CC1200 Asphalt Roller

The new CC1100/CC1200 VI is designed to meet the construction industry's tough conditions with the operator in mind resulting in a robust, comfortable and modern machine for best compaction results. The new machine has a unique design with its cross-mounted engine in combination with excellent visibility and massive casted forks with built-in flexible lifting/towing/tie down possibilities.

Sustainability is one of Dynapac's cornerstones. Having sustainability and working environment in mind under the developing process resulted in the latest emission reduction technology to fulfill the worldwide emission regulations. The range is powered by durable, fuel-efficient Kubota diesel engines which reach unbeat-

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able performance with maximum up-time. Dynapac offers engine alternatives which meets the engine emission regulations worldwide. For the North American markets, the machines are powered by a 37.5 hp (28 kW) Tier 4 final (T4f) Kubota engine with a diesel particulate filter (DPF) after-treatment system or, alternatively, by a 25 hp (18,5 kW) engine fulfilling the T4f

emission legislations without the cost and complexity of an after-treatment system.

The design of the machines contributes to great serviceability. Easy accessible daily service-points and contribution to great serviceability has been a target during the design process.

Dynapac, part of the FAYAT Group, is a leading supplier of high tech soil and



asphalt rollers, pavers and milling equipment, committed to strengthen customer performance.

Dynapac North America customer support and distribution is located in Rock Hill, South Carolina.

Source: Dynapac North America



Caterpillar Expands EU Stage V / U.S. EPA Tier 4 Final Industrial Engine Range with New 9.3 I Offering

To address the diverse requirements of the global off-highway emissions landscape, Caterpillar has taken a customer's approach to the new Cat® C9.3B industrial engine. Customers expect reliability and durability, but they need it from a simpler, lighter package with more power and that

is what Caterpillar is giving them.

The 6 cylinder, 9.3 I engine combines a new high-pressure, common rail fuel system and simplified air, electrical and aftertreatment systems to produce up to 456 hp (340 kW) of power and 1,550 lbf ft

(2,088 Nm) of torque out of a package that is nearly 140 kg lighter than its predecessor.

These significant system upgrades, which provide added value to OEM customers, build on the core engine, which has been in production since 2011 with more than 46,000 engines, logging more than 150 million hours in real world off-highway applications. With a proven, reliable core engine and diesel particulate filter (DPF) solution already in place, Caterpillar's focus for EU Stage V construction customers has been on simplifying design and improving performance.

Along with taking 39% of the after-treatment packaging size out of the previous design, customers can opt for enginemounted after-treatment (EMAT) and full industrial power units (IPU) straight from the factory.



For the more challenging installations, remote-mounted after-treatment is available that only requires wiring, coolant and diesel exhaust fluid effects added to the system. With full engine production planned in the first quarter of 2018, Caterpillar is prepared to meet the needs of Stage V customers.

Source: Caterpillar







Blastcrete Introduces MX-20MT Mixer/Pump

The new MX-20MT mixer/pump from Blastcrete Equipment Company gives contractors a high-output, easy-to-use unit for superb productivity on shotcrete and refractory work in a variety of applications, including steel mills, cement plants and petrochemical plants. The machine provides twice the output of the company's popular MX-10 mixer/pump yet has nearly the same compact footprint. It is mounted to a single-chassis trailer for convenience as well as fast and easy transportation, setup and cleaning.

The MX-20MT features a 1 t mixer with a high-speed hydraulic agitator that keeps materials blended and in suspension as it flows to the 10 cm swing-tube piston pump. The pump operates with up to 150 bar (2,200 psi) pumping pressure for consistent installation of as much as 20 t/h of material. Customers can vertically pump refractory material in excess of 100 m and load the hopper with as much as 1,130 kg of material.

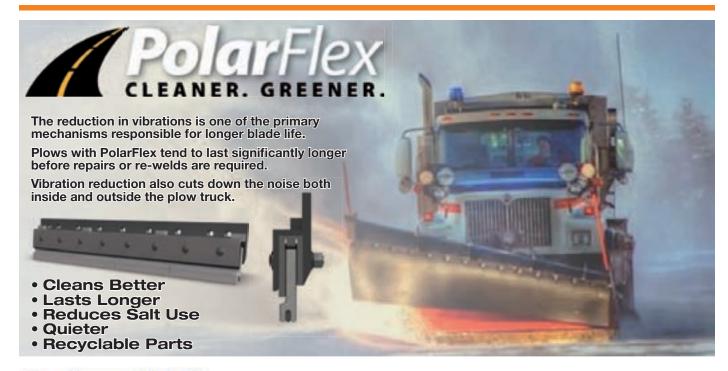


"To achieve high output often requires a separate mixer and pump, which doubles transport cost to jobsites as well doubles the setup time," said Tripp Farrell, Blastcrete Equipment Company president. "We resolved these challenges and built a machine that is safe and simple to use, quick to clean and maintain and very userfriendly."

Mr. Farrell added that designing equipment around customer feedback is in

Blastcrete's DNA. The company did it in 1996 with the release of the MX-20MT's sister model, the MX-10, which became the industry's most popular unit.

"Our customers know we listen to them and understand their challenges, and they trusted us to provide them with a userfriendly, higher output machine, but on a smaller footprint," he added. "They know and we know a machine must be kept clean and maintained. We make the job as





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easy as possible to accomplish, and our customers like that."

Portability on industrial jobsites can come at a premium. The ability to move and set up a unit in tight spaces using a forklift can be essential. The MX-20MT can be set up with a single person, which saves labor and time.

Blastcrete preserved the popular swingout hopper in its latest model, giving users quick cleanup and maintenance. Additionally, the 20-minute quick-change-out 10 cm flat pack provides low-cost insurance for contractors in quick turnaround installations. No other pump in the world offers these features, said Mr. Farrell.

Blastcrete offers an optional 138 bar (2,000 psi) hydraulic pressure washer for easier cleanup and an automatic lubrication system to ensure proper greasing of the swing-tube pump.

The MX-20MT's 2 m² platform provides 50% more space than competitive equipment to give operators ample room to maneuver for safe operation. The electrical controls are mounted on the platform and positioned away from the mixer to remain free from debris and water.

Customers can also use the unit with Blastcrete's patented DustAway system, which consists of an innovative bulk bag design that attaches to a mixer to contain dust as the mixer fills. DustAway helps businesses meet impending OSHA regulations for crystalline silica dust by controlling dust to within new OSHA permissible exposure limits.

The MX-20MT features electric braking and lights for enhanced safety when traveling. Lifting eyes on the platform allow operators to use a crane to lift the machine and place it on a flatbed for traveling longer distances. Blastcrete offers the MX-20MT with an optional skid-mounted framework that reduces the overall length, width and height of the machine.

The new MX-20MT is equipped with a 173 hp John Deere 6068HF engine. Blastcrete also offers the unit with electric motors. The engine on the MX-20MT is placed away from the mixer and receiving hopper to prevent thermal transfer that causes refractory materials to set prematurely.

Source: Blastcrete Equipment Company

Gilsonite-Based Emulsified Asphalt Seal Coat Proven to Maintain Pavement

GSB-88® Sealer/ Binder Emulsion from Asphalt Systems, Inc.® (ASI) is a gilsonitebased emulsified asphalt seal coating product that has demonstrated in numerous studies to not only add years of life to asphalt pavement, but also to provide up to 400% return on investment. The primary deteriorating factor for most asphalt pavements is surface oxidation. Application of GSB-88® very early in the life of the pavement, and timely repeat applications every 4 to 7 years, can elimi-



nate surface oxidation as a significant factor in pavement deterioration. As an integral component of GSB-88®, gilsonite is a unique, naturally occurring resinous asphalt ore found in Utah that does not have to undergo an oil refining process. Gilsonite emulsions are non-flammable, non-carcinogenic and non-toxic. GSB-88® comprises a mixture of gilsonite, specially selected plasticizers and oils that penetrate and reintroduce essential binders into the pavement matrix. GSB-88® is designed to mitigate the impacts of surface oxidation and moisture damage on asphalt pavements, halting deterioration and sealing the surface to help repel water. The product also helps prevent or cure surface raveling.

The average GSB-88® treatment cycle is 4 to 7 years. Based on nearly 3 decades of projects, studies, and commercial and governmental assessments, when applied regularly, GSB-88® can protect against the detrimental effects of surface oxidation of asphalt pavements almost indefinitely.

Free from toxic, old-school coal tar and with very low VOC levels, ASI's gilsonite-based asphalt preservation products are safe for the environment. As an aid to maintaining infrastructure, pavement preservation is both eco-friendly and socially responsible. ASI's GSB-88® is the only product in the asphalt industry today to have undergone rigorous independent 3rd-party environmental testing. After an intensive 2011 Life Cycle Assessment by the Institute for Environmental Research & Education (IERE), GSB-88® earned an Environmental Product Declaration (EPD), which attests to the significant environmental benefits of its use in preserving pavement. Additionally, GSB-88® has been honored with a GreenCircle® Certification, recognizing that one application every 5 years can significantly extend the life of asphalt and help reduce global warming, acidification and eutrophication by nearly 50%, when compared to reconstruction.

GSB-88® applies quickly and easily with standard bituminous distributors. Spread rate is dependent upon the existing asphalt pavement's texture, porosity, and age. Application generally cures in 2 to 8 hours. Wet GSB-88® can be cleaned up with water and GSB-88® can be removed from skin with industrial hand cleaners and hand creams. Applications for GSB-88® include pavements ranging from high-speed state highways to parking lots, city streets, and county roads. It has also been applied to more than 500 military and civil airport runways in North America.

Source: Asphalt Systems, Inc.

Digging & Rigging Moves Heaviest Loads on Faymonville Trailers

Established in 1981, the family-owned company Digging & Rigging Inc. is ranked today among the most reliable and professional crane and rigging companies in North America. To hold up this reputation, the Mount Airy, Maryland, firm relies on robust material that allows maximum versatility and highest performance.

To stay in line with these principles, Digging & Rigging recently took delivery of 13 new axle lines of G-SL ModulMAX and PowerMAX from Faymonville and they have managed their first moves on those trailer with flying colors.

"The addition of the ModulMAX to our fleet is going to give us a huge edge in the oversize load market," confirms Jim Gregory, president of Digging & Rigging, Inc.

For one of the first jobs, the staff used a 9-axle combination with an extra low flatbed to transport a power generator. The huge piece had a weight of 95,254 kg and



dimensions of 7.34 m length, 3.73 m width and 4.77 m height. Firstly, the transformer was shipped from Wisconsin to Virginia by rail car.

Digging & Rigging then had to load the transformer from the rail car to the ModulMAX with its Liebherr LTM 1250-6.1 crane and move it 1.9 km to the substation followed by the off-load. To pull the 9-axle ModulMAX trailer, they used their 4 axle Kenworth tractor. In total, the combination

had a gross weight of 163 t and an overall length of 35 m.

"The ModulMAX made easy work of some tight turns at the load site and at the substation. The low deck height made it easy to clear several utility lines and stop lights along the route," explains Mr. Gregory and thereby highlights some of the advantages of their new Faymonville trailer.

To move a 15.2 m-long dryer on the

ALL Takes Delivery of New Liebherr All-Terrain Cranes

The ALL Family of Companies recently took delivery of 2 Liebherr LTM 1450-8.1 all-terrain (AT) cranes. In keeping with ALL's strategy of working with manufacturers to obtain the newest and best machines, the company ordered these cranes before they had even made their U.S. debut at last spring's CONEXPO-CON/AGG show in Las Vegas.

With a powerful 85 m telescopic main boom and a full range of lattice jib attachments, this Liebherr AT can handle jobs at – and often above – its 450 t capacity. The LTM 1450-8.1 was manufactured to accommodate a variety of transport weight and machine axle configurations, making it one of the most road-friendly 8-axle ATs on the market.

"We're always scanning the horizon of the industry anticipating customer needs in





the months and years ahead," said Hutton Strader, business development specialist for ALL. "It's why we frequently pull the trigger on orders very early in the life of a new model. We want to make sure we are serving our customers not just today, but in the future."

The LTM 1450-8.1's VarioBallast® system adds capacity when needed, but still allows the nimble AT to work in spaces where many other large cranes simply will not fit.

There is great potential for the machine on wind farms, refineries, chemical plants, as well as in setting up tower cranes.

"In addition to its obvious power and versatility, the LTM 1450-8.1 is designed with readily transportable weights and dimensions," added Mr. Strader. "The speed with which it can be delivered to a site and assembled maximizes uptime for all who use it, positively impacting profitability for our customers."

Eastern shore of Maryland with a weight of 79,378 kg and a diameter of 3.66 m, Digging & Rigging used 10 G-SL ModulMAX axle lines including a PowerMAX APMC to run the combination as a self-propelled unit.

"The trailer made easy work negotiating the dryer through the tight plant and into position for our Liebherr LTM 1500-8.1 crane to offload and set in place," says Jim Gregory.

Besides the heavy-duty modular platforms, Digging & Rigging, Inc. also trusts its MegaMAX double drop trailers from Faymonville and their unique king-pin steering. With an unmatched maneuverability and a maximum steering angle of 42°, the MegaMAX allows access into tighter and smaller locations than ever before.

With a drive height of only 35 cm, the MegaMAX's perimeter-style deck is also the lowest stretch in the market and offers



the possibility to move highest goods underneath the lowest bridges and obstacles. The 3-axle trailers on air suspension are rated for 45,359 kg technical capacity.

Faymonville is the only European manufacturer in the North American market that uses electric and pneumatic components that are completely DOT approved. The complete Faymonville product range for the U.S. can be viewed and tested at Hale Heavy Haul, in Voorhees, New Jersey. The

company is one of the largest independent full service trailer dealerships with 12 branches all along the East Coast, from Maine to Florida.

Source: Faymonville Group



The machine is ideal for a national crane rental company like ALL, where machines move from yard-to-yard and state-to-stateto-province based on market demand or a specific jobsite's needs. "The new 1450 is accommodating for states with strict axle load limits," explains Hutton Strader. "Boom sections 2 through 6 are completely removable, leaving just the first main boom section. Front and back outriggers can be removed as well. And this model is Liebherr's 4th mobile crane to feature the new Liebherr single-engine concept, a feature that not only allows for a stronger crane by redistributing the saved weight for structural enhancements, but also reduces engine maintenance literally in half."

The new LTM 1450-8.1 is designed to achieve strong capacities without the need for a superlift, which saves time during setup, reduces costly trailer loads, and allows for large jobs in confined spaces.

Source: The ALL Family of Companies

Bosch Rexroth Describes Latest Technology Innovations in Expansive Brochure

As a leading provider of Industry 4.0, Bosch Rexroth is excited to share its recent technological developments. With an extensive product range and outstanding application expertise, Rexroth is a technological and market leader in Industrial Hydraulics.

Rexroth's new Innovations brochure includes developments in Hydraulics, Electric Drives and Controls, Linear Motion and Assembly Technology.

Spanning Rexroth's entire technology portfolio, the Innovations brochure provides readers with valuable information on Rexroth's latest innovations.

Conveniently organized by technology type, the catalog lays out key technical data and notable

product features into a single, informative document.

Source: Bosch Rexroth



Luffing Jib Tower Crane the Right Fit for Smith Bros. & Wilson on a Challenging Downtown Project

New construction projects always come with a set of challenges, but the site and lifting needs are usually straightforward enough that several different crane options fit the requirements. Building reconstruction, on the other hand, typically comes with its own unique challenges. Often, there are obstacles in the way that make selecting the right crane much more difficult, and bidding the right crane can be the difference between getting the job and moving on to the next opportunity.

Major metropolitan downtown reconstruction projects offer even more challenges for the lifting contractor. It is a virtual certainty that the site will be surrounded by structures on all sides, making it a tight fit for mobile cranes. Busy streets make it nearly impossible and sometimes cost-prohibitive to block off a road for a significant period of time.

This is precisely the type of demanding project facing contractor, Smith Bros.

& Wilson (BC) Ltd. (SBW) of Vancouver, British Columbia, during the demolition and reconstruction of the 8th and 9th floors at the downtown Vancouver Public Library. The tasks included converting the once provincial government office spaces into additional library space, meeting rooms and an urban green space, all while keeping the library open to thousands of visitors daily.

Demolition and construction activities required many materials, large and small, to be moved. "All the demo material had to be removed," explains Tyler Brown, general superintendent for SBW, "and the library only had service elevators to get material from the top floors to street level. During the tender phase, we saw the need to hoist many items, including large-span escalators to get people up to the green space. It was quite a challenging prospect."

This is a very high profile project for the city, as the building's distinct design makes

the library a focal point of the downtown area. While the historical look allows it to stand out, it also poses unique challenges that require much preplanning in order to properly bid.

"The library is designed after the Roman Colosseum and surrounded by an elliptical wall on the east side," comments Dean Arsene, crane rental & sales representative for Leavitt Machinery of Vancouver, an authorized Terex Cranes distributor. "We started discussing the project with SBW in late 2016, and all options were reviewed."

Like most contractors submitting bids, SBW initially considered mobile cranes to tackle the heavy lifting from street level. Unlike those companies, however, SBW saw several drawbacks that made planners rethink the option.

"The structure's shape required a minimum of a 500 t capacity class mobile crane to hoist large materials to and from the upper floors because it would be



boom bound," says Tyler Brown. Given the possible set-up locations for a mobile crane at the site, smaller cranes just did not offer the capacity to lift many of the objects at the required boom lengths and working radii. "This meant we would have had to shut down an entire street, and mobilization costs would have been high. By the time we counted everything that needed to be hoisted, it was cost-prohibitive to use a mobile crane."

The next option for SBW was tower cranes, and they looked at flat top, hammerhead and luffing jib designs. "The job required a 55 m boom radius, and the flat top and hammerhead cranes didn't offer the capacity we needed for the escalators without breaking them down," mentions Mr. Brown. Plus, there was a more pressing issue, as the crane would be placed about 15.2 m from an adjacent structure. "Those booms were too long, and they didn't have the freedom to slew without



hitting a structure, so these designs were not an option," explains Dean Arsene.

For SBW, the only option was a luffing jib tower crane, and the Terex® CTL 430-24 offered the reach and capacity for the job.

Throughout the demolition phase, the crane was kept busy daily removing large structural pieces and concrete from the rooftop. Choosing the tower crane for this project gave work crews more flexibility

with material removal.

As work transitions to the reconstruction phase, the crane will be used to hoist large building materials and full concrete buckets from street level to the 8th and 9th floors. The largest and heaviest planned lifts will be the 2 escalators weighing 5.4 t each, hoisted into position without disassembly to save time and money.

Source: Terex Corporation

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Haala Industries Storm Water Grates and Guards

Storm water and wetland management grates and guards from Haala Industries provide a solution for pipe, manhole, culvert and other drainage cover applications.

Grates and guards are DOT approved in multiple states and produced to existing standards, allowing them to be easily incorporated into construction design plans, eliminating the need for contractor fabrication. Custom fabrication is also available to meet specific design requirements.



Haala Industries' line includes manhole grates, pond skimmers, flared end vehicle safety grates, trash guards and more. Grates and guards can be made from domestic materials including galvanized steel, stainless steel or aluminum.

Since 1974, Haala Industries, Inc. has been providing metal fabricated products for a variety of industries. In addition to grates and guards, Haala Industries offers fabricated rebar products, 3D wire bending, roll threading, robotic welding, high definition plasma cutting and product design.

Source: Haala Industries, Inc.

The Inflatable Concrete Bridge

A wildlife crossing over the upcoming Koralm railway is being built using a new construction technique developed by Vienna University of Technology (TU Wien). Traditional support structures are replaced by an air cushion.

The shell construction methods which are usually used to build bridges and domes generally rely on expensive support structures. However, a team of engineers from TU Wien have now developed a new technique that is not only cheaper, but also makes more much efficient use of resources. Instead of using a support structure, an air cushion is inserted underneath the concrete and gradually inflated during the construction process.

The first major tests were carried out 3 years ago at a TU Wien test site, but now the new method has been used in a real-life project for the very first time by the Austrian Federal Railways (ÖBB-Infrastruktur AG). With the help of TU Wien, the Austrian railway network operator has successfully used the technique to build a wildlife crossing over a new section of track on the Koralm railway.

The basic idea is simple: If you make regular incisions in a piece of orange

peel, you can spread it flat on a table. The "Pneumatic Forming of Hardened Concrete" technique developed by TU Wien applies precisely this principle but in reverse, starting with a flat sheet of concrete with wedge-shaped incisions and transforming it into a curved dome. An enormous plastic air cushion is placed underneath the concrete panel and then slowly

inflated once the concrete has hardened. Hydraulic-tensioned steel cables ensure that the concrete retains the correct shape during this process.

"It took around 5 hours to inflate the cushion and create an elongated concrete dome with an internal height of 7.60 m," says Benjamin Kromoser from the Institute of Structural Engineering at TU Wien, who developed the technique as part of his dissertation with Prof. Johann Kollegger and worked closely with ÖBB on the project. Each end of the concrete dome was then

The concrete dome, which is then cut on both ends, creating a bridge.

Credit: Vienna University of Technology

removed and archways installed to create a bridge. The new Koralm railway will run under the bridge and the outside of the concrete structure will be backfilled with earth so that animals can use the bridge to cross the railway safely.

ENERGY-SAVING, COST-EFFECTIVE AND RESOURCE-EFFICIENT

The method offers some major advantages over traditional bridge building techniques.

"The process requires a little more concrete but 40% less steel," according to Mr. Kromoser.



The TU Wien method is also more energy-efficient, reduces equivalent CO₂ emissions by 40% and is significantly cheaper.

"The costs are expected to fall even further once construction firms have gained more experience using the new technique. We estimate that it could ultimately reduce costs by 15% to 30%," explains Mr. Kromoser.

It has been many years since Prof.

Johann Kollegger first developed the idea of constructing a concrete structure using

continuous forming rather than support structures. Since then he and his team have worked hard to overcome each of the technical hurdles encountered on the road to developing a practical solution.

It is rare for an academic development to be put into practice in a real-life construction project in such a short period of time.

"We're delighted that ÖBB had the courage to test out such an innovative idea. If the method is to become more widespread in future, it is essential to have a real-life prototype construction," explains Johann Kollegger.

"We're especially pleased that our calculations about the resource efficiency of the technique proved accurate. Sometimes, you work through these ideas in an academic context, but when you actually put them into practice you find there are still lots of details that need improving. That's why it was so exciting for us to be involved with the project right through to completion," says Benjamin Kromoser.

The innovative wildlife crossing is located on the Carinthia section of the new Koralm railway, one of ÖBB-Infrastruktur AG's major infrastructure projects in Southern Austria. Following the completion of the construction and terrain modelling work, the earthwork is now continuing before the infrastructure for the high-speed electrified railway can be installed.

Source: Vienna University of Technology



McCloskey International Welcomes Bison Iron to Global Dealer Network

Screening and crushing industry leader McCloskey International has welcomed equipment dealer Bison Iron to its global network of distributors. The company will serve British Columbia and Alaska.

Bison Iron is led by partners Liam Quinn and Emmet Holland, whose extensive crushing and screening experience in the aggregate industry will reinforce McCloskey's representation.

"We are excited to be representing McCloskey International," noted Liam Quinn. "The feedback we have received has been excellent, and our customers are thoroughly impressed with the quality of the equipment. The fact that the machines are built in North America by a privately-owned company is a huge advantage."

Bison Iron has a diverse portfolio of customers within the private and public sectors, across multiple industries including aggregates, construction & demolition, roadbuilding and infrastructure, topsoil, and composting.

"Striving to exceed our customers' expectations on after-sales support is very important to us. We invest heavily in our parts inventory which helps maximize our customers profitability and keeps downtime to a minimum. Our customers realize having the McCloskey factory so close is an advantage for everyone," noted Emmet Holland. "We are excited for the growth this partnership will bring."

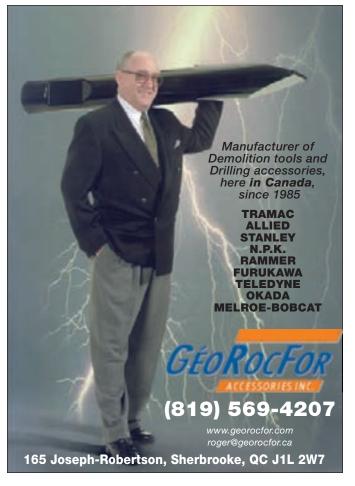
Bison Iron's product support staff is factory-trained and has extensive knowledge of the products it represents. Whether it is troubleshooting an issue over the phone, or being on site, Bison Iron's team offers 24/7 support to customers.

"Bringing Bison Iron on board continues to strengthen our distribution network in North America," said John O'Neill, vice president, Sales for McCloskey International. "They have the in-the-field experience and relationships with their customers to provide excellent sales and support for our product lines. It's evident that everyone in the organization takes great pride in the product, and that resonates with their loyal customers."

Source: McCloskey International







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JCB displayed the 3TS-8T Teleskid and 48Z-1 compact excavator at the 2018 Landscape Ontario's CONGRESS trade show.

Additionally, the JCB 215 skid steer loader – the latest in the company's range of skid steer and compact track loaders built in North America – made its Canadian debut.

"JCB machines provide Canadian landscapers with the power and performance they demand, and the build quality and reliability they need to be successful in our challenging environment," said Trent Fedak, general manager of sales for JCB in Canada. "The Teleskid, in particular, is a game-changer, allowing operators to lift





higher, reach further and dig deeper than with any other skid steer on the market."

The JCB Teleskid is the world's only skid steer and compact track loader with a telescopic boom, allowing operators to lift above 3.9 m, reach forward 2.4 m and dig 1 m below grade. It is also the only skid steer to combine the advantages of vertical and radial lift capabilities in a single machine. The Teleskid is equipped with a 74 hp (55 kW) JCB EcoMAX engine, requiring no diesel particulate filter (DPF) or diesel engine fluid (DEF). Available wheeled and tracked models offer rated operating capacities of 1,455 kg and 1,676 kg, respectively.

Another highlight on the JCB booth was the Canadian debut of 215 vertical lift skid steer loader. Designed as a smallplatform skid steer with large-platform capability, the JCB 215 is powered by the 74 hp (55 kW) JCB Diesel by Kohler engine, requiring no DPF or DEF, and features the iconic JCB Powerboom™ with side-door entry. The 215 wheeled skid steer has a rated operating capacity (ROC) of 958 kg in standard configuration or 1,024 kg with an optional dealer-fit counterweight package. The 215 is also available as a compact track loader, with an ROC of 955 kg in standard configuration or 970 kg with the optional counterweight package. A similarly capable 210 radial lift model is also available in skid steer and compact track loader configurations. All 215 and 210 machines are capable of operating high flow attachments up to 113 l/min.

The JCB 48Z-1 compact excavator drew a lot of attention. This zero tail swing machine boasts a JCB Diesel by Kohler engine that produces 48 hp (36 kW) and 166 ft lbf (225 Nm) of torque. A fully bushed dig end with 500-hour greasing intervals reduces downtime and daily maintenance, cutting total cost of ownership for the customer and increasing productivity.

Source: JCB North America



The 7 Secrets to Extend the Life of your Sweeper Brushes

The majority of people do not appreciate street sweepers as they should. Odds are, most people do not recognize the health preventive side of having clean streets. Like any fleet vehicle, maintenance is an essential part of delivering quality service while keeping costs under control.

Since extending sweeper brush life is part and parcel to street sweeper maintenance while maintaining operation overall cost low, EDDYNET is giving you the 7 secrets for optimal brush performance:

<u>Secret No 1</u>: Don't buy cheap brushes. The economy at first blush and may seems to be a good deal but this potential economy will be quickly erased by poor performance, fast wear and down time to replace them.

<u>Secret No 2</u>: Make sure all broom linkages are in serviceable condition. Their functionality is to guaranty the optimal contact with the ground whatever the surface variation of the street.

Just as keeping tires properly inflated can reduce gas mileage, keeping linkages in good condition can reduce wear on the sweeper brushes.

Preventive maintenance is always cost effective.

Secret No 3: Do not put too much down pressure. The most common cause of premature wear of the brushes is using too much down pressure

than necessary. Excessive down pressure will create too much contact surface with the street causing filament to wear at a faster rate. The sweeping pattern should be checked before every use. Do not mop, sweep!

<u>Secret No 4</u>: The angle of the gutter broom is critical. If the forward and outward tilt angle are not settled properly it will cause premature wear. Again, too much filament in contact with the street is causing wear without increasing the performance.

<u>Secret No 5</u>: Many rotary sweepers offer features that help the operator avoid exces-

sive down pressure and adjust the proper angle without affecting productivity. Most of the time return of investment for these



options is short.

<u>Secret No 6</u>: Sweeping is not a race; too many times, operators are trying to go too fast. Surfaces and conditions varies



and the majority of rotary sweepers are designed for a maximum speed of 10 km/h. Just like in the tortoise and the hare fable, a slow and constant speed will win.

Secret No 7: Training before use:
Besides the purchase of quality brushes,
all the other aspects allowing an optimal
use of the brushes can be addressed by an
adequate training of the operators. Their
understanding of "why" certain elements
are critical will give them the necessary
autonomy to make adjustments and
interventions at the appropriate time.

Source: Eddynet Inc.

First Class Attachments Proudly Introduces
MUTTER Solutions Cutting Edges to North America

MUTTER Solutions is a recognized European leader in the manufacture of high-quality, reliable cutting edges for winter service machines. Now, after extensive testing under rigorous winter conditions in Canada, these superior cutting edges are available in North America through First Class Attachments.

MUTTER Solutions cutting edges have demonstrated increased longevity and significant reductions in vibration and bouncing compared to competitive products. This means fewer cutting edge changes, less downtime, and cost savings on manpower and reduced fuel consumption.

These benefits are the result of MUT-TER's laser focus on the production of high-quality cutting edges for snowplows. Over the years the company has acquired a high degree of expertise and developed specialized production processes to produce superior cutting edges for efficient and cost-effective snow clearance. Working with established suppliers and using the highest quality raw materials processed on the latest precision production machines, MUTTER has established a reputation for helping end users achieve effective snow removal and ensuring safe, clear roads, sidewalks and highways.

Since its foundation in 1999, MUTTER has evolved from the distribution of winter-service machines such as snowplows and spreaders to the expert manufacture of cutting edges. Today a team of professional, experienced employees manufactures and sells MUTTER cutting edges worldwide.

One key to MUTTER's success is the ability to rapidly adapt products to customer requirements. As a medium-sized

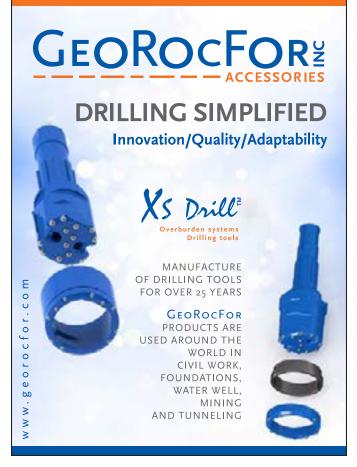
manufacturer, MUTTER has the flexibility to respond fast to end user's needs while continuing to ensure the high quality of cutting edges. Furthermore, every cutting edge is assigned a unique code, enabling comprehensive traceability for quality

Trained and professional staff are happy to answer any questions clients may have.

Source: First Class Attachments

control and safety purposes.





at Landscape Ontario's CONGRESS Building on a tradition of unmatched innovation, Harper Turf Equipment unveiled its latest solution to the debris management line - the MultiLoader at Landscape

Ontario's CONGRESS, held from January 9 - 10 in Toronto. This new truck loader features a belt-driven impeller and coned inlet to maximize debris reduction and cut clean up time.



The ML32 contains 4 serrated impeller blades providing 212 m³/min (7,500 CFM) for extreme shredding and decreased particle size. The belt-driven impeller isolates



the 32.5 hp Kohler carbureted engine from shock loads, increasing engine life.

The first of its kind, patent-pending, coned inlet boosts vacuum efficiency for a smooth transition from inlet to impeller. This downward angle, 305 mm inlet reduces potential for clogging.

The wide 30 cm x 3 m clear poly hose is built for heavy use applications, yet is flexible on the job. A replaceable 6 mm steel liner provides durability and reduces wear and tear on the machine. Built for property managers, contractors and mid-sized municipalities, the skid design and LED light package allows for trailer use across multiple properties.

Source: Harper Industries





Chevrolet recently introduced the nextgeneration Silverado, 100 years after the brand delivered its first trucks to customers in January 1918. The new Silverado comes with the most functional bed of any fullsize truck and is lighter than before.

The 2019 Silverado offers the most cargo volume in every bed length, with the short-box offering up to 20% more than a competitor's short-box. Most of that volume was created by widening the maximum width of the bed floor nearly 18 cm. Chevrolet Accessories will offer storage bins that fit over the wheel wells, offering nearly 200 I of lockable cargo space for short-box models, while easily accommodating a sheet of plywood flat on the cargo floor. The bed floor is made of an even higher-grade steel with a yield strength increased from 340 to 500 MPa Also, the Silverado will be available with a class-exclusive power up/down tailgate.

The 2019 Silverado is larger than before, including a wheelbase that is up to 100 mm



longer. Remarkably, it is also lighter, weighing 204 kg less than today's truck when comparing crew cab V-8 models.

The 2019 Silverado will be available with 6 engine/transmission combinations, including an all-new 3.0 I Duramax I6 turbodiesel paired with a new 10-speed automatic transmission as well as start/ stop technology to improve fuel economy for optimum performance and efficiency.

The cab has been stretched, with crew-cab models now offering 76 mm of additional rear-seat legroom.

Production of the 2019 Silverado will begin shortly at the Fort Wayne, Indiana, assembly plant with customer deliveries beginning this fall.

Source: Chevrolet

Ford F-150 Diesel Offers Best-in-Class Torque

Pickup truck fans have reason to celebrate this year as Ford delivers on its promise to offer a diesel version of the popular F-150.

"For every truck owner who wants strong fuel economy while they tow and haul, we offer a new 3.0 I Power Stroke® V6 engine that dreams are made of," said Dave Filipe, vice president global powertrain engineering. "The more you tow and the longer you haul, the more you'll appreciate its class-leading towing and payload capacity and how efficient it is at the pump."

This all-new 3.0 I diesel now makes for 6 engine choices for F-150 customers.

Peak torque comes at just 1,750 rpm with strong torque delivery continuing throughout the range, which is ideal for towing or hauling heavy loads over long distances. The new V6 diesel features the same compacted-graphite iron block material construction and forged-steel crank used in the 2.7 I EcoBoost® engine for added strength and durability along with reduced weight.



For greater responsiveness and reduced turbo lag, the Ford truck team chose a high-efficiency variable-geometry turbocharger. A high-pressure common-rail fuel injection system enables smoother, quieter operation with reduced emissions.

Calibrated specifically for the all-new 3.0 I Power Stroke diesel's low-end power and torque curve, a standard 10 speed automatic transmission maximizes shift points and gear ratios to optimize power,

and efficiency. Auto Start-Stop also comes standard.

The all-new 3.0 I Power Stroke diesel engine is available for both 4x2 and 4x4 F-150 pickups. It will be available on SuperCrew trucks with either a 167 cm or 198 cm bed configuration, and SuperCab trucks with a 198 cm bed.

Source: Ford Motor Company of Canada, Limited

New 2019 Ram 1500 - No-Compromise Truck, Leading in Durability, Technology and Efficiency

The weight of the 2019 Ram 1500 has been reduced by 102 kg. As the truck's backbone, the frame uses advanced materials and engineering to eliminate 45 kg while increasing stiffness and durability for 5,783 kg of towing capability and 1,043 kg of payload.

"The all-new 2019 Ram 1500 delivers a no-compromise approach to the full-size truck segment with strength, durability, technology and efficiency," said Mike Manley, head of Ram brand. "The Ram 1500 offers truck buyers leading-edge innovation with over 100 kg of weight reduction, 5.7 t of towing capability, a stunning Uconnect touchscreen display and active systems that improve fuel efficiency and assist drivers. The Ram 1500 stands out as the benchmark in a very competitive segment."

The strongest Ram 1500 frame ever produced includes the same impact countermeasures across all configurations, and is made from 98% high-strength steel. Exclusive front splayed frame rail technology (patent pending) creates a highly efficient energy absorbing structure for all impact modes, including front-offset with frame integration forward of front tire. Also, frame-mounted high-strength steel tire blockers are placed behind the front tires to force wheels outward in the event of impact. Additionally, side rails are taller and fully boxed. To further improve NVH, new electronically-controlled side-framemounted active tuned-mass modules (ATMM) work in harmony with an interior active noise cancellation (ANC) system on 5.7 I HEMI V-8 equipped models to reduce ambient sounds down to a low 67.1 db - the quietest Ram 1500 ever. Rear cross members are double sheer welded to the inside and outside of the frame for improved durability and roll stiffness.

Helping to create the most spacious cab in the segment, 3 new, longer frame lengths are offered. The exclusive rear 5-link coil suspension design provides better articulation over obstacles than a leaf spring system.

The new aluminum tailgate not only features damping during opening, it also integrates a lift assist measure. Unlike most competitors, Ram uses a nitrogen-

and oil-charged strut, which gives consistent assist in even the coldest or warmest climates and consistent assist through the entire tailgate swing.

Extensive wind-tunnel testing honed the 2019 Ram 1500 exterior shape, resulting in continued, class-leading aerodynamics. Also, the cooperative application of active aerodynamics and modern styling led to a 9% aerodynamic improvement on the new truck. The 2019 Ram 1500 Quad Cab 4x2 coefficient of drag is 0.357.

As the 2019 Ram 1500 approaches 56 km/h, a standard active front air dam automatically extends downward 63 mm on non-air suspension and Rebel trucks. The optional air suspension system lowers the truck 15 mm improving overall aerodynamics and efficiency. The new Ram 1500 also employs an active grille shutter system, which automatically closes the airflow through the huge grille when cooling is least needed.

Ram now adds a robust 4x4 Off-road Package for the Ram 1500 on nearly every trim. The offering includes a 30 mm suspension lift, with or without the available 4-corner air suspension. An electronic-locking rear differential and on/off-road tires provide additional grip. Hill-descent Control, an off-road-biased rear suspension geometry and unique off-road-calibrated shocks bolster trail capability. The package also includes robust skid plate protection.

The eTorque mild hybrid system replaces the traditional alternator on the engine with a belt-driven motor generator unit that performs several functions. The motor generator unit works with a 48 V battery pack to enable quick and seamless

start/stop function, short-duration torque addition to the engine crankshaft in certain driving situations and brake energy regeneration, which improves responsiveness and efficiency.

With the engine running, eTorque's motor generator unit feeds 48 V current to a 300 Wh lithium-ion nickel manganese cobalt (NMC)-graphite battery. The small-suitcase-sized, air-cooled battery pack mounts to the rear wall inside the Ram 1500's cabin. In addition to spinning the engine for restarts, the eTorque unit also recaptures energy during deceleration and braking to feed charge to the battery pack.

Every 2019 Ram 1500 is equipped with a fully electronic TorqueFlite 8-speed automatic transmission with a wide spread of gear ratios that keeps engine rpm in the right range for the task - whether putting in a full day of off-road work or highway cruising. Trucks equipped with the 3.6 I Pentastar V-6 use an FCA-produced TorqueFlite 850RE transmission. The 5.7 I HEMI V-8 uses an upgraded TorqueFlite 8HP75 transmission. Both transmissions use a new generation of computer controllers that process data faster and coordinate transmission operation with the eTorque mild hybrid system. There are more than 40 individual shift maps to optimize shift changes and points for fuel economy, performance and drivability.

Source: FCA US LLC



A Date Has Been Set for bauma CONEXPO INDIA

The 5th edition of the international trade fair for construction machinery, building material machines, mining machines and construction vehicles will take place from December 11 to 14, 2018 at the HUDA grounds in Gurugram/Delhi, India.

Exhibitors interested in the event can register now at www.bcindia. com. Priority deadline will end on April 30, 2018 when the placement phase starts.

The preparations for bauma CONEXPO INDIA 2018 have started on a pleasant note. There is a positive trend in all sectors of the construction machinery industry in India for the years to come.

"We expect this good development on the Indian market to be reflected in the next event," says Bhupinder Singh, CEO of bC Expo India. "bauma CONEXPO INDIA has become the industry's key meeting point in India in recent years."

Exhibitors present at the last event back up this trend.

"We find that this is the best opportunity for Indian companies to show the international community what facilities India has," explains Payal Koul Mirakhur, vice president of Invest India.

The event also received good ratings for direct business transactions.

"The success of bauma CONEXPO INDIA is a reflection of the overall upturn and positive outlook of the Indian construction market. We sold several machines at the booth," adds Wu Song, managing director at Liugong.

Source: Messe München GmbH Association of Equipment Manufacturers

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Appointments

Hyundai Construction Equipment Americas, Inc., recently announced the appointment of Tom Owen as vice president of National Construction Equipment Sales, effective immediately.

Mr. Owen will be responsible for leading the team that reaches and supports equipment customers whose jobsites and business scope extends across North America.



Most recently, Tom Owen served as national sales manager for the company, responsible for both the inside and outside sales teams for Hyundai's construction equipment products. Mr. Owen has extensive experience in strategic sales and distribution management within the heavy equipment industry, with more than 25 years holding key sales and marketing positions at leading global OEMs. He has an agricultural engineering degree from lowa State University.

"Tom understands the strategic and tactical requirements of customers with multi-state, multi-province operations and will work to help ensure that Hyundai and our expanding dealer network meet the needs of these customers," said M.S. Kang, president, Hyundai Construction Equipment Americas, Inc. "His strategic outlook and dedication to achieving outstanding results make him an excellent fit to lead our national sales efforts."

"With Hyundai, we continually hear that customers get more than they expect," said Tom Owen. "I look forward to building on the growing momentum for the Hyundai brand and helping strengthen relationships with our customers."

Source: Hyundai Construction Equipment Americas, Inc.

Hyundai Construction Equipment Americas, Inc., recently announced the appointment of Stan Park as vice president of Distribution/Marketing, effective immediately. Mr. Park will be responsible for leading the teams in charge of building and supporting Hyundai's growing dealer network and overall marketing efforts.



Most recently, Stan Park served as strategic distribution manager for the company, responsible for marketing and district sales management, strategic dealer development and national account sales. An employee of Hyundai Construction Equipment for more than 20 years, he has extensive experience in the material handling industry. Mr. Park has a marketing degree from Hofstra University.

Source: Hyundai Construction Equipment Americas, Inc.



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Agenda

21th Edition of the Construction Re-Cycle Convention

February 13 - 14, 2018 Drummondville, QC Canada

bautec 2018 - International Trade Fair for Building and Construction Technology

February 20 - 23, 2018 Berlin, Germany

PDAC 2018 International Convention

March 4 - 7, 2018 Toronto, ON Canada

World of Asphalt 2018 / AGG1 2018

March 6 - 8, 2018

Houston, TX USA

The Work Truck Show 2018

March 6 - 9, 2018 Indianapolis, IN USA

BAUMA CONEXPO AFRICA

March 13 - 16, 2018 Johannesburg, South Africa

Atlantic Heavy Equipment Show April 5 - 6, 2018

Moncton, NB Canada

INTERMAT Paris

April 23 - 28, 2018 Paris, France

Expo Grands Travaux

April 27 - 28, 2018 Montreal, QC Canada

APOM Technical Day

May 10, 2018 Saint-Hyacinthe, QC Canada

IFAT Munich

May 14 - 18, 2018 Munich, Germany

bauma CTT RUSSIA 2018

June 5 - 8, 2018 Moscow, Russia

AORS Municipal Trade Show

June 6 - 7, 2018 Belleville, ON Canada

Hillhead 2018

June 26 - 28, 2018 Buxton, England

APOM Technical Day

September 13, 2018 Lévis, QC Canada

The 11th annual WSI conference and expo

October 3 - 5, 2018 Las Vegas, NV USA

Waste & Recycling Expo Canada/Municipal Equipment Expo Canada

October 24 - 25, 2018 Toronto, ON Canada

bauma CONEXPO INDIA 2018

December 11 - 14, 2018 Gurugram/Delhi, İndia

MATEXPO 2019

September 11 - 15, 2019 Courtray, Belgium

inter airport Europe 2019

October 8 - 11, 2019 Munich, Germany

stein expo

August 26 - 29, 2020 Homberg/Nieder-Ofleiden, Germany















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