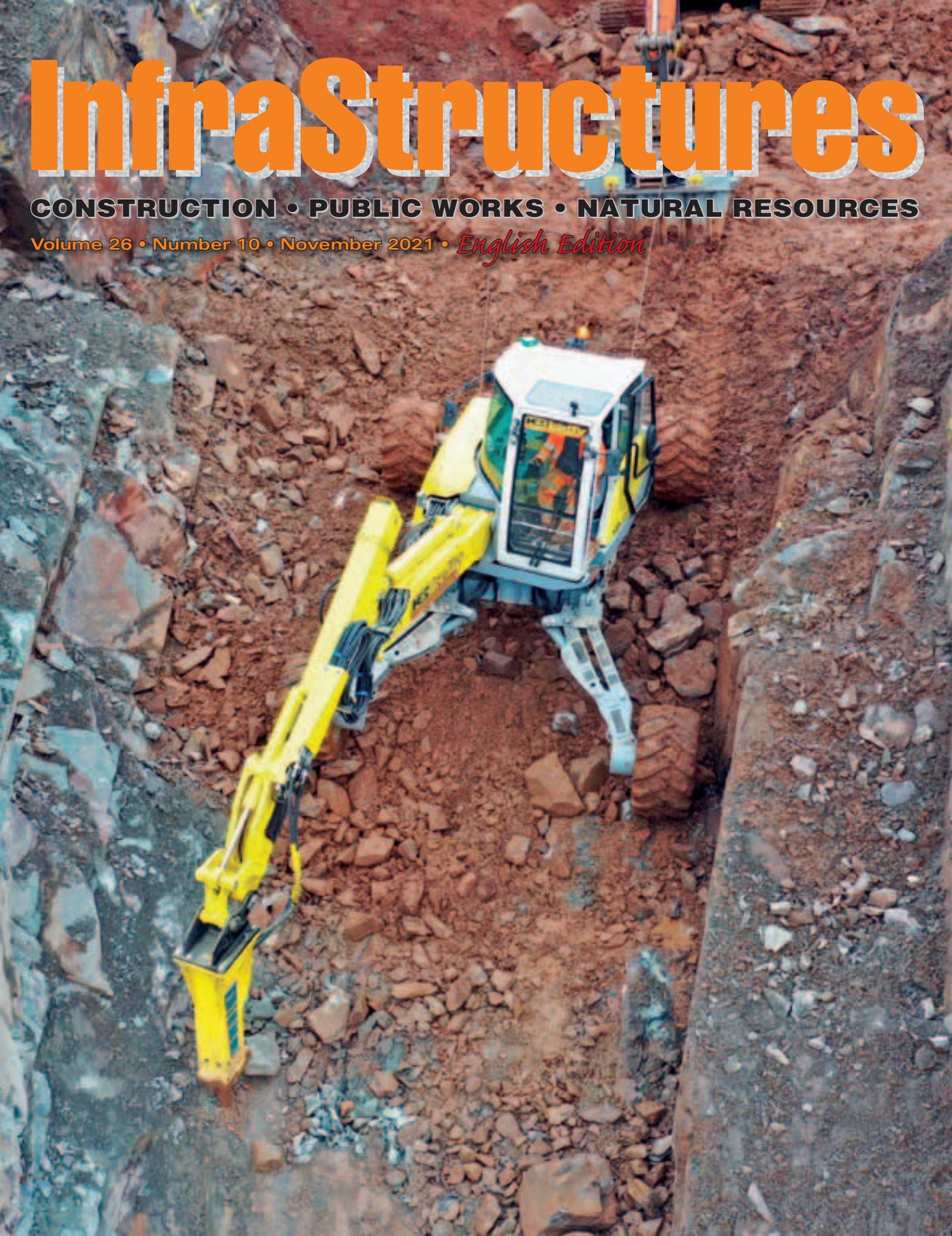


InfraStructures

CONSTRUCTION • PUBLIC WORKS • NATURAL RESOURCES

Volume 26 • Number 10 • November 2021 • *English Edition*





A legacy of hard-working trucks since 1897™

A newcomer in the Class 7 & 8 Cabover category

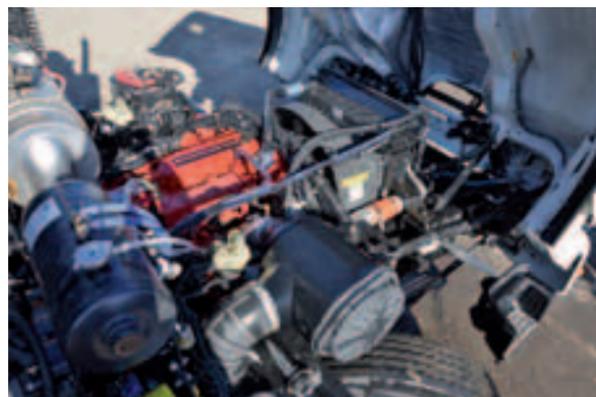
The oldest North American truck brand, Autocar® enters the Class 7 & 8 cabover market with a range of trucks designed for heavy work such as road maintenance and heavy pick-up and delivery, the Autocar Xpert.



The Autocar Xpert is designed to ensure the best sight lines in any cabover or conventional truck. The spacious cab features a huge windshield, side, and rear windows.

The Autocar Xpert can be equipped with an OEM dual steering system. With all controls placed either in the middle, or duplicated and mirrored on both sides.

The high performance dual steering gear system is designed for an extra tight turning radius, and the electrical system is designed for dual steer from the ground up, with no third party splicing into a wire harness.



Distributed by:

Accessories Machinery Limited
www.aolaml.com

1-800-461-1979

InfraStructures

CONSTRUCTION • PUBLIC WORKS • NATURAL RESOURCES
English Edition

Volume 26 Number 10
November 2021

PUBLISHER
Jean-François Villard
editor@infrastructures.com

CONTRIBUTING EDITORS
Rob Holden
Philip Lavigne
toronto@infrastructures.com

ADVERTISING SALES
sales@infrastructures.com

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

TELEPHONE
514-233-1295
613-862-1295
416-795-1295

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

INTERNET
www.infrastructures.com

/InfraStructuresMagazine



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 one year is \$50 for Canadian residents and US\$75 or €75 for U.S. and overseas. The content of InfraStructures is available for consultation on the website www.infrastructures.com. It may not be reproduced or transmitted in any form, either in part or in full, without the written consent of the copyright owner.

LEGAL DEPOSIT
Bibliothèque Nationale du Québec

DISTRIBUTED BY CANADA POST
Publications Mail Agreement #40052183

A Brief Word...

It isn't November already, is it?

I guess for Canadians it is hard to believe we are on the eve of year's end. With most of the G7 already planning on a typical Yuletide, we'll be having yet another Covid-centric Christmas.

Although we may be suffering from a substantive lack of leadership at all levels and in all regions, one thing is certain: construction, mining and winter maintenance are carrying on as normal. Things would be a lot worse if they couldn't.

COP26, for all the hoopla is behind us, and to no one's surprise the pace of change toward sustainability has continued much as before. It steadily progresses as technology, materials and infrastructure are developed and renewed. After all, it isn't like rebooting your computer-turn it Off and On and Voilà!

Leadership comes in various forms, and as Canada's leading bilingual equipment publication, we continue to bring you cutting edge information about what will affect you in the short and long term.

In this edition there are stories and announcements of innovation partnerships for the electrification of mining operations, new products and dealer announcements and our usual plethora of detail and editorial insight.

As the nights grow longer, think of InfraStructures as your beacon, shining light on what is headed your way.

Give Thanks, and REMEMBER in November.

OptiFant 8000 / CityFant 60

BUCHER
schörling

SALES & RENTALS
Vacuum type street sweepers
Different models from 1 m² to 10 m²
USED SWEEPERS IN STOCK

CityCat 5006 / CityCat 2020 XL / CityCat 1000

Accessories Machinery Limited
www.aolaml.com

1-800-461-1979

On the cover: a 12 t Menzi Muck spider excavator wields an Epiroc MB 1200 hammer with ease despite it being designed for the larger 15-26 t carrier range. Even at its full 6 m reach, the lift capacity of the 157 hp machine is over 4 t making it an ideal hydraulic attachment carrier.

Ernst Menzi launched the machine in 1966 to take care of heavy-duty work on slopes.

BKT CANADA ANNOUNCES OTR SUPPLY ALLIANCE WITH FOUNTAIN TIRE

BKT Tires Canada Inc. recently announced an Off-The-Road (OTR) tire supply alliance with Fountain Tire. Effective immediately, Fountain Tire will have full access to BKT's OTR product lineup for sale through its locations across Canada.

"This alliance allows BKT to expand our OTR footprint in Canada," said Rajiv Poddar, joint managing director of Balkrishna

Industries Ltd. "By aligning with Fountain Tire, we are able to serve a growing OTR segment."

BKT offers a large range of Off-Highway tires specially designed for vehicles in the OTR and agricultural sectors, and it is particularly focused on developing the OTR segment. The company has recently expanded its Radial EARTHMAX lineup by introducing 2 giant OTR sizes in 51" and 57". Strengthening its position in the OTR

industry is thus strategic for BKT, especially in Canada and the U.S.

This alliance indeed offers a new distribution channel for BKT Tires Canada, and at the same time it broadens Fountain Tire's product line, providing an increased selection of OTR bias and radial tires. Among other evaluation criteria, BKT was selected as a supplier due to BKT's large product assortment, more than 2,700 tires in total, excellent manufacturing quality and a deep commitment to innovation.

"Our customers have been asking for a more diverse product range," said Yves Richard, senior director Product & Supply at Fountain Tire. "We're delighted to have added BKT Tires to our OTR lineup in response. Continually evaluating and building upon our offering of quality products and services is a key part of Fountain Tire's customer service commitment."

"Fountain Tire is in the business of helping people get there – safely, sustainably and successfully," said Nelson Tonn, vice president, Sales and Mine Service at Fountain Tire. "The addition of BKT OTR tires to our product lineup allows us to support the diverse needs of our customers in mining, oil and gas and construction."

Established in 1956, Fountain Tire is one of Canada's premier tire and automotive service networks with over 160 locations spanning Central and Western Canada.

Source: Balkrishna Industries Ltd. (BKT)

SENSATA DEBUTS XIRGO'S SOLUTIONS AT THE UTILITY EXPO

Sensata Technologies debuted solutions from its newly combined business, Sensata | Xirgo at The Utility Expo, held last September in Louisville, Kentucky.

Xirgo Technologies LLC., recently acquired by Sensata Technologies, offers innovative wireless IoT communication devices for a wide range of applications across multiple markets including but not limited to vehicle telematics, fleet management, asset monitoring and control, usage-based insurance and cold chain.

As a part of the combined Sensata Insights business, Sensata | Xirgo's range of connected solutions improve operational efficiencies, reduce costs, unlock new revenue streams, and keep people and property safe and free from harm.

Sensata | Xirgo highlighted Cargo Monitoring, Tire Pressure Monitoring, Asset Monitoring and Control, Data Insight

Services, Vehicle Telematics, and Video Telematics solutions at the show.

"I am thrilled to debut our solutions at this tradeshow. We offer a broad portfolio of sensors, telematics, and asset tracking devices, as well as a vehicle-area network, cloud solutions, and valuable data insight services that help us build relationships with, and accelerate value creation for, potential customers and partners," said Shawn Aleman, vice president at Sensata | Xirgo.

Source: Sensata Technologies

STEALTH POWER LAUNCHES ELECTRIC POWER TAKE-OFF (EPTO) SOLUTION

Stealth Power recently announced the launch of its Stealth Electric Power Take-Off (ePTO) System. Timed with The Utility Expo, held last September in Louisville, Kentucky, Stealth Power's new product offering has wide-ranging implications for the utilities industry's bucket trucks.

By combining ePTO, together with idle mitigation capabilities, Stealth is able to offer the most compelling ePTO solution on the market. Stealth's new ePTO and its current product line of idle mitigation vehicle power systems and mobile power products enable companies to transition to a more cost effective, sustainable fleet.

"Stealth's ePTO replaces the need to run an engine to drive existing inefficient hydraulic power take-off systems," said Devin Scott, CEO, Stealth Power. "We are excited to offer this innovative and highly cost-effective solution for utilities across the country."

Battery-stored clean energy powers the Stealth solution, effectively cutting costs, maintenance needs and environmental impact by an impressive margin. Stealth's ePTO system will vastly improve the efficiency of the vehicle, eliminate unnecessary idle time, save on fuel, and reduce engine and transmission maintenance.

Source: Stealth Power

JLG® TO EXPAND PRODUCT LINE WITH INTRODUCTION OF ROTARY TELEHANDLERS

JLG Industries, Inc., an Oshkosh Corporation company, recently announced the expansion of its product portfolio with the introduction of a new generation of rotary telehandlers. For this new range of products, JLG chose to partner with Dieci, a manufacturer with more than 20-years of rotating telehandler experience, who is

recognized for its market leadership, innovation and technological advancements.

The new JLG® rotating telehandler line will offer premium performance and will initially consist of 3 models, the JLG R1370, R1385 and R11100 with max lift heights from 20.5 m to 29.5 m and max lift capacities of 5,000 kg to 6,000 kg. The line will provide operators with optimal comfort, increased functionality, and premium performance, redefining productivity while

reducing congestion on the jobsite.

"JLG is delighted to partner with a like-minded innovator like Dieci to develop its line of rotating telehandlers for North America," said Rogerio dos Santos, vice president of engineering for telehandlers at JLG. "With industry-leading design engineers around the globe collaborating on this effort, the resulting product line is expected to exceed both the quality and performance standards customers have

REVERSIBLE SNOW PLOWS WITH TRIPPING EDGE

HEAVY DUTY MODEL "HD"

PUSHER BLADES

SIDE WINGS

- TRUCK
- WHEEL LOADER
- GRADER

BUCKETS FOR FRONT END LOADERS & EXCAVATORS

QUICK ATTACH FOR FRONT END LOADERS & EXCAVATORS

FORKS FOR FRONT END LOADERS & TOOL CARRIERS

INTERNET : www.edfltd.com • E-MAIL : info@edfltd.com

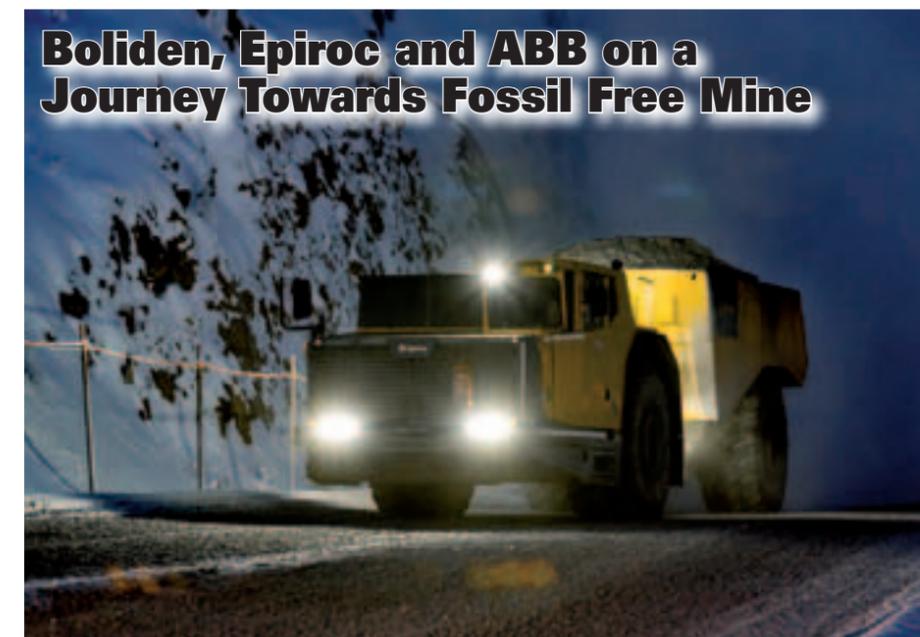


EDF
EQUIPMENT FOR HEAVY MACHINERY

1-888-649-3331
(514) 866-6859
(450) 649-9461
Fax: (450) 649-1874

1735 Lavoisier, Sainte-Julie (Quebec) J3E 1Y6

CALL US!
TOLL FREE NUMBER **1-888-649-EDF-1**



Boliden, Epiroc and ABB on a Journey Towards Fossil Free Mine

The 3 companies recently entered a joint collaboration to develop an electric trolley truck system for underground mining. With this, Boliden, Epiroc and ABB take yet another step on Boliden's journey towards fossil-free mining.

The partners will develop and demonstrate an electric trolley truck system on a test track in the Kristineberg mine, in Sweden. The electric trolley truck system is a vital component in enabling heavy transportation with electric driven battery vehicles.

This development project will lower CO2 emissions, improve work environment and contribute to Boliden's vision to be the most climate-friendly and respected metal provider in the world. All 3 partners have clear corporate goals that support more sustainable operations, aiming to help mines improve sustainable production and meet growing metal demand across the world.

The electric trolley assist concept is highly suitable for long haul ramps and builds on Epiroc's proven Minetruck MT42 Battery. Battery-electric vehicles improve operator health and safety, reduces CO2 emissions and lowers total operating costs. The zero-emissions mine truck will be joined by a trolley pantograph, which in turn is connected to an overhead contact power line. ABB's contribution includes design of electric trolley truck systems, definition of standards and vehicle interface, as well as rectifier substation for the test track. The electrical infrastructure is part of the ABB Ability™ eMine portfolio of integrated portfolio of electrification and digital systems designed to accelerate the decarbonization of the mining sector.

This project is supported by funding from the Swedish innovation agency Vinnova.

Boliden targets full scale electric trolley system implementation in the Rävliiden mine, a satellite orebody and extension of the Kristineberg mine, in northern Sweden.

Source: Epiroc Underground division

come to expect from both companies.”

Rotating telehandlers have long been popular in Europe, where city streets are often narrow and curve through tightly packed buildings. With a drive towards urbanization in North America and less open space as a result, rotating telehandlers are becoming more sought after to complete work in situations where a telehandler must be stationed in one place without frequent movement.

“Traditional telehandlers can lift and extend loads directly in front of them, whereas rotating handlers can lift, extend and swing 360°, adding a new layer of functionality during operation. In some applications, rotary telehandlers can even

be used in place of 3 individual machines – a traditional telehandler for telescoping, a MEWP for use of a platform and as an off-road crane to handle suspended loads,” continued Mr. dos Santos.

JLG rotating telehandlers are being designed to meet the needs of the masonry, roofing, demolition, cladding, renovation and tunnelling industries. They are best suited for use in loading and unloading and for transporting and/or distributing loads on flat, firm surfaces and uneven terrain.

“The partnership between Dieci and JLG to build rotary telehandlers marks the coming together of 2 global market leaders in the telehandler space,” said

Correggi, CEO of Dieci. “We are proud of our manufacturing history and success in Europe with this product and pleased to partner with a company of JLG’s caliber to bring it to North American customers.”

The new line of JLG rotary telehandlers will be available with 13 attachments at launch for added versatility.

The 3 new JLG rotary telehandler models will be available to order Fall 2021 with shipment to customers beginning in early 2022.

Source: JLG Industries, Inc.

STANLEY BLACK & DECKER TO ACQUIRE REMAINING 80% STAKE IN MTD HOLDINGS

Stanley Black & Decker recently announced that it has agreed to acquire the remaining 80% ownership stake in MTD Holdings Inc., a privately-held global manufacturer of outdoor power equipment for US\$1.6 billion (\$2.0 billion) in cash. Stanley Black & Decker acquired a 20% stake in MTD in 2019.

With over \$2.5 billion of revenue in the last 12 months, MTD designs, manufactures and distributes lawn tractors, zero turn mowers, walk behind mowers, snow blowers, residential robotic mowers, handheld outdoor power equipment and garden tools for both residential and professional consumers under wellknown brands like Cub Cadet® and Troy-Bilt®. MTD has state-of-the-art manufacturing facilities in North America and Europe, and a global distribution network.

The acquisition, which is subject to regulatory approvals and customary closing conditions, is expected to close in 2021 and will be funded with a combination of cash on hand and proceeds from debt incurrence, which is expected to include support by new credit facilities.

Source: Stanley Black & Decker

THE COHESIVE COMPANIES EXPAND IN TRANSPORTATION INFRASTRUCTURE

The Cohesive Companies, a wholly-owned but independently operated digital integrator business unit of Bentley Systems, Incorporated recently announced its acquisition of OXplus, a rail asset management specialist headquartered in Veghel, Netherlands. The acquisition coincides

Braden Bolt-On Utility Winch Bumpers Save Time and Money on Installation



Braden recently introduced new direct bolt-on utility winch bumper options for PAC-CAR New Medium-Duty Trucks as part of its popular UBX20 and PD18 Utility Bumper and Planetary Recovery Winch Systems. Available now for Kenworth and Peterbilt Aero and Vocational models, the patented designs allow the bumpers to be attached directly to the chassis frame for hassle-free installation.

The newest additions to the UBX20 and PD18 replacement bumper lines for utility fleet applications feature mounting bolt patterns matched specifically to the new Kenworth T480, T380, T280, T180 and Peterbilt 548, 537, 536, 535 models for the Class 5-7 segments. That means there is no need for custom mounting brackets or welding, which saves on time and cost of installation. Both bumper systems are engineered to deliver proven Braden strength and performance with maximum winch line pull ratings of 9,072 kg.

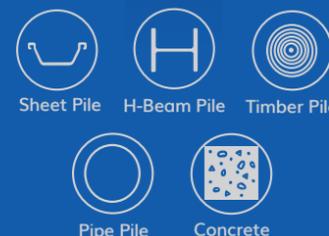
The UBX20 utility bumper is available with TR20 and PD18 Planetary Recovery Winch models. Featuring a lighter and more aerodynamic design, the UBX20 has a reinforced steel frame with 2 tow-eyes for maximum pulling capabilities. An optional provision for the installation of a collision mitigation system is available to assist safe driving. The bumper accommodates a capstan to easily pull lighter loads at faster speeds and features a 60% larger toolbox lid for more accessible storage.

The PD18 utility bumper is built for no-nonsense performance. Like the UBX20, it is designed in compliance with SAE J706 and will accommodate the PD18 Planetary Recovery Winch.

Source: PACCAR Winch Inc.



OPTIMUM Performance!



Piling Hammer	DH-15	DH-25	DH-35	DH-45
Impact Energy	0-11,000 ft-lb	0-18,000 ft-lb	0-25,800 ft-lb	0-33,200 ft-lb



Hercules Machinery Corporation, Manufacturer & Supplier of Foundational Equipment.

Call Toll Free // 800.348.1890
HMC-US.COM

with the appointment of Dr. Mark Bew MBE as CEO of The Cohesive Companies. OXplus becomes the 6th brand to enter The Cohesive Companies fold in support of its mission to deliver the strongest social, economic, and environmental outcomes for infrastructure clients and their constituents.

OXplus supports rail owners, operators, and maintainers, and rolling stock manufacturers around the globe with digital tools and solutions that give them a deep insight into the performance of their assets. It builds smart systems, and delivers standout client experiences, that use IoT data to effectively predict when repair or intervention is needed, that prevent downtime, that reduce operational costs, and that enable efficient scheduling of assets. The acquisition of OXplus, founded in 2010, will accelerate The Cohesive Companies' expansion of its Enterprise Asset Management presence within Europe and elsewhere. For instance, OXplus has recently supported the prestigious Riyadh Metro project, the largest single-phase metro project underway globally, and is

also supporting Siemens Mobility to efficiently execute the maintenance of Riyadh Metro's new train fleet.

Source: Bentley Systems, Incorporated

MCCORMICK SYSTEMS RELEASES VERSION 15.0 OF ITS ESTIMATING SOFTWARE

McCormick Systems recently announced the release of Version 15.0 of their estimating software for the electrical, plumbing and mechanical industries.

McCormick Version 15.0 features new change order management, an executive dashboard and an enhanced integration with FOUNDATION[®] accounting software.

"McCormick Version 15.0 will help clients get estimating jobs done quicker and more efficiently. With the new change order management and updates to our other features, our estimating software is stronger than ever," said Paul Wheaton, vice president of sales for McCormick.

Updates to the change order management feature include the ability to create automatic proposals when entering change orders, the option to easily total all job and man-hours and an overall more organized

view. Users will also be able to view all change orders for all jobs on a single screen.

"The updated change order management feature was designed specifically with our clients in mind. It makes it easier to manage multiple jobs, create proposals and keep your projects on track," explained Mr. Wheaton.

McCormick Version 15.0 also features an enhanced executive dashboard that allows users to easily organize their most pertinent data. With completely customizable job screens, users can view job data in the way that is most efficient to them – whether that is in a graph, table, list or chart.

Additional features of McCormick Version 15.0 include a new overlay feature in Design Estimating Pro, that allows users to layer multiple drawings at one time and enhancements to both the auto-count and the patented Auto Home Run features.

Source: Foundation Software, LLC

EPIROC WINS LARGE EQUIPMENT ORDER FOR GREENFIELD MINE

Epiroc has won a large order for surface mining equipment from IAMGOLD Corp. in Canada that will optimize safety and productivity through advanced automation. The machines will be used in production at a greenfield gold mine currently under construction.

IAMGOLD has ordered several Pit Viper 231 and SmartROC D65 drill rigs for use at Côté Gold, located between Sudbury and Timmins in northeastern Ontario, an open pit gold mine that is currently under construction and expected to start production in the 2nd half of 2023. The Pit Vipers will be fully autonomous. The SmartROC D65 rigs are prepared for remote operation.

The order is valued at approximately \$18 million and was booked in the Q3 2021.

"IAMGOLD, a returning Epiroc customer, is taking safety, sustainability and productivity extremely seriously," said Helena Hedblom, Epiroc's president and CEO. "As IAMGOLD is preparing a new exciting mine project, we are proud to contribute to their success with our advanced machines and solutions for autonomous operation."

The Pit Viper 231 and SmartROC D65 surface drill rigs are built to face the toughest conditions while optimizing productivity, safety and fuel efficiency. Advanced

features include Epiroc's telematics system Certiq, which allows for automated and intelligent monitoring of productivity and machine performance.

Source: Epiroc

KENWORTH LAUNCHES EV TECHNICIAN TRAINING AND CERTIFICATION PROGRAM

Kenworth recently launched a comprehensive EV technician training and certification program as part of its efforts to prepare Kenworth dealerships to service electric vehicles in the U.S. and Canada.

"It's vitally important to support Kenworth's Driving To Zero Emissions™ endeavor to bring battery electric vehicles into the marketplace by ensuring that we help provide in-depth training and a certification path for service technicians at Kenworth dealerships," said Jim Walenczak, Kenworth assistant general manager for sales and marketing.

To attain initial EV certification, Kenworth technicians must successfully complete a challenging 7-course curriculum on service systems, electrical principles, electrical systems II, cab and chassis electronics, electric vehicles systems, and advanced electric diagnostics. Course length runs from 2 to 4 days. The Kenworth program offers a variety of classroom and virtual training.

Kenworth's Driving To Zero Emissions™ product line features the Kenworth T680E (Class 8), K370E (Class 7) and K270E (Class 6) battery electric vehicles.

Designed for pickup and delivery, regional haul and drayage applications, the T680E is available as a day cab as either a tractor or straight truck in a 6x4 axle configuration. The zero emissions vehicle has an estimated operating range of 240 km, depending on application.

The K270E and K370E battery electric vehicles have a range of up to 160 km and 320 km, respectively. Both models utilize a DC fast-charging system capable of fast recharge in as quick as one hour, which makes the Kenworth K270E and K370E cabovers ideal for local pickup and delivery, as well as short regional haul operations. End-of-shift and overnight AC charging is also offered.

In addition, the zero emissions Kenworth T680 fuel cell electric vehicle (FCEV) model powered by hydrogen is part of a demonstration test project in Southern California.

Source: Kenworth Truck Company



Franna[®] recently unveiled the Franna Minemaster range, a series of pick and carry cranes with lift capacities ranging from 15 t to 40 t that come fully equipped and ready to work in mining applications.

The Franna Minemaster range has been specifically designed to meet the vigorous safety requirements and complex operating environment of the modern day mine site. Each individual crane can be customized to meet local requirements, with an extensive list of mine spec options available for customers to choose from.

"Franna has been supplying the global mining industry with robust lifting solutions for over 40 years, working alongside a number of leading contractors such as Rio Tinto, BHP & Glencore," explained Danny Black, general manager at Franna. "In line with our growing export sales, we have developed this range to meet the needs of the markets and industries we serve. Whilst mining has always been at the forefront of the Franna business, many of our international customers are not fully aware of the numerous mine specs that we can offer. As well as helping to educate the marketplace, our Franna Minemaster range provides mining contractors with heavy-duty lifting solutions that are tailored to their needs and do not compromise on safety or performance."

Franna cranes have a proven ability of operating safely on the challenging terrains that are commonly associated with mining (for example, poor underfoot conditions). The robust design and superior operating benefits allow them to thrive in both open pit and underground mining conditions. "Indonesian mining companies have been using Franna cranes in coal and hard rock mines to support underground, open pit, workshop, port and blasting operations for many years. Frannas are the most utilized support equipment assets on the mine site," said James Hoyt, director at PT Berlian Cranserco Indonesia. "The Franna product line is sold and supported internationally through an extensive dealer network, ensuring that customers receive specialized aftermarket support on a local basis. Franna cranes working in the Indonesian mining industry are supported by Cranserco with parts, service, training, technical support and sales."

Franna cranes require no outriggers, which allows the operator to set up and start working almost immediately. The compact footprint and unique design of each machine provides unrivalled access to tunnels and other areas of limited space on the mine site. From lifting and laying pipes to changing out engines, it is easy to see why Franna cranes are a popular choice for mining contractors.

Source: Terex Corporation

METAL PLESS

LIVEBOXXX

The LiveBoxx pusher can be installed on a skid steer, compact loader, backhoe or wheel loader.

metalpless.TV
metalpless.com

WE ARE READY TO DELIVER!
Be ready for this winter and order your snowplow. Metal Pless has taken the lead and we have a large inventory available but, they are moving fast! Don't delay!

Hiab Increases Truck-Mounted Forklift Manufacturing Capacity

Hiab, part of Cargotec, has received 3 large orders for a combined value of €12.9 million (\$18.5 million) for Moffett truck-mounted forklifts and HIAB loader cranes in the U.S.

Two nationwide builders' supply companies placed separate orders for Moffett truck-mounted forklifts and heavy range HIAB loader cranes.

In addition, a liquefied gas distributor has placed an order for HIAB X-HiDuo 072 and HIAB X-HiDuo 082 loader cranes from the light range. The cranes offer great performance, flexibility and high levels of safety in a light crane body.

"Bulky and hazardous but essential energy items alike can be delivered safely and efficiently with Hiab's equipment. We are very pleased that some of the largest

names in their industries have put their faith in Hiab to deliver on their promises to their customers," said Jani Koskinen, senior manager Strategic Accounts, Hiab.

To meet demand for truck-mounted forklifts, Hiab will expand manufacturing to the U.S. Simultaneously the production capacity in Dundalk, Ireland, is being increased and a new multi-assembly unit planned. The second Hiab production facility for truck-mounted forklifts will be established in Streetsboro, Ohio, where Waitco liftgates are manufactured.

"With the increased demand for our truck-mounted forklift products in the



U.S., we are extremely excited to start manufacturing here in Ohio. This will allow us to provide reduced lead times to our customers, additional capacity for growth, and reduce CO2 emissions associated with transportation," said James Oreck, vice president Sales & Services, North America, Hiab.

Source: Cargotec Corporation

John Deere Invests in Renewable Fuel Technology

John Deere recently announced it has made an equity investment in ClearFlame Engine Technologies, a start-up dedicated to the development of clean engine technology. ClearFlame's solution enables low-carbon fuels like ethanol to be easily integrated into compression ignition engines, offering a more sustainable solution without compromising engine performance.

John Deere's investment is in line with its strategic vision to accelerate and lead the industry in low and zero carbon powertrain technology. John Deere will also

supply an engine to use in conceptual testing, which will help validate the technology currently under development.

Using ethanol in place of petroleum diesel fuel in diesel engines significantly reduces carbon emissions and air quality emissions. In addition, ethanol is widely available and can offer a high-efficiency, liquid alternative fuel option.

John Deere understands the importance for renewable fuel options and is committed to exploring new solutions.

"Compression ignition engines have a long life ahead — in terms of both the cur-

rent source of diesel and a wide variety of alternative fuel types," said Pierre Guyot, senior vice president, John Deere Power Systems. "John Deere already offers biomass-based diesel compatibility on our engines. These investments are the right thing to do for environmental, economic and rural-development benefits."

Investments like this one are a critical component of John Deere's vision to integrate smart and sustainable technology innovations with its legacy of manufacturing excellence.

Source: Deere & Company

JCB Hydrogen Engine Gets £100 Million Injection

JCB is investing £100 million (\$169 million) on a project to produce super-efficient hydrogen engines, the company announced recently.

A team of 100 engineers is already working on the exciting development with the recruitment of up to 50 more engineers under way as JCB targets the end of 2022 for the first machines to be available for sale to customers.

The wraps have already come off a prototype hydrogen-powered JCB backhoe loader and a Loadall telescopic handler.

JCB's hydrogen technology was also on show in the Green Zone at COP26 in Glasgow as world leaders debated measures to drastically reduce greenhouse emissions. JCB's emergence as a leader in zero-emission hydrogen technology comes as governments around the world unveil strategies to develop the infrastructure needed to support the use of hydrogen to drive down CO2 emissions.

"Our sort of machinery will need to be

powered by something other than fossil fuels. We make machines which are powered by diesel so we have to find a solution and we are doing something about it now," said JCB chairman Lord Bamford. "We are investing in hydrogen as we don't see electric being the all-round solution, particularly not for our industry because it can only be used to power smaller machines. It does mean we will carry on making engines, but they will be super-efficient, affordable, high-tech hydrogen motors with zero CO2 emissions, which can be brought to market quickly using our existing supply base. These will be our industry's first hydrogen engines.

JCB has manufactured engines since



2004, producing them at plants in Derbyshire, UK, and in Delhi, India. This year JCB will celebrate a major milestone: the production of its 750,000th engine.

Source: JCB

Epiroc Launches New Reman Center in Sudbury

As mining operations strive for longevity, the availability of reliable components is essential for equipment to meet, and surpass, expectations on site. If this goal can be achieved while also offering significant cost savings and a remanufactured component with a new lease on life — even better.

This approach to maximizing a component's lifecycle potential is the inspiration behind Epiroc's newest state-of-the-art Reman Center, which now calls the mining hub of Sudbury, Ontario, its home.

With similar Epiroc Reman facilities opening their doors across the globe, this Reman Center is a modern addition to the program, which manages the process of recycling components to the newest and latest specifications. This global program guarantees availability of components and offers an industry-leading warranty to give customers added confidence in their component's performance capabilities on site.

The Reman Program is designed to have a high level of interaction with customers and their machine operating fleet. It is a

commitment to work together and achieve operational excellence through collaboration. By working closely with customers and utilizing forecasting tools, the Reman

Program takes a predictive approach and ensures components are accessible so they can meet the needs of each mine; the global supply chain keeps equipment flowing to customer sites right as they need it, ready to perform.

The highly-trained on-site technicians routinely utilize modern testing equipment to ensure no fault goes unchecked and the component is remanufactured to its fullest potential. Since the testing methods

are the foundation of a successful rebuild, the Epiroc-designed test bench uses engineered program tests to confirm the product quality is able to meet or surpass the strictest of standards. Managing the cores is a key element of the program and utilizing Core Notification Management Systems ensure this part of the process flows seamlessly.

Source: Epiroc Parts & Services division



THE MULTI-PURPOSE SWEEPER

MAKE YOUR SWEEPER WORK ALL YEAR ROUND!

Contact us today to find your local Canadian dealer!

443 852 1842 info@multihog.com www.multihog.com



CASE Launches the TV620B Compact Track Loader

CASE CE recently introduced the TV620B compact track loader (CTL), the largest and most powerful ever built. The 114-hp machine has a rated operating capacity of 2,812 kg. It comes standard with adjustable electro-hydraulic controls, high-flow hydraulics, auto ride control, one-way self-leveling, a hydraulic coupler, an auto-reversing fan, LED lights and a one-year subscription to CASE SiteWatch telematics. It also comes with a new 0.95 m³ heavy-duty bucket designed specifically for the TV620B.

The TV620B also features the advances introduced with the launch of the CASE B Series CTLs, including a completely redesigned operator interface, industry-leading 360° visibility, and an 8" display that serves as the command center for the machine. It also includes the industry's only rearview camera visible in a split screen display with machine data.

Ground performance and machine strength is further supported by a new



heavy-duty undercarriage and heavy-duty rubber tracks that allow for minimal ground disturbance and enhanced performance on improved surfaces.

The TV620B is specifically designed for use with other heavy-duty attachments such as mulching heads, cold planers and the all-new CASE grading blade. CASE will be releasing additional heavy-duty attachments designed specifically for use with the TV620B, and has enhanced the

hydraulic cooling capacity of the machine to support use of such heavy-duty, high-capacity attachments.

The CASE TV620B meets emissions regulations with a combination of cooled exhaust gas recirculation (CEGR), diesel oxidation catalyst (DOC) and selective catalytic reduction (SCR) technologies – it features no diesel particulate filter (DPF) and requires no regeneration.

Source: CASE Construction Equipment

LiuGong North America Expands its Mini-Excavator Line-Up

LiuGong North America recently announced its 9027F ZTS, a true zero tail-swing 2.5 t class mini excavator to its North America lineup. It is designed to meet and exceed North American market's tough design specifications. Its compact dimensions and versatility give operators multiple transportation and application benefits.

The versatility of the 9027F ZTS is more than just its compact size and ability to be transported in a pickup bed or on a light trailer. This unit is a powerful machine that supports a variety of attachments and consumer-requested aftermarket add-ons.

"We are pleased to announce the expansion of our mini-class excavator line," said Christopher Saucedo, vice president and general manager, LiuGong North America. "Like all of our machines, the 9027F ZTS's value-adding features come standard and are not classified as premium options that add cost to the base price of the unit. Features like a Tier 4 final Yanmar engine



rated at 20.4 hp, inline hydraulic pumps and main control valve make the 9027F ZTS a truly versatile machine."

The 9027F ZTS enables operators to dig parallel to the dozer blade, especially advantageous for operations close to walls and backfilling. The 9027F ZTS's applications range from digging and trenching for

residential and commercial construction to landscaping applications like grading, trenching and fencing. With a competitive operating weight and its lifting and digging abilities, the 9027F ZTS is also ideal for rental and utility applications.

Source: LiuGong North America

Cat® Mini Excavators Offer Class-Size Industry-First Features

Boosting operating efficiency, servicing ease and operator comfort, the new Cat® 302.7 CR, 303 CR and 303.5 CR hydraulic mini excavators introduce industry-first features for the 2.7- to 3.5-t class machines. Built on the Next Generation platform that offers a consistent operator experience through the 1.5- to 10-t range, each new model features exclusive stick steer, cruise control, operator adjustable settings, and tilt-up canopy or cab as standard.

Expanded use of common parts throughout the line plus their damage-resistant exterior construction help to reduce parts inventory investment and lower repair costs. Daily maintenance checks are quickly made from ground level through side doors, while the tilt-up cab design offers unmatched access to components for servicing. Increased service intervals mean these excavators spend more time on the job and less time in the workshop. Combined, these features lower total ownership costs up to 5% compared to previous models.



At the same time, design enhancements for the new 302.7 CR, 303 CR and 303.5 CR deliver up to 10% more performance in travel and trenching. Hydraulic system upgrades improve lifting performance and cycle times, while customizable operator settings improve efficiency.

An industry-exclusive Cat Stick Steer System simplifies machine control, and, at the touch of a button, the operator switches from conventional lever/foot-pedal steering controls to low-effort joystick operation. Two travel ranges with speeds

reaching 4.5 km/h help to facilitate moving around the jobsite, and standard cruise control minimizes operator interaction when traveling longer distances between work locations.

The new excavators offer the choice between canopy or cab enclosure. The sealed and pressurized cab offers a clean and quiet environment for the operator and can be equipped with heating and/or air conditioning for all-weather climate control.

Source: Caterpillar

Arrive safe and on time.

Onspot provides extra starting and stopping traction in slippery conditions. With Onspot you can reduce the risk of sliding or getting stuck simply by flipping a switch.



ONSPOT
AUTOMATIC TIRE CHAINS

Member of VBG Group

www.onspot.com



UNMATCHED PERFORMANCE

5 GOOD REASONS TO CHOOSE LARUE

- ✓ High efficiency with great capacity
- ✓ Smart design focused on operators safety and comfort
- ✓ Lower operating cost due to superior engineering
- ✓ Ease of maintenance with quick access to key components
- ✓ Largest selection of models for all loader makes and sizes

QUEBEC MONTREAL MONCTON

1-877-658-3013

JALARUE.COM

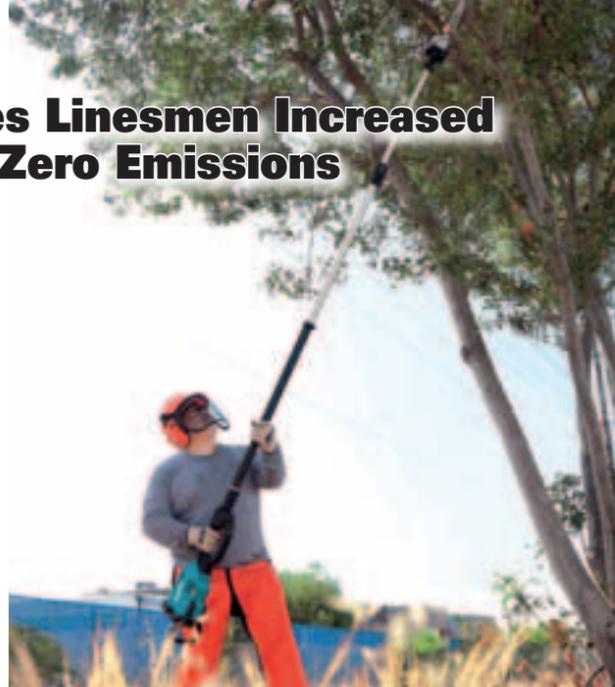
Makita Cordless Technology Gives Linesmen Increased Efficiency with Lower Noise and Zero Emissions

Makita® presented more cordless solutions for linesmen and utility installers at The Utility Expo, held last September in Louisville, Kentucky. The company offers solutions for every phase of utilities construction and maintenance, from power generation and transmission to distribution and metering. It is backed up by over 40 years of engineering and innovation in cordless.

“Utility professionals are seeking top performance, superior comfort and ergonomics, and the convenience of a single battery platform,” said Wayne Hart, senior communications manager, Makita U.S.A., Inc. “Makita has it covered with cordless solutions for drilling and fastening, metal and wood cutting, concrete drilling, vegetation management, jobsite lighting, and more. Makita® Cordless Solutions can empower linesmen and utility installers to work with increased efficiency, lower noise, and zero emissions.”

Vegetation management is a key part of utility equipment installation and maintenance. Makita has it covered with the world’s largest professional cordless outdoor power equipment system powered by 18 V batteries. The new telescoping pole saw is a recent addition, and is ideal for clearing vegetation around utility equipment.

Makita has a deep lineup of impact drivers and impact wrenches that deliver top speed and fastening torque, with added protections for work in live utility environments. The company also has a range of cordless drilling and cutting solutions for wood, metal, and concrete. Makita recently released 2 new right angle drills and a



compact brushless band saw that are ideal for utility applications.

Makita also recently launched a new website that highlights the full range of products engineered for use in every phase of utilities construction and maintenance.

Source: Makita U.S.A., Inc.

The Forestry Mulcher with Bite Limiter Technology

FAE is expanding its line of forestry mulchers for excavators with Bite Limiter technology with the launch of the new BL5/EX/VT. This new head is perfect for handling and removing vegetation in wooded areas, especially for jobs that require a large shredding capacity and speed.

The BL5/EX/VT, which can mulch logs up to 40 cm in diameter, works with 24-36 t excavators, and has a working width of 160 cm.

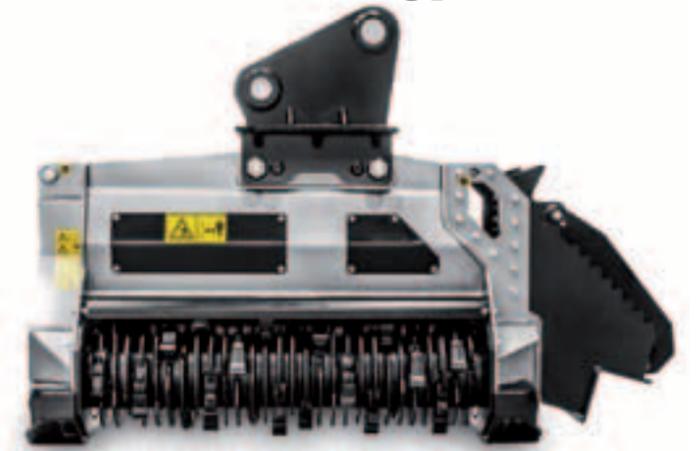
The BL5/EX/VT’s best feature is the rotor with Bite Limiter technology. It has special wear-resistant steel profiles that limit the teeth’s reach. This cuts down on power demand and promotes a consistent working speed, for excellent performance when mulching any kind of wood. Bite Limiter technology also minimizes rotor stalling and optimizes fuel consumption.

The BL5/EX/VT has a Variable Torque (VT) motor for noticeably better performance. It increases torque when needed to minimize rotor stalling.

The sturdy steel frame is built to last, just like all FAE products, and the BL5/EX/VT’s Poly Chain belt drive provides optimal power transfer and reliability.

The BL5/EX/VT can be equipped with the Sonic system – available only from FAE – which keeps the operating machine and the FAE mulcher perfectly aligned by automatically calibrating the mulcher. The system continuously manages the mulcher’s hydraulic settings as well, for a boost in overall productivity of up to 30%.

The Sonic system also minimizes rotor stalling and shortens recovery time thanks to quick recovery of rotor rpm. This head



can also be equipped with a hydraulic thumb to make it easier to handle the material on the ground.

The addition of the BL5/EX/VT completes FAE’s line of forestry mulchers for excavators with Bite Limiter technology, which now goes from 4 t, with the BL1/EX, to 36 t, with its newest machine.

Source: FAE Group

**ALL-SEASON
ROAD MAINTENANCE
MACHINERY**

**ÉQUIPEMENT POUR
L'ENTRETIEN DES ROUTES
ÉTÉ COMME HIVER**

Mross Import Service Ltd.
25450 80th Avenue, Langley, BC V1M 3M9
Phone: (604) 888-6228
unimogcanada.com

DEALERS WANTED / REVENDEURS RECHERCHÉS

EDDYNET EDDYNETINC.COM • 1-866-444-2802

FORESTRY
BRUSH CUTTERS

FAE the benchmark in forestry mulchers also offers a complete new series of forestry brush cutters.

819 336-4805 | gbequipment.ca
sales@gbequipment.ca

Contact us to know which series best suits your needs.

bauma Innovation Award 2022 - Be Part of It!

New categories bring a breath of fresh air to the competition and call for entries with forward-looking technology for the construction industry to compete for one of the first places. The bauma Innovation Award ceremony ring in the trade fair week from October 24-30, 2022.

The period for entries has already started on May 3rd, 2021 and ends on May 3rd, 2022. All necessary information on the conditions of participation can be found at www.bauma-innovationspreis.de.

Candidates can submit their documents via a form in the web portal. To do justice to technical progress and social as well as political developments, the responsible members in the task force have revised the categories. They are:

- Category 1 Climate protection
- Category 2 Digitalization
- Category 3 Mechanical engineering
- Category 4 Building
- Category 5 Research



VDMA Construction and VDMA Mining, together with Messe München and the leading associations of the German construction industry HDB, ZDB and bbs, are conducting the multi-stage competition process and are hosting the awards ceremony at the Munich Residence.

The VDMA represents around 3,300 German and European mechanical and plant engineering companies. The industry stands for innovation, export orientation,

medium-sized businesses and employs around 4 million people in Europe, more than 1 million of them in Germany alone.

In terms of exhibition space, Bauma is both the largest trade fair in the industry and the biggest trade show in the world. It generally attracts over 3,000 exhibitors from over 50 countries and over 500,000 visitors from over 200 countries on an exhibition space of over 600,000 m².

Source: Messe München

VMAC Puts the "Air" in Lincoln's Air Vantage®

Lincoln Electric's Air Vantage® system is a critical piece of equipment for many operators in tough terrain, offering a welder, generator and air compressor. But the Air Vantage would not exist without VMAC, a mobile air manufacturer that provides compact yet powerful air compressor technology.

"Lincoln Electric and VMAC have successfully worked together for the past 20 years," said Nicholas Winarski, Lincoln Electric's product manager – Industrial Engine Drives. "VMAC is our top choice air compressor manufacturer for our Air Vantage models due to their high-quality air compressors and dedicated engineering support."

The first Air Vantage model, the "Air Vantage 500", was launched in early 2004. It included VMAC's S700033 spline drive rotary screw air compressor, and it was the only welder generator air compressor of its kind at the time.

The Air Vantage 500 was an undeni-

able success, but only the start of Lincoln Electric and VMAC's partnership. VMAC redesigned and adjusted its air compressor for the Air Vantage product line several times over the course of their relationship.

"VMAC has developed 5 complete air compressor systems for Lincoln Electric over the past 2 decades," said Rick Duifhuis, OEM division manager at VMAC. "Our team is always willing to do what it takes to serve our partners and ensure they have the air power they need to succeed."

"VMAC and Lincoln Electric have seen great success with our collaborations, which have resulted in several powerful systems. We are proud of our 20-year relationship and hope to continue to work with Lincoln Electric in the decades



that follow," said Mr. Duifhuis.

Source: VMAC Global Technology Inc.

CROPAC EQUIPMENT INC.



CRANES
FOKLIFFS
SHORT TRUCKS
TELEHANDLERS

WWW.CROPAC.COM 1800-4-CROPAC



LOGISTEC USA Orders Mobile Harbor Cranes to Reduce Carbon Footprint

LOGISTEC USA Inc. has ordered 2 new Generation 6 Konecranes Gottwald Mobile Harbor Cranes for their terminal at the Port of Manatee in Tampa Bay, Florida.

LOGISTEC operates 80 terminals in 54 ports across North America. The company handles all kinds of cargo, and their terminal at the Port of Manatee deals mostly with containers, pallets, steel and break-bulk. In the light of their continued commitment to the port, they are anticipating increasing levels of container traffic.

"With the arrival of our new electric drive cranes from Konecranes, we will be serving our customers in an eco-friendly way. These new additions to our fleet of cargo handling equipment are well aligned

with our focus on reducing our marine carbon footprint in support of our Green Marine initiatives. This is great news for our customers, our community and the environment in Port Manatee," said Rodney Corrigan, president of LOGISTEC USA Inc.

The Konecranes Gottwald ESP.7 Mobile Harbor Cranes have a working radius of up to 51 m and a lifting capacity of 125 t. They are the natural successors of the Generation 5 cranes already on-site. They feature a higher tower cab for a better view of the vessels in port and stronger lifting capacity curves for improved handling performance and a higher classification, which doubles their service life in container handling operations. Their on-board drive follows the strict EPA Tier 4 final standards. It is a smart hybrid drive combining a diesel engine with optimized fuel consumption and an ultracapacitor. This allows for both eco-efficient operation and peak performance when necessary.

A strong focus on customers and commitment to business growth and continu-



ous improvement make Konecranes a lifting industry leader. This is underpinned by investments in digitalization and technology, plus our work to make material flows more efficient with solutions that decarbonize the economy and advance circularity and safety.

Source: Konecranes



You can watch videos related to some of our featured stories on www.infrastructures.com

Watch for the  logo

“Quality by Design”, at The Rental Show

Genie showcased new equipment, along with tried-and-true products during The Rental Show, held in Las Vegas October 17-20, 2021. Genie also showcased its Lift Connect™ Telematics solution, including the new Access Manager add-on feature that allows equipment owners to remotely manage access to their fleet.

“For more than 55 years, Genie has delivered quality equipment and services to the lifting equipment rental market. I’m excited to be returning to The ARA Show so our customers can see, first-hand, the exciting products and accessories we’ve launched over the last year and a half. These new models are easier to maintain, reduce the total cost of ownership for equipment owners and, at the same time, improve productivity for the end user,” said Genie president, Simon Meester.

Three models in the Genie® GTH™ telehandler family (GTH-1056, GTH-5519, and GTH-844) feature new 74 hp DEF-free engine eliminates the need to add diesel



exhaust fluid (DEF), saving time and maintenance costs, and improving fuel efficiency without compromising jobsite performance. The GTH-1056 is available with a 3-speed powershift transmission or with continuously variable transmission (CVT). Engines are side-mounted for simpler service access, and commonality of parts across the GTH product line lowers total cost of ownership.

Genie’s boom lift family was represented by the S®-60 J telescopic boom, S-65 XC™

boom and the articulating Z®-45 FE hybrid model.

Genie E-Drive was showcased on 3 scissor lifts: GS™-1932 and 2 new micro scissors, the GS-1432m and GS-1932m. The ultra-efficient, fully-sealed, brushless AC electric drive system has 70% fewer hoses and fittings, reducing maintenance costs, and offers improved performance with 30% longer runtime per charge and real-world torque and traction.

Source: Terex Corporation

World’s First Operating License Renewals Now Available by VR Simulation

Serious Labs recently achieved another world first. After a rigorous review process, its Mobile Elevating Work Platform (MEWP) Virtual Reality (VR) Operator Training Simulator was approved by the International Powered Access Federation (IPAF) for renewals of its Powered Access License (PAL) Card. This is the first time that heavy equipment operators may renew their license by simulator, without even touching a physical machine.

IPAF has issued over 2 million PAL Cards worldwide, and its high-quality operator training is recognized in over 51 countries. PAL Cards typically need to be renewed every 5 years. Serious Labs’ VR simulator offers convenience, reliability and standardization to contractors and operators alike.

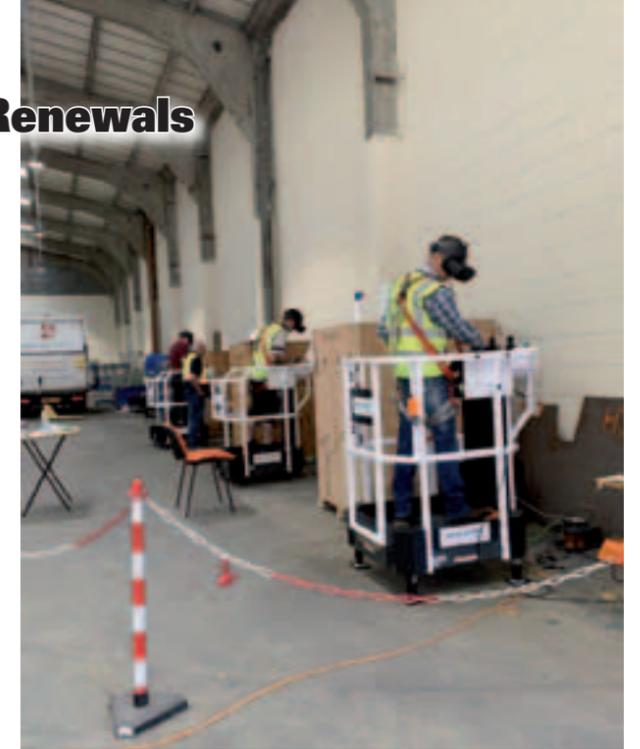
The simulated MEWP PAL card renewal tests existing PAL Card holders through a VR-based replica of the IPAF 3a/3b practical test. Two scenarios go through a pre-use

check on the machine, and a practical course, just as if the operator was on a machine in the real world. Created from the data and results of trials over the course of 8 months, the course uses an abridged theory session but the same practical session, based on ISO 18878 that is used in the standard 3a and 3b courses. The trial used experienced operators with a minimum 3 years’ experience who each held a valid PAL Card.

According to Serious Labs, a number of leading organizations and projects using access equipment – including Laing O’Rourke, Skanska, Sir Robert McAlpine, Keltbray, the HS2 rail project, and the Hinkley Point nuclear

power station – are fully supportive of using the VR simulator for renewing PAL Cards and were actively involved in the trials.

Source: Serious Labs



SUPER EQUIPMENT INC.

AUTHORIZED DEALER
PETTIBONE
FOR QUÉBEC & THE MARITIMES

Reynaldo Mascia, mobile 514-222-6157
rey@superequipment.com
Patrick Tremblay, mobile 514-237-6281
patrick@superequipment.com

- ✓ SALES & RENTAL SERVICES
- ✓ Used Material Handling Equipment
- ✓ **PETTIBONE** Telehandlers
- ✓ Easy Financing

881 Harwood Road, Vaudreuil-Dorion, QC J7V 8P2
Telephone: 855-301-2235 • www.superequipment.com

PRE-USE INSPECTION!

MAKE SURE THE MACHINE IS OPERATING PROPERLY BEFORE STARTING WORK

IPAF
THE WORLD AUTHORITY IN POWERED ACCESS
Download free posters at www.ipaf.org/andyaccess
Ref: A3-MH-1920-1118 ©-10-14-09

New Portable Vortex Edge Plus from CM Labs

CM Labs Simulations Inc. featured the newly released Vortex Edge Plus at The Utility Expo, held last September in Louisville, Kentucky. Thanks to its lightweight design, the new Vortex Edge Plus can be easily transported in carrying cases and set up in minutes. This makes it ideal for classroom or on-the-go training.

The Vortex Edge Plus runs CM Labs’ full fleet of earthmoving, lifting and forestry equipment training packs including the Excavator, Backhoe, Dozer, Wheel Loader, Motor Grader, Luffing Tower Crane, Flat-top Tower Crane, Mobile Crane, Crawler Crane, Forwarder and Harvester. Its ease of transport makes the Vortex Edge Plus an optimal hands-on tool for attracting talent at job fairs and career development events. It can also be used to quickly assess the skill level of new operators. Hardware includes a laptop, monitor, industrial-grade joysticks and pedals, as well as a steering wheel to support specific earthmoving equipment.

The Vortex Edge Plus runs on the same engineering-grade software that powers

CM Labs’ fully immersive Vortex Advantage simulators, used by training schools and fleet owners internationally. This means that all simulated machine components behave as they do in the real world, whether operators are digging a trench, delimiting a tree or catching a swing.

In addition, the Vortex Edge Plus can be paired with an optional Instructor Operating Station (IOS) for instructor-led training. With the IOS, instructors can control the training right from their seat and do everything from launching exercises and manipulating the weather, to injecting machine faults, providing hand signals as well as customizing scores and generating reports. The Vortex Edge Plus can also connect to other Vortex simulators, for



collaborative crew training. It complements classroom theory by simply making learning more engaging and efficient.

The affordability of the Edge series expands professional-grade simulation to contractors and training organizations that did not previously have access to these capabilities - providing solutions that help bridge the skills gap.

Source: CM Labs Simulations Inc.

The Squeaky Wheel Gets the (Biobased) Oil!

It is often true that “the squeaky wheel gets the oil”, both literally and figuratively. For example, a door that starts to squeak is naturally much more likely to get lubricated than one that is moving quietly on its hinges. In the past, this maintenance activity had to be done with a petroleum-based lubricant. Fortunately, in answer to today’s emphasis on greater environmental responsibility, Cortec® has made it possible to give the squeaky wheel the biobased oil in the form of EcoLine® ELP all-purpose lubricant. EcoLine® ELP is a high-performance biodegradable soy-based lubricant and penetrant for general purpose use. It is formulated from natural seed oils and select additives that offer lubricity and performance superior to conventional lubricants. Its excellent performance, biobased nature, and low environmental impact make EcoLine® ELP a highly desirable option for environmentally conscious industries or federal agencies and their contractors seeking to comply with mandatory federal purchasing guidelines of the USDA BioPreferred® Program.*

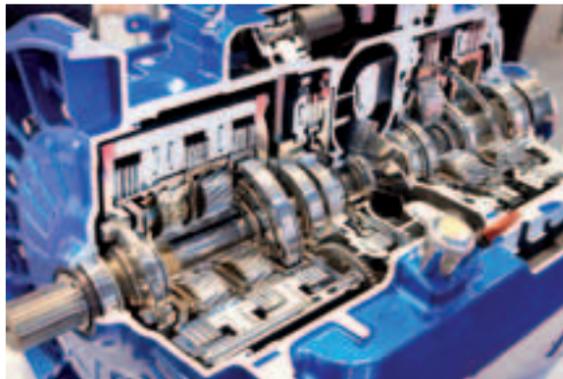
EcoLine® ELP contains 95% USDA certified biobased content, surpassing minimum biobased content requirements for products falling into the BioPreferred® category of multifunctional lubricants. When purchasing products in this category, federal agencies and their contractors are required to buy products with at least 88% biobased content, thus promoting the development and use of products made from renewable materials. In addition to being biobased, EcoLine® ELP is biodegradable, chlorine-free, and not toxic to plants – a much friendlier environmental prospect than petroleum-based products in case of the incidental leak or spill.**

EcoLine® ELP has shown good performance in laboratory testing compared with several name-brand petroleum-based lubricants.

When tested according to the ASTM D-3233 Falex Pin and Vee Block Test, which demonstrates the extreme pressure properties of lubricants, EcoLine® ELP was



able to hold up under a much heavier load than the other lubricants while avoiding scarring. Compared to WD-40® and CRC 3-36®, it was able to withstand nearly 4 times the load; compared to LPS 2®, it was able to withstand nearly 10 times the



load. Coefficient of friction for EcoLine® ELP was also significantly lower than the competition—as low as 1/8 that of LPS 2®.

When tested according to ASTM D-4172 Wear Preventive Characteristics of Lubricating Fluid (4-Ball Method), EcoLine® ELP showed a much smaller scar diameter than the 3 other products.

EcoLine® ELP and the 3 other products were tested by applying them to rusty nuts and bolts and leaving them to sit for 15 minutes. Then they were unscrewed, and the torque was measured. EcoLine® ELP fell into close range with the performance of the competition. Also, although corrosion protection is not the main purpose of EcoLine® ELP, parts treated with it passed more than 3,000 hours corrosion-free in 100% humidity at 50°C (ASTM D-1748), comparable to the competition.

There are many possible uses for EcoLine® ELP around the shop

or plant. Chain and gear systems need frequent lubrication and are often out in the open at risk for outdoor leaks and spills where a biodegradable product would be preferred. Nuts and bolts that need to be easily removed for equipment access and fans, wheels, and hinges are other common moving parts where biobased EcoLine® ELP can be introduced.

Source: Cortec® Corporation

LPS 2® is a registered trademark of Illinois Tool Works. WD-40® is a registered trademark of WD-40 Company. CRC® and 3-36® are registered trademarks of CRC Industries, Inc.

**For more information, go to <https://www.biopreferred.gov>.*

***It is always important to ensure that use and disposal of all materials is in accordance with local guidelines.*

+ ASTM D-4172 and ASTM D-3233 tests performed at Engineered Lubricants, Maryland Heights, Missouri



Western Star Introduces All-New 47X

Western Star recently introduced the all-new Western Star 47X. The truck complements the Western Star 49X to establish the Western Star X-Series and extend the platform’s reach into entirely new vocational applications.

With a standard 2,834 mm BBC, the 47X is well suited to regions or applications that require a shorter overall vehicle length and for those that need to meet local bridge law requirements, an optional 2,814 mm BBC. With the shorter hood and a wheel cut up to 50°, the 47X further optimizes maneuverability for work on construction sites or operation in congested urban environments.

Western Star has a long legacy of manufacturing durable, hard-working trucks. With the X-Series, DTNA engineers have evolved that legacy to consider the needs of today’s customers and have completely reimagined the modern vocational truck.

The 47X is approximately 90 kg lighter than the 49X in like-for-like spec and is best for weight-sensitive applications like mixers and bulk haul. All X-Series trucks have tougher, yet lighter, single-channel frame rail options versus legacy products. The platform offers frame rails with best-in-class RBM (resisting bending moment) to last longer and return greater payload. A new 9.5 mm single channel rail option is available and features comparable strength as today’s 11 mm rail. Standard high-strength aluminum forward, rear and end-of-frame crossmembers further reduce mass, as does a new 2-battery option.

The X-Series steel-reinforced aluminum cab further reduces mass by up to 8% while offering greater driver comfort with 13% more space than competitors. An optional 2-person bench seat is available for applications demanding a large on-site crew, and a new space-optimized, in-cab battery box affords additional legroom to the operator. An optional roof-mounted condenser offers maximum airflow through the radiator for stationary applica-



tions like construction and mining while keeping operators comfortable.

The 47X’s unique hood offers industry-leading forward visibility of 7.55 m – a 28 cm improvement over the 49X – while its composite construction and ISO Tech suspension system resists bending and cracking by absorbing and dissipating vibrations from road inputs.

The 47X comes standard with the Detroit DD13 Gen 5 engine, which features higher compression ratios and a new swirl piston design to further improve combustion and efficiency. ThermoCoasting in the DD13 Gen 5 prevents aftertreatment cool-down during a driving regen to keep the system at its optimum temperature and significantly reduce the need for parked regens.

For weight-sensitive applications, the Cummins L9 and X12 engines are available for the 47X. Optional front-engine power take-off (FEPTO) is offered on both Cummins engine offerings and the Detroit DD13 for applications like snowplows. Similarly, rectangular fuel tanks and a raised after-treatment system mounting are offered with Cummins engines for better clearance for belly plows, making them a clear choice for municipalities and customers maintaining critical roadways in the winter months.

The 47X is also offered with the all-new DT12-V transmission, which includes 3 work-ready mode applications: Rock-free mode, Off-road mode, and Paver mode

for the challenges of specific vocational applications.

Western Star partnered with leading truck equipment manufacturers (TEMs) to ensure the X-Series supports fast and efficient upfits. The 47X’s mid-chassis packaging has a number of clear back-of-cab configurations while unobstructed frame rails provide more efficient body integration. The QuickFit Interface System offers ready access to electrical architecture and was designed for easy TEM interface, programming and access to power. The CHEC Tool from DTNA enables TEMs and dealers to view and modify electrical configurations, giving them the power to customize inputs and outputs and change parameters within minutes.

A Flex Panel located in the dash B-panel of the truck gives TEMs the ability to mount body controllers, making Western Star the only OEM that does not require compromising space between the seats to do so. The Flex Panel can also accommodate additional gauges, switches, or a RAM™ Mount prep, depending on customer needs.

Source: Western Star Truck Sales, Inc.

InfraStructures

reaches more heavy machinery and specialized equipment users than any other trade magazine in Canada.

The Media Kit is available on InfraStructures’ website at www.infrastructures.com



Groundbreaking Performance

In the Spring of 2021, Transportes Muciño (Transportes Muciño, S.A. De C.V.) performed a groundbreaking transport on an extremely challenging route in Mexico. Two major components weighing 380 and 320 t respectively had to be moved from the port of Tampico to the Tamazunchale II power plant, on behalf of Mitsubishi Power Americas, Inc. This challenging transport could not have been performed safely without the Goldhofer ADDRIVE and the all-new ADDRONIC.

Tamazunchale II is a 514 MW gas-fired power plant under construction in the Mexican state of San Luis Potosí. The heaviest component was a generator weighing 380 t and measuring 10.2 x 5.4 x 5.4 m. Since the route included multiple obstacles, conventional heavy-duty module combinations were not feasible. With the trust of its client, Transportes Muciño turned to the equipment from Goldhofer to perform the job.

"Mitsubishi placed their trust for this challenging job in us. For us, transportation is about teamwork, so we wanted a partner we had worked with in the past:

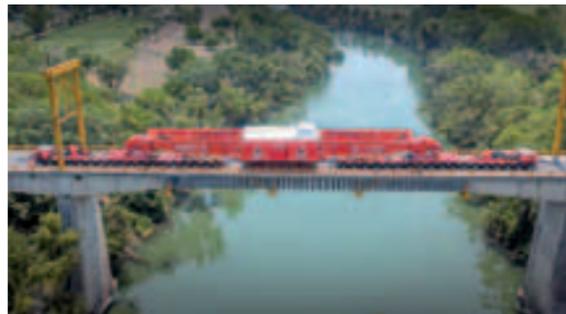
a value that Mitsubishi, Muciño, and Goldhofer share. That is why we decided to face this project with Goldhofer," said Raúl Cuevas, commercial director at Transportes Muciño.

Inclines of up to 19%, hairpin turns, and narrow roads posed a challenge. In the end, multiple combinations of Goldhofer heavy-duty modules and the FAKTOR 5



high girder bridge were put to use. The gross weight without trucks was up to 705 t.

"With ADDRONIC, the basic functions such as steering, leveling, and drive of up to 4 ADDRIVE modules can be synchro-



nized. In addition to that, the integration of an existing fleet into the transport combination can be realized easily," said Rainer Auerbacher, head of Transport Technology at Goldhofer.

Starting with a 2x18-axle line combination with 1 pushing and 2 towing trucks, the 2 modules supported the combination. At the city of Jaltocan, the Muciño team

reconfigured the convoy to a 2x9-axle parallel combination with 4x6-axle line modules. The 3 tractors and the modules handle inclines of up to 14% on extremely narrow roads. With detached tractors, the convoy traversed over 46 hairpin turns, even passing a 54° bend in Chapulhuacanito. After another reconfiguration to a 2x12-axle line parallel combination, the Muciño team made their way to the power plant. For the last mile, the synchronized ADDRIVE modules once again played to their strengths and independently moved the convoy through a 19% decline to its final destination.

More than 126 curves were expanded, and 6 major bridge reinforcements had to be made along the route in order to accommodate such a large configuration. Some of the bridges even had to be crossed without trucks in order to reduce the total weight and avoid long detours. Under the leadership of Mitsubishi's logistics team, Transportes Muciño spent over 16 months preparing for this project.

Source: Goldhofer AG

ZF Delivers 360° of Safety to Commercial Vehicles

According to the HDT/Work Truck Safety Survey 2021, distracted driving detection is the top technology that America's largest fleets plan to invest in within the next year. ZF provides 360° of safety – front, side and rear – helping to shield the truck and trailer from potential hazards through detection and dynamic control. With the successful integration of WABCO, ZF's Commercial Vehicle Solutions division, launching January 2022, is intensely focused on delivering intelligent, and function-led technologies and systems required for future autonomous, connected and electric commercial vehicles.

"ZF is helping revolutionize the commercial vehicle market by bringing cleaner, smarter, safer and more efficient technologies to this important transportation sector," said Julien Plenchette, vice president, Americas, Commercial Vehicle Division, ZF Group. "Safety is critically important for our customers and everyone who shares the road with trucks. ZF is focused on delivering products and systems that can aid in creating a safety perimeter around the vehicle to help avoid accidents."

ZF highlighted the following technologies at the TMC Fall 2021 event, held September 12-16 in Cleveland, Ohio:

- OnGuardMAX combines sophisticated data integration with state-of-the-art camera and radar sensors to detect, classify and react to moving and stationary vehicles and objects. The system is designed to warn the driver of imminent collisions and, if necessary, can autonomously bring the vehicle to a complete stop. Other features include lane departure warning, road departure braking, traffic sign recognition and safety distance support. When paired with next-generation braking systems, OnGuardMAX can enable adaptive cruise control with stop-and-go.
- OnSideALERT™ Passive Lane Change Assist is a radar-based, blind-spot detection system that supports drivers merging into adjacent lanes by checking them for clear-



ance and for the first time is applicable to both the driver and passenger sides of the vehicle. The advanced driver assistance system enables coverage of the entire side of a standard Class 8 truck and 53' trailer and is designed to effectively address side collisions and helps to prevent or mitigate truck crashes by alerting drivers of moving vehicles in the blind spot at speeds of 24 km/h and above.

- TailGUARD™ is a reversing collision avoidance system with automatic braking. It is designed to detect small, large, static and moving objects in the blind spot behind the vehicle, automatically stopping the vehicle at a safe distance and helping to prevent collisions. Activated when reversing, sensors monitor approximately 2 m behind the vehicle and trigger vehicle brakes automatically if the brake is not applied at 60 cm from the object.
- ReAX adaptive steering is designed to adapt to signals from the vehicle and analyzes driver input to provide smoother, more precise steering, helping to improve performance and reduce driver fatigue. Intelligent, assisted steering designed for commercial vehicles is the foundation for increasing levels of automated driving and further integration with other ZF products, like OnGuardMAX.

- TrailerCAST™ trailer telematics is engineered to interpret and broadcast critical events enabling deeper fleet intelligence and delivering real-time vehicle insights to help maximize uptime. TrailerCAST enables GPS position tracking and critical issue alerts. It also supports fleets with optimized planning of maintenance cycles.

ZF's Commercial Vehicle Solutions Division is on schedule to launch January 1st, 2022. In the Americas, the new division will be led by Julien Plenchette who previously served as Americas Region OEM Truck, Bus, Car & Fleet business leader. As a member of the regional leadership team, he played a key role in developing Americas strategy and driving excellence that has strengthened customers relationships and led to key commercial wins. Prior to joining WABCO in May 2019, he was vice president of sales and projects for LS Automotive and previously gained experience in commercial sales, finance, engineering, manufacturing operations management and executive leadership with Valeo and Chassis, among other companies.

Source: ZF Group

TRANSPORT
our
EXPERTISE

CONSTRUCTION & INDUSTRIAL EQUIPMENT
- MACHINERY—SKIDS - ETC.

CANADA & UNITED STATES
OVERSIZE TRANSPORT AVAILABLE

TRUCKLOAD & LTL

866-985-0255 x 712
eckoteam712@eckologistics.com

FLATBED—STEPDECK—DOUBLEDROP—RGN—DRYBOX



InfraStructures

reaches more heavy machinery and specialized equipment users in print and online than any other trade magazine in Canada.

The Media Kit is available on InfraStructures' website at www.infrastructures.com



Appointments

Dynapac recently announced the appointment of **Jamie Roush** to president/general manager of Dynapac North America, effective October 1, 2021.

Mr. Roush is a long-time industry veteran with over 20 years of experience in the equipment industry. He has been with Dynapac North America since the transition in 2017 and held various management positions at Atlas Copco LLC since 2007.



Jamie Roush will continue his work with the team at Dynapac, helping facilitate the company's growth in the North American market under his strong leadership.

"We have such a great team here at Dynapac. Everyone throughout the company is very passionate about the brand," he said. "As the new president, I am sincerely excited about our future and look forward to building on our success since joining the Fayat group. Dynapac is poised now more than ever to grow with our customers. We have spent the last few years strategically aligning and launching innovative products that differentiate us in the market."

Source: Dynapac

BOMAG Americas, Inc. is pleased to announce and welcome **Chris Colwell** as vice president of Milling & Paving. Mr. Colwell will be responsible for developing and leading a new business unit segment focused on optimizing the sales and product support for BOMAG's milling, paving, and reclaiming customers.



Chris Colwell brings 35 plus years of road construction equipment experience, having worked for both manufacturers and dealers so he has a keen understanding of what is required to support end users. Prior to joining BOMAG, he spent 10 years with Astec Industries, with his most recent positions as vice president Channel Management and president of Carlson Paving Products. Prior to joining Astec, he spent several years managing a road construction equipment dealership based in Michigan.

"I strongly believe in BOMAG's products, its vision to strengthen its presence in the roadbuilding sector and, most importantly, the commitment BOMAG has to additional investments to improve support for milling, paving, and reclaiming customers," said Mr. Colwell. "I look forward to leading a dedicated team of sales, product and service personnel to support our customers and mutually capitalize on our growth opportunities in paving, milling, and reclaiming."

Source: BOMAG Americas, Inc.

Yanmar Compact Equipment North America, encompassing the Yanmar Compact Equipment and ASV Holdings Inc. brands, recently announced the appointments of **Tate Johnson** as president, **Lee Thole** as director of aftermarket and **David Gannon** as director of channel development.

Tate Johnson joined the organization as commercial director in September 2020, overseeing sales, national accounts, channel development and marketing. He brought extensive leadership experience with deep technical, channel development and business leadership expertise within the commercial industry. As president, Mr. Johnson will lead and further develop the growth initiatives for the company as the two brands progress in a joint vision of Yanmar Compact Equipment North America.

Lee Thole brings more than 20 years of experience, with a strong background in parts, service, and overall business operations. His responsibilities as director of aftermarket will include strengthening several post-sales support functions as well as leading further development and implementation of the aftermarket strategy.

David Gannon joins his role with 30 years of multi-industry experience. His position as director of channel development will involve working closely with the dealer network, both by recruiting dealers and assisting existing dealers with being successful.

Source: Yanmar Compact Equipment North America

Advertise from **\$75** plus tax

Reach more equipment users than with any other trade magazine in Canada!



Used BUCHER Optifant 70 sweeper, on 2008 GMC truck chassis, Stock 405914 Price: P.O.R.

Accessories Machinery Ltd
Phone: 1-800-461-1979



Used 2016 BUCHER CityCat 5006XL compact sweeper, 2,856 hours, Stock SN7148 Price: P.O.R.

Accessories Machinery Ltd
Phone: 1-800-461-1979



NEW PETTIBONE DEALER
New PETTIBONE T944X, 74 hp Cummins QSF3.8, 9,000 lb capacity, 70" horizontal boom transfer. Super Equipment Inc.

patrick@superequipment.com
Patrick Tremblay Phone: 514-237-6281



30,000 lb CAPACITY
2009 TAYLOR TXB300L rough terrain sn #36022 2 stage mast 180", side shift, 8' forks. Super Equipment Inc.

patrick@superequipment.com
Patrick Tremblay Phone: 514-237-6281



1 866 643-4649 or 514 643-4649

INSTA-MIX.COM



EXCLUSIVE DISTRIBUTOR

MECHANICAL
BROOM
XBROOM BY NESCON



The XBroom collection broom has been designed for intensive high production sweeping.

Our broom is ideal for cleaning behind milling or leveling operations, high volume needed to keep pace.

Very large hopper capacity means more sweeping time and less dump time.

The high efficiency hydraulic system and high torque motor allow the broom to sweep at engine idle speed, minimizing braking and keeping hydraulic temperatures low.

The unique lift system can unload faster and higher, leaving the center of the truck wide open for maintenance and cleaning.

The control system automates allowing the operator to concentrate on driving and traffic.



Unique forklift style lifting system.

STANDARD EQUIPMENT

Chassis: Freightliner M2
Transmission: Auto 6 speed
Brooms: 36"x60", optional border brushes 46" 4 or 5 positions
Water tank: 300 gallons
Hopper capacity: Total volume of 5.9 yards³ with a net usable capacity of CY 4.9

SALE OF EQUIPMENT



MECHANICAL
VACUUM SWEEPER
LIBERTY MARK III
BY VICTORY SWEEPERS



The Liberty Mark III is a mid-size regenerative air road sweeper designed primarily for curb and gutter sweeping. It uses a full-width air propel style pickup head with a 12-inch diameter intake and air hoses with the intake on the right side.

The Mark III is ideal for cleaning crowned streets and is equally effective for street or construction site sweeping.

The Mark III is equipped with a hopper high-dump 4.35-yard³ stainless steel, one or more 39-inch diameter vertical steel gutter brush (s) with hydraulic tilt in the cab, 105-gallon (165-gallon) dust control system optional) and is powered by an auxiliary 67hp turbodiesel engine.

The Liberty Mark III features a 10-blade, rear-angled Hardox® steel fan for maximum performance. The 30 inch diameter fan is backed by our 5 year / 5,000 hour wear warranty. The Mark III is mounted on the Isuzu NQR chassis With a very manoeuvrable 132-inch wheelbase.



STANDARD EQUIPMENT

Chassis: Isuzu NQR HD
Transmission: Auto 6 forward gears, 1 reverse
Edge broom: 39"
Water tank: 105 gallons
Debris hopper capacity: 4,35 yards³

COLASSE TRUCK

KENWORTH T370S/A TRUCK (2022)

Automatic trans: Alison 3500
Sprinkler bar: 8 to 16 telescopic feet
Tank: Mauldin PS2000 system 2021
Option 500 gallons of water and 1500 gallons of colasse or maximum capacity of 2000 gallons

A/C and radio, Control in the cab and rear, Axles 14/23 air suspension, Pump and heated solvent, Automatic cleaning system.

Price upon request

ORDER IT
NOW
AND RECEIVE IT
IN SPRING
2022

CONTACT OUR
REPRESENTATIVES

BOBBY MORMINA
Cell.: 514 863-4649
East and Ottawa sector
bobby@insta-mix.com

ALEX FORREST
Cell.: 905 807-1649
Toronto
alex.forrest@insta-mix.com

SYLVIE MONGEAU
Cell.: 514 816-4069
North of Mont-Tremblant
smongeau@insta-mix.com

SAMI

- Galvanized top loading spreaders
- SLH self-loading spreaders
- SLF self-loading spreaders
- Towed-behind ground-driven spreaders

SINCE 1952 www.easternfarmmachinery.com
EASTERN FARM MACHINERY LIMITED
 RR3, 10 Nicholas Beaver Rd, Puslinch ON N0B 2J0
 Phone: 519-763-2400 • Fax: 519-763-3930

InfraStructures
 Canada's Equipment Magazine • La revue de l'équipement au Canada

Find us on Facebook

InfraStructures magazine
<https://www.facebook.com/InfraStructuresMagazine/>

With more readers across Canada than any other publication

InfraStructures offers you the **widest coverage** available to advertise your products and services

With readers involved in all aspects of the industry **InfraStructures** offers you the **deepest coverage** available to advertise your products and services.

Why advertise anywhere else?

Choose **InfraStructures** for your next campaign.

Address Change

Fill out the coupon and send it to us by mail at:

InfraStructures Magazine
 Subscription Department
 4330 Saint-Hubert Street
 Montreal, QC H2J 2W7

by e-mail at subscriptions@infrastructures.com

.....send the changes to us by mail or by fax or type-in the information in an e-mail..... ✂

Old Address (as on label):

Name: _____

Company: _____

Mailing address: _____

Province / Postal Code: _____

New Address

Name / Title: _____

Company: _____

Mailing address: _____

Province / Postal Code: _____

Phone: _____

Agenda

- SMOPYC 2021**
November 17-20, 2021
Zaragoza, Spain
- bauma CONEXPO INDIA**
Rescheduled to 2022
Greater Noida/Delhi, India
- Landscape Ontario CONGRESS**
January 11-13, 2022
Toronto, ON Canada
- Work Truck Show**
March 8-11, 2022
Indianapolis, IN USA
- World of Asphalt**
March 29-31, 2022
Nashville, TN USA
- National Heavy Equipment Show**
March 31 - April 1, 2022
Toronto, ON Canada
- Atlantic Heavy Equipment Show**
April 13-14, 2022
Moncton, NB Canada
- IFAT**
May 30 - June 3, 2022
Munich, Germany
- AORS Municipal Public Works Trade Show**
June 1-2, 2022
Barrie, ON Canada
- Svenska Maskinmässan**
June 2-4, 2022
Stockholm, Sweden
- Canadian Mining Expo**
June 8-9, 2022
Timmins, ON Canada
- Hillhead**
June 21-23, 2022
Buxton, Derbyshire, UK
- M&T Expo - Trade Fair for Construction and Mining Equipment**
August 30 - September 2, 2022
São Paulo, Brazil
- InnoTrans**
September 20-23, 2022
Berlin, Germany
- bauma**
Rescheduled to October 24-30, 2022
Munich, Germany
- CONEXPO-CON/AGG**
March 14-18, 2023
Las Vegas, NV USA
- International Rental Exhibition (IRE) / APEX access show**
Rescheduled to 2023
Maastricht, the Netherlands
- steinexpo**
Rescheduled to Summer 2023
Homburg/Nieder-Ofleiden, Germany
- INTERMAT Paris**
Rescheduled to April 2024
Paris, France



LEADING ASPHALT TRADE SHOW AND CONFERENCE

“This was my first show and it was a great experience. Being able to see and talk with all of the vendors within our industry was a huge benefit for my current position and professional growth. I now feel as though I have a better understanding of our industry and what vendors are available as well as technologies. This adds excellent value to our organization.” — Jamie Bailey, Lehigh Hanson

March 29-31, 2022 | Nashville, Tennessee

Register for tickets at worldofasphalt.com

WHEN SHOVELING ISN'T AN OPTION

	Cerruti Ribbon Blowers
Weight	661-970 lbs (300-440 kg)
Clearing Width	47-63" (1200-1600 mm)
Cutting Auger Diameter	20" (500 mm)
Impeller Diameter	18" (450 mm)
Standard Features	Cast iron gearbox, auger with ice breaker, hydraulic chute rotation, hydraulic chute deflector adjustment, chute installed on thrust ball-bearings, hand-crank adjustable skid shoes
Hitch Category	Category 2 3-point connector with swivel joints and slots for self-leveling.
Options	Fully-adjustable chute in galvanized iron, electric chute rotation, electric chute deflector, automatic safety torque limiters on auger, chute extension. Custom sizes available - Please Inquire

CONTACT US

Visit our website at www.metec.ca or contact us at sales@metec.ca or 613-678-3957 x211



**WE'RE READY!
ARE YOU?**

METEC Metal Technology Inc. 20 Terry Fox Drive, Vankleek Hill, Ontario | 613-678-3957 | info@metec.ca | www.metec.ca