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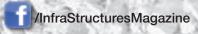
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#### A Brief Word...

March, the traditional month when thoughts turn to the pending spring and the bounty it promises.

As the snow pack shrinks and the mercury rises what else will the new season bring? Well, if you want to glimpse that, then you are at the first page of your odyssey. Within these pages is a plethora of news and developments to sprout energetically into the spotlight.

We've all heard in abundance about renewable energy and zero-emission developments, much of which is still intangible to the average jobsite. Something that slips stealthily through this conversation is hydrogen as a source of portable, renewable and environmentally sustainable fuel. Many manufacturers and their partners have been tinkering away at it and some of this news you can read herein.

Not forgetting announcements and products of more immediate impact to you and your crews. International shows too are beginning to sprout again along with many local events. It will be curious to see how technology may enhance those experiences.

Get your spring wear ready, put the snow tires away and take a ride with us into this brave new world.



On the cover: Already popular in Scandinavia and Europe, tiltrotators have now gained acceptance in North America. Their capability for 360° bidirectional rotation and left and right tilt, allow the machine to work from many different angles with less repositioning.

Caterpillar's portfolio of tiltrotators now covers machines from 11 to

### PINNACLE DRILLING PRODUCTS NAMED AS IPC/NPC NORTH AMERICAN DISTRIBUTOR

International Pile Croppers (IPC), the sister company of National Pile Croppers (NPC), the world's largest cropper manufacturer and rental company, is proud to announce Pinnacle Drilling Products as its new distributor in North America. Named North American Pile Croppers (NAPC), Pinnacle will be supplying the comprehensive cropper range designed, manufactured

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and supplied from the UK, and will also be providing full aftermarket care, spare parts and dedicated customer service.

Headquartered in Calgary, Alberta, Pinnacle Drilling Products prides itself on delivering the best and most innovative solutions to its construction and civil engineering clients, partnering with them to understand their needs, culture and business aspirations. This understanding enables it to provide exceptional service

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and advanced solutions to meet any challenge using world-class products. These have been carefully selected and tested to meet the most rigorous specifications and safety standards across a variety of industries, with all the added extras for maximum efficiency, operator comfort and safety.

As part of Pinnacle's drive to provide its customers with state-of-the-art solutions and products, it was quick to spot the potential of National Pile Cropper Group's range of pile croppers. Pinnacle's vice president, Simon Bennett, made contact which directly led to the company being appointed International Pile Croppers' distributor throughout North America. The appointment of such a professional and experienced industry distributor reinforces the National Pile Cropper Group's commitment to providing exceptional levels of customer focus in-market.

In practical terms the agreement between the 2 companies will see Pinnacle Drilling Products stock a full range of pile croppers for the North American market at its strategically placed hubs and provide "point of contact" customer support and training. International Pile Croppers will also be on hand to provide round the clock support from its UK-based technical support department. This will further enable customers to tap into the specialized advice and assistance that has made the National Pile Cropper's Group the world's largest designer, manufacturer and hire center of pile cropping attachments.

Source: National Pile Croppers

### FORTESCUE AND COVESTRO PLAN A GREEN HYDROGEN SUPPLY AGREEMENT

Fortescue Future Industries (FFI), a green energy and green industry company, a wholly owned subsidiary of Fortescue Metals Group based in Australia, and Covestro, a Germany-based supplier of high-tech polymer materials, intend to enter into a long-term agreement for the supply of green hydrogen and its derivatives, including green ammonia. Under the terms of the agreement, FFI would supply Covestro with the equivalent of up to 100,000 t/y of green hydrogen (GH2).

The arrangement will enable Covestro to reduce its greenhouse gas emissions by up to 900,000 t/y of CO<sub>2</sub>, by replacing grey hydrogen and its derivatives with GH<sub>2</sub>.

The deliveries are earmarked for 3 po-

tential locations – Asia, North America and Europe – and could commence by 2024.

FFI and Covestro view the non-binding memorandum of understanding (MoU) as the first step towards a broader strategic partnership to accelerate the green energy transition, particularly in energy-intensive industry.

"This is a ground-breaking collaboration which reinforces the power of green hydrogen to accelerate the decarbonisation of some of the most energy-intensive industries around the world," said Dr Andrew Forrest AO, FFI chairman. "FFI and Covestro share the belief that green hydrogen and green ammonia will play a crucial role in enabling companies to reach their climate targets and preventing runaway global warming."

"We are delighted that FFI shares our circular economy vision and is willing to take courageous steps to foster the urgently needed market ramp-up for green hydrogen," said Dr Markus Steilemann, CEO of Covestro. "Our collaboration with FFI underlines our ambition to pioneer the transition towards a circular economy and climate-neutral production. Green hydrogen and its derivatives play a key role for the chemical industry, both as an alternative feedstock and a source of clean energy. The transition towards green hydrogen and its derivatives will be an important step forward in our efforts to offer more sustainable products that also reduce the carbon footprint of our customers' industries."

Green hydrogen is made from renewable energy, producing zero pollution – its only by-product is steam. FFI's ambition is to grow its green hydrogen production to 15 million t/y by 2030, accelerating to 50 million t/y in the following decade.

Covestro uses hydrogen and its derivatives as feedstock in the production of high-performance polymers. As part of a broader circular economy strategy, Covestro committed itself to completely transition towards the use of fossil-free alternative raw materials and renewable energies. The partnership with FFI is an important milestone towards this goal.

Source: Fortescue Future Industries

### WESTPORT FUEL SYSTEMS JOINS WORLD HYDROGEN COUNCIL

Westport Fuel Systems Inc. recently announced that it has joined the inter-

nationally-recognized Hydrogen Council as a supporting member. The Hydrogen Council is a global CEO-level advisory body providing a long-term vision for the important role of hydrogen technologies in an energy transition for cleaner transportation solutions.

The Hydrogen Council aims to:

- Increase visibility around the hydrogen solutions currently available and the progress that has been made in this regard.
- Advocate for the important role of hydrogen technologies in helping to meet climate goals, energy security and com-

petitive targets, as well as work toward better deployment conditions.

 Work with and provide recommendations to several key stakeholders, such as policymakers, the business community, international agencies and civil society, to achieve its goals.

The Hydrogen Council includes CEOs from such member companies as Airbus, Bosch, BMW, Daimler, ENGIE, Honda, Hyundai, Iveco, Kawasaki, Mitsubishi, Shell, Linde, Toyota and Weichai.

Source: Westport Fuel Systems Inc.

# **Construction and Mining Machinery Industry Getting Ready for bauma 2022**

Just a few months before bauma opens its doors in Munich, Germany, from October 24-30, the world's leading trade fair for construction machinery, building material machines, mining machines, construction vehicles and construction equipment is expecting a very high level of participation:



97% of the available space has already been confirmed by exhibiting companies. These numbers have given organizers a reason to be very optimistic about the upcoming fair.

"This feedback is a clear signal of our customers' intention to take part in bauma. In the personal conversations we have with exhibitors and visitors, we hear one thing over and over again: They are really looking forward to having face-to-face discussions and, of course, to experiencing the special atmosphere that only bauma can create. I am really confident that the situation will soon have improved to the point that we will be able to put on an exciting bauma that will attract a large number of international companies and visitors," said Klaus Dittrich, chairman and CEO of Messe München.

For years now, the trade fair has been viewed as the world's unmistakable innovation hub thanks to the tremendous number of innovations that exhibitors present there. This special position will be underscored this year by the innovation hall LABO, an area that will include such special areas as the bauma Forum, virtual reality, MIC 4.0, startups and a science hub. Think Big, a program that promotes talented young people, will also be included as a key issue for the industry.

bauma is also a thematic pacesetter: The trade fair will focus this year on 5 key topics that will be covered by exhibitors, the supporting program and the trade fair's very first series of webinars: "Zero emissions", "The digital construction site", "Tomorrow's construction techniques and materials", "The way to autonomous machines" and "Mining – sustainable, efficient, reliable". The webinar series will begin in March and will be conducted in English. Industry experts will use the new format to explore bauma's key topics in depth.

Source: Messe München



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IPD recently announced a new company called Industrial Digital Solutions (IDS). IDS was born from the folks at IPD who have been working with independent engine rebuilders to make high quality engine parts for diesel and natural gas engines since 1955. IDS was formed to simply and intelligently connect assets with owners, managers, and service channels to increase efficiency, reduce fuel costs, and prevent downtime.

"IPD has a history that's over 65 years old working with engine parts," shared Michael Badar, president of both IPD and IDS. "Our customer base told us that they see plenty of services that will connect and monitor your assets, but most are overly complex and expensive. We wanted to develop a digital solution that's easy to use and affordable."

The first product that will be available in early April is TruckRx. IDS is partnering with South Carolina-based Diesel Laptops as their technology provider to deliver the easy-to-use interface that provides a simple solution for immediate diagnostics on your smart phone or tablet. TruckRx works with all makes and models of heavy duty trucks.

Just plug the TRX-Link device into a diagnostic port and it sends fault codes and what parts are needed to fix it.

TruckRx app will be available to download for free on the Apple App Store and Google Play.

Source: IPD

#### GROUPE MORNEAU DEPLOYS FIRST VOLVO VNR ELECTRIC IN QUÉBEC CITY

Volvo Trucks North America's customer Groupe Morneau recently took delivery of its first Volvo VNR Electric to operate on freight logistics routes in Eastern Canada. The zero emission Class 8 truck was delivered to Groupe Morneau in January during a key handover event with the local Volvo Trucks dealership, Paré Centre du Camion. The Volvo VNR Electric is the first heavyduty battery-electric Volvo truck operating in Québec City and the first Volvo VNR Electric tandem rear axle configuration in

"We commend Groupe Morneau for its leadership in deploying the first Volvo VNR Electric truck in Québec City and for its commitment to improve the sustainability of its fleet," said Paul Kudla, managing director for Canada, Volvo Trucks North America. "As one of Canada's largest transportation and logistics companies, Groupe Morneau will have the opportunity to integrate the Volvo VNR Electric into a wide variety of distribution routes and serve as an example for other area fleets that are considering their electromobility options."

Groupe Morneau operates an extensive freight network across Québec and is a leader in TL and LTL goods movement services. The company has successfully established itself as a transportation and logistics expert and reliable business partner and now also a market leader in the adoption of battery-electric trucks.

Paré Centre du Camion is currently finalizing its requirements to become one of the first Volvo Trucks Certified Electric Vehicle Dealers in Canada. The dealership's sales team, supported by Volvo Trucks electromobility team, consulted with Groupe Morneau to determine ideal routes for the Volvo VNR Electric, based on vehicle range, ideal charging opportunities, and duty cycle. Paré Centre du Camion will also support Groupe Morneau with maximizing vehicle uptime by performing all scheduled maintenance with specialty-trained technicians and maintaining an inventory of parts and components.

Source: Volvo Trucks North America

#### **6GRAHAM COMPLETES ACQUISITION** OF AECOM'S ENERGY OPERATIONS AND MAINTENANCE BUSINESS

Graham Group's acquisition of the North American assets of AECOM's Energy Operations and Maintenance (EOM) business is now complete, significantly expanding Graham's capacity to provide maintenance, turnaround, fabrication and sustaining capital services for major energy, industrial and petrochemical companies in Western Canada, Ontario, and the U.S.

This acquisition immediately boosts Graham's annual revenues by more than \$550 million and provides access to a 3,000-worker pool of skilled labor through allied subcontractors. With this added strength and expertise, Graham is now the company to provide one-stop shop services for major industrial clients, from initial construction through lifetime asset



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maintenance. This addition to Graham's already formidable capacity to self-execute in this sector will create efficiencies of scale and pricing advantages to the benefit of clients.

"There is a lot of opportunity in the North American energy sector right now. We know that our major industrial clients are trying to meet the current demands of oil and gas, creating a greater need for maintenance, and sustaining capital services," said Andy Trewick, president and CEO. "These same clients are also pursuing opportunities to transition their facilities to reduce emissions and support a lower carbon economy – we can now be the construction solutions partner in that transition."

A larger footprint in the resources sector allows Graham to expand its successful

Indigenous engagement program where the company delivers projects through business partnerships with First Nations communities. In these true partnerships, Graham may provide financial support, expertise and training focused on long-term employment and even greater economic development opportunities.

Source: Graham Construction & Engineering Inc.

#### TWO OF FOUR VENICE BIENNALE SHORT-LISTED TEAMS INCLUDE CARLETON UNIVERSITY MEMBERS

Five members of Carleton University's architecture school, in Ottawa, Ontario, feature on 2 of the 4 teams shortlisted by the Canada Council for the Arts for Canada's official representation at the 2023 Venice Biennale of Architecture.

# PACCAR Winch Service Schools Schedule Announced

PACCAR Winch has announced its 2022 Service School class calendar. The expanded schedule includes the popular Standard Planetary Hoist Service School along with 3 new courses including an Advanced Planetary Hoist Service School as well as classes focused on CARCO and

Recovery Winches.

PACCAR Winch



Service Schools provide authorized service centers, distributors, OEMs and their end users with the knowledge needed to perform service work on BRADEN, CARCO and Gearmatic winches, hoists and drives.

Each comprehensive program provides an overview of the products, theory of operation, competitive advantages, troubleshooting and in-depth service instruction. Courses are equally balanced between hands-on training and classroom learning.

Technical training provides a strong return on investment. Factory-trained technicians can perform service work that might otherwise go to unauthorized repair shops. Costly mistakes are minimized with technicians who know proper procedures for trouble-shooting and repairs. In addition, parts and unit sales can increase with better product knowledge and improved customer service.

For a complete and up-to-date class schedule and enrollment information, visit pwd.paccarwinch.com/ServiceSchool.

Source: PACCAR Winch Inc.

The Azrieli School of Architecture & Urbanism is the official applicant for HiLo/YOW+, a collaborative which includes Ozayr Saloojee, Johan Voordouw, Piper Bernbaum, and Suzanne Harris-Brandts. Interim director Federica Goffi is the invited curator for the Chevalier Morales Collaborative.

HiLo/YOW+ is a diverse multidisciplinary design collaborative that spans Turtle Island and beyond, with team members from Africa, the Netherlands, the U.S., and Canada.

Their proposal features a series of narratives in Canadian architecture, reflecting on past and future relationships and the material stories that underpin them. The Canadian Pavilion in Venice will be transformed through a set of installations into an experiential, global event space where guests will be invited to consider: "how can we ask better questions through the stories we tell?"

The Chevalier Morales Collaborative is a research unit searching for new operating models, collaborative strategies, and listening tools in the field of architecture.

For the Biennale, the unit integrates 4 academics who specialize in the fields of Indigenous studies, architecture, sustainable design, critical practices, and architectural mediations. It looks at how buildings meet their ground as a shared space with a deep history – one that is collective, social, economic, and geopolitical. How can we reformulate the spatial and cultural conditions of listening? Such questions are pressing in architecture schools and are addressed – albeit partially – in exemplary architecture projects throughout Canada.

Source: Carleton University

#### **ROTAR JOINS OPEN-S ALLIANCE**

Rotar International B. V., manufacturer of premium hydraulic attachments for excavators in the demolition, recycling and scrap metal industry, becomes a member of the Open-S Alliance.

Open-S is the open standard for fully automatic quick couplers for excavators.

The goal with the standard is to give machine operators and contractors around the world the freedom to combine machine couplers, tiltrotators and work tools from manufacturers that are in compliance with the standard, and to promote continued technological development. The Open-S Alliance is open to all manufacturers in the

industry who believe in the benefits of a common standard. The organization now welcomes Rotar International as a member.

Rotar makes an extensive product line for hydraulic excavators for the demolition and recycling industry. Based in the Netherlands, the company has over the years become a full service supplier for the demolition and recycling market. Rotar International joins the Open-S Alliance as a supporting member.

"We at Rotar International are delighted to be a member of the Open-S Alliance. We supported the Open-S philosophy from day one. With our joint knowledge we have developed a perfect solution for the demolition and recycling industry. Today, a lot of our equipment is factory fitted with original OEM integrated fully automatic quick coupler adapters. Our customers experience the many advantages that the plug and play system is offering. Such as safety, weight, compactness and service friendliness", said Louis Broekhuizen, commercial director, Rotar International B. V.

"We are very happy that yet another quality manufacturer of excavator work tools joins the alliance. The Rotar customer can benefit greatly from the Open-S standard as high value work tools now with ease can be shared between different excavators in order to increase the utilization ratio and improve profitability. As more excavator brands can mount Open-S compliant products from factories this will make it even easier in the future", said Stefan Stockhaus, chairman of the Open-S Alliance.

Source: Open-S Alliance

### TITAN ENTERS EXCLUSIVITY AGREEMENT WITH KUBOTA

Titan International, Inc. and Kubota Tractor Corporation/Kubota Canada Limited have entered into an exclusivity agreement on select sizes of Titan's new Trac Loader II tires for compact and utility tractor models used in residential, commercial, agricultural, and light construction applications. This innovative tire, branded with Titan and Kubota both displayed on the sidewall of the tire, will bring new value to Titan and Kubota customers.

Before entering into agreement with Titan, Kubota conducted testing on the new Trac Loader II. In addition to the improved cleanout, the tire proved to have outstanding stability and durability, along with

better roading capabilities resulting from an upgraded center lug.

"We were impressed with how the Trac Loader II performed in residential and commercial applications when paired with our compact and utility tractors," said Chris Box, Kubota director Product Marketing, Compact and Utility Tractors. "This tire is a perfect match for our versatile and durable tractors and will enhance our customers' productivity whether they're using them on their property at home or on a farm, ranch, or jobsite."

Source: Titan International, Inc.

### IFAT MUNICH – DRIVING ENVIRONMENTAL AND CLIMATE PROTECTION

The sustainable use of resources – and thus climate protection – is the major topic of IFAT Munich, which will be held from May 30 to June 3, 2022 at the exhibition center in Munich, Germany. International interest in the world's leading trade fair for water, sewage, waste and raw materials management remains strong. The global community needs environmental technologies and the trade show brings them to life

and provides the network to address the greatest challenge of our time.

Preparations for IFAT Munich are running at full speed. So far, some 2,500 exhibitors from more than 50 countries have registered.

"Municipal Technology" will be represented by, for example: Bucher Municipal, Aebi Schmidt, Epoke, Kahlbacher, Boschung, Multihog, Fayat Environmental Solutions (Dulevo-Mathieu-Ravo-Scarab) and RPM Tech - Tenco. In the vehicles section, exhibitors will include Iveco, Scania, Volvo, DAF, Daimler Truck and Mercedes Benz.

In addition, there will be international joint pavilions from Belgium, China, Denmark, France, Great Britain, Italy, Japan, Canada, the Netherlands, Austria, South Korea, Switzerland, the Czech Republic, Turkey, Hungary, and the U.S.

In keeping with the established tradition, many national and international associations are actively involved in shaping the trade show program, be it as exhibitors, with special shows, live demonstrations, solution tours and lectures.

Source: Messe München

### **Hilti and Trackunit Announce Partnership**

Hilti and Trackunit recently announced a strategic partnership to advance digital transformation in the construction industry. Together with Trackunit, Hilti is now able to strengthen its ON!Track solution. At the same time, the Trackunit platform will be enriched with additional tool-related data. The partnership also seeks to expand the evergrowing network of Trackunit devices, providing increased



connectivity around the globe through advanced Bluetooth technology. It enables the industry to detect tags on smaller tools and equipment, capture insights from tool and equipment data and offer an integrated customer experience across platforms.

Hilti provides market reach to a well-established Trackunit solution and enlarges the global network. Trackunit serves some of the world's largest OEMs, rentals and contractors and, with this strategic partnership, Hilti brings the access to the retrofit market and mid-market. Trackunit will also strengthen its offering to cover unpowered equipment and assets for their existing customers. Data insights are now being made available across the 2 platforms in real time, so that tools registered in Hilti's ON!Track system can be viewed on the Trackunit platform, and heavy machinery equipped with Trackunit hardware can be viewed in ON!Track.

Source: The Hilti Group



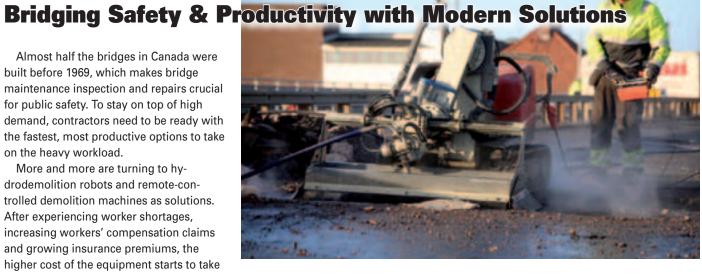
Almost half the bridges in Canada were built before 1969, which makes bridge maintenance inspection and repairs crucial for public safety. To stay on top of high demand, contractors need to be ready with

More and more are turning to hydrodemolition robots and remote-controlled demolition machines as solutions. After experiencing worker shortages, increasing workers' compensation claims and growing insurance premiums, the higher cost of the equipment starts to take a backseat. Remote-controlled and robotic machines provide more safety, productiv-

on the heavy workload.



ity and efficiency for removing concrete



around rebar than handheld tools, mini excavators and backhoes.

As an example, innovative hydrodemolition robots can remove as much as 74.3 m<sup>2</sup> of bridge deck at a depth of 10 cm in just an hour, a fraction of the time it would take a crew of workers with jackhammers.

Unlike handheld tools and excavators with demolition tools, hydrodemolition robots virtually eliminate the possibility of

microfracturing and unintended damage during bridge repair or rehabilitation. The 1380 bar (20,000 psi) water jets target the bridge deck surface, quickly removing layers of concrete but leaving rebar unscathed and clean. There is no need to spend extra time carefully avoiding rebar because the high-pressure water, though devastating to concrete, does not damage the metal bars. The method also does not cause

vibrations, eliminating the possibility of microfracturing that could threaten bridge stability.

Alternatively, a remote-controlled demolition machine equipped with a breaker attachment and controlled by an operator and one spotter can break up 0.19 m<sup>2</sup> of bridge deck concrete in 15 minutes. The



same area in the same amount of time would require 3 workers with handheld tools.



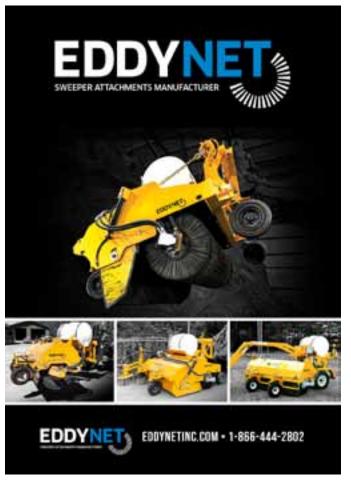
Remote-controlled machines drop labor costs by 33%, accomplish the job faster and greatly reduce the risk of injury. Plus, it is a lot easier to recruit young workers to run remote-controlled machines and hydrodemolition robots as opposed to handheld tools.

Until infrastructure funding is passed, the number of bridges in dire need of repair will continue to skyrocket. However,

funding will eventually need to be addressed and these structures repaired before liabilities escalate. Contractors that prepare, plan and incorporate technology solutions into their business will be able to successfully, efficiently and profitably address these needs.

Source: Aquajet







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Cat® Tiltrotators (TRS) for excavators seamlessly integrate to the machine, contribute up to 13% more productivity and are easy to operate. The introduction of these models provides a portfolio of TRS for machines from 11 to 30 t. The tiltrotators have the capability for 360° bi-directional rotation and 40° left and right tilt,

allowing the machine to work from many

different angles with less repositioning.

TRS10, 14, 18, and 23 models are available with pin-on or S-type coupler top interfaces and S-type coupler bottom interfaces. Using a tiltrotator with a coupler top allows the operator to maximize the versatility of attachments by switching them out for application and task appropriate purposes. An optional grapple module allows the operator to move materials out of the way, such as large rocks or pipe, without switching attachments.

Key components, including an oil-filled gear box, single-point lubrication system



and innovative control system, factor into the ease of maintenance and operation features. Long-term reliability and durability for the tiltrotators result from the heavy-duty bolted joint that secures the housing, rotator and coupler as a unit. The worm gear drive is designed with wide bearing surfaces that distribute excavation forces in all directions. In addition, the gear drive is submersed in oil to ensure positive lubrication in all operating conditions. Pins,

shafts and bushings feature heavy-duty construction, and the hydraulic rotator motor is protected inside the cast rotator

Machine controls allow for simultaneous tilt, rotation and machine movement. The short profile of the TRS unit helps maintain consistent breakout forces for digging experienced with a regular coupler.

Source: Caterpillar Inc.



modular steel bridges had been installed to provide temporary traffic access on Highway 1 in the Fraser Canyon, in British Columbia. The bridge replaces a section of road damaged during heavy rains in November 2021.

Much of British Columbia was impacted by flooding caused by the extreme weather events, and Highway 1 had particularly significant damage. At Jackass Mountain, a large 3-lane section of the road was destroyed by a landslide. This and other closures and disruptions were of particular concern as Highway 1 is the main route of the Trans-Canada Highway through the province and a vital route for commerce and area residents.

The British Columbia Ministry of Transportation and Infrastructure (BC MoTI) was able to quickly open many of the damaged sections of the highway or reroute traffic with detours. This was not possible at the Jackass Mountain location so BC MoTI and contractor Coguitlam Ridge

Constructors Ltd. opted to use a modular steel bridge from Acrow to restore traffic flow as quickly and safely as possible until options for a permanent solution could be considered. With decades of experience in restoring infrastructure under emergency conditions, Acrow's deep technical expertise coupled with its strong commitment to comprehensive service excellence ensures a successful installation under the most difficult conditions.

The site has extremely steep terrain and carries the risk of further geotechnical hazards, requiring a complex design and construction process to ensure worker safety and the success of the project. At the same time, it was mandatory that environmental and cultural protocols were considered and followed at every stage of the restoration work.

The single-lane Acrow bridge selected for the project is 79.25 m long with a road**JCB North America Launches New 50Z-1 Excavator** 

JCB North America recently introduced the 50Z-1 zero tail swing compact excavator, its latest addition to the extensive range of compact excavator models. The 50Z-1 replaces the 48Z in the range and provides industry-leading dig depth, increased reach, and increased dump height.

This robust, reliable machine is designed with 100% steel body work and zero tail swing for exceptional power and control while working in confined spaces. With 500-hour greasing intervals, easy to access service panels, and sectioned hydraulic hoses with easily accessible bulkhead, the 50Z-1 offers increased productivity for more profitability. As with all JCB machines, the cab has been engineered for exceptional operator comfort, and the machine is built to world-class safety standards.

"The 50Z-1 is a versatile machine with low cost of ownership, making it the perfect solution for contractors, landscapers, owner operators and rental companies. It



is ideal for everything from construction, landscaping, and utility work to highway and residential building. And it is built with JCB's industry-leading commitment to delivering outstanding safety and performance," said Chris Lucas, Excavator product manager for JCB North America.

JCB has built and manufactured compact excavators since 1964. The range includes everything from stand behind and

sit-on minis, to the 10 t first-in-class machine, the JCB 100C-1. JCB's experience as a global excavator manufacturer ensures that the 50Z-1 is productive, profitable, easily serviceable, and safe.

The 50Z-1 is powered by a 48.3 hp engine and features a 4.5 m digging depth, a 6 m ground level reach, and a 4.3 m dump height.

Source: JCB North America

### **Multihog Partners with JD Brule**

way width of 4.2 m and a TL-2 guardrail system. Extensive site preparation included stabilization work and road and bank reconstruction ahead of the launch of the temporary bridge, which occurred on January 5, 2022, with a partial launching nose and the assistance of a crane. Although record snowfalls and avalanches delayed work at the site, the bridge officially opened to traffic on January 24.

"Acrow bridges are easily transported to the most difficult locations, and quickly and easily built and installed, making them ideal for emergency applications," said Gordon Scott, director of Operations and Sales, Acrow Canada. "With in-stock components available for immediate delivery, Acrow bridges provide a safe, economical and reliable solution to rapidly restore damaged infrastructure."

Source: Acrow

Multihog is delighted to announce its partnership with JD Brule Equipment, based in Ottawa, Ontario.

The Irish vehicle manufacturer of multi-purpose tractors and sweepers, already has a strong presence in Canada, and JD Brule will join existing dealer McGill Equipment to provide coverage for the entire province.

Since 2008 Multihog has been supplying multi-purpose maintenance vehicles to customers around the world. Notable Canadian customers include Vancouver Airport, in British

Columbia and the public works departments of Laval and Granby, in Quebec.

"From the beginning, we were impressed by the quality of the machines. It's a relatively young brand, but they are really gaining traction here in Canada, and we are thrilled to be the latest addition to the Canadian dealer network. Our sales team can't wait to get out and demonstrate these maneuverable machines," said Bill Woods, vice president at JD Brule Equipment.

Designed to prioritize safety, operator comfort and maneuverability, Multihog machines can be fitted with various attachments to carry out a wide range of tasks, including sweeping, mowing, street cleaning and even solar panel cleaning. These versatile machines are used worldwide by prestigious customers such as DHL, Heathrow Airport, Antwerp Zoo, Montana State University, and the City of San Francisco.

Source: Multihog



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**ASV Presents the Forestry Industry's Most Powerful CTL** 

ASV Holdings Inc., a Yanmar Compact Equipment company, recently launched the industry's most powerful compact track loader (CTL) - the MAX-Series RT-135 Forestry Posi-Track® loader. Featuring 10% more horsepower than the RT-120 it replaces, the 5,890 kg machine gives operators the ability to maintain best-inclass machine performance while operating high-flow attachments. That maximum power is paired with a premium operator experience, as the completely upgraded loader is part of the new MAX-Series lineup, with all the line's superior comfort and ease-of-use features standard. Outfitted with forestry-rated guarding and safety features, the new machine is ideal for brushcutting, mulching, land clearing and other high-flow applications.

The machine's Cummins engine boasts 132 hp. That, combined with a 190 l/min maximum auxiliary flow and an auxiliary pump capable of 250 l/min, allows the RT-135F to transfer more engine power to the



attachment with no sacrifices to machine performance.

The new machine features 360° visibility. Standard LED lighting, optional side lighting and new taillights make it even easier to see around the outside of the machine.

ASV built the frameless door with 19 mm polycarbonate with enough strength to allow the elimination of the cross beam – improving visibility over the RT-120. The rugged side panels are manufactured with 12 mm polycarbonate. A limb riser is also built in for additional guarding. Because of the reinforced cab and high-strength polycarbonate, the RT-135F is the only compact track loader in the industry to meet the same safety standards as dedicated forestry equipment.

The non-Forestry version of the RT-135F, the RT-135, will also be available.

Source: ASV Holdings Inc.

### **Log Handling Duties Handled by SENNEBOGEN**

Rettenmeier, one of Germany's largest manufacturers of do it yourself (DIY) wood products began construction of a new sawmill at the Wilburgstetten site in the spring of 2020. Fast forward to today: a new high-performance saw line outputting the 3 grades of DIY wood products and the expansion of the fleet with 4 new SENNE-BOGEN timber handlers is also underway. With this investment, the processing capacity of the plant will increase to a further 1.3 million FBM (foot, board measure) per year in the future.

Whether sawn or structural timber, glulam or beams, Rettenmeier's product range is broad and unparalleled. The plant has relied on the long-standing relationship with SENNEBOGEN and their dealer for more than 15 years now.

In addition to the additional saw line, the sorting line will also be supplemented with additional boxes so that log lengths up to 6.2 m can be easily sorted. Log removal and stacking is handled by 2 SENNEBO-GEN 730 E log handlers, while 2 SENNEBOGEN 735 E Pick & Carry machines are



used for unloading the trucks and feeding the saw line.

With the help of a log grapple up to 30 t of logs can be loaded and transported onto a trailer and brought to the new saw line. Particularly helpful here is that the SENNEBOGEN 735 E has a low rear ballast resulting in a tight turning radius and the automatic steering and driving direction changeover proves to be a valuable helper.

In between the narrow wood stacks, it is possible to drive easily and in a space-saving manner without time-consuming maneuvering, even with a trailer. This saves the company valuable time during operation

Source: SENNEBOGEN, LLC

### **New Holland Launches Largest, Most Powerful CTL to Date**

Skid steer and track loaders have become an essential tool and necessary investment for everyday chores for many farms, landscapers, and construction operations. It is also is a key part of New Holland's brand DNA. To further support customer needs, New Holland Construction recently launched the C362, its largest and most powerful compact track loader (CTL). With 114 hp (gross), a rated operating capacity of 2810 kg, and a breakout force of 5,850 kg, the C362 is ready to tackle any project.

"New Holland has never built a compact track loader this large or powerful, or with so much capacity as the new C362," said Tyler Mills, director of New Holland Construction. "This machine redefines best-in-class performance in key areas, giving you the confidence to tackle jobs you hadn't considered before. Customers can do more and operate longer thanks to the C362's power, strength, and stability."

The patented New Holland Super Boom®



vertical lift design optimizes the C362 for lift-and-carry operations. With greater dump reach and height, customers can easily load high-sided truck boxes or hoppers. Full 360° visibility comes with the C362's low-profile Super Boom arm and shoulder design, an integrated rear camera, and new LED front work lights.

The low-profile undercarriage design eases cleanout, reduces noise, and increases durability.

The C362 is also built with electrohydraulic controls featuring multiple speed and sensitivity settings, including creep mode and automatic straight-line tracking.

For regular service or maintenance, the C362 allows for easy access to the engine. The rear door and hood provide quick service entry for daily and periodic maintenance. All major service points can be accessed by tilting the cab forward.

Source: New Holland Construction

### Felling Trailers' "Green" Air-Operated Bi-Fold Ramp System

Felling Trailers' continues to go "green" with their patent-pending Air-Operated Bifold Ramps system. The Air Bi-Fold Ramps system first debuted at CONEXPO-CON/ AGG 2020, stirring the interest of many in the construction sector. The Air Bi-Fold ramp system is part of Felling's Controlled-Flow Air Ramp series, which the company launched over a decade ago, all air-powered, no batteries, no hydraulics. The new Air Bi-Fold system is a revolutionary system that is perfect for the paving and low clearance markets. A key feature of Felling's design is in the operation of the flip ramp. The flip ramp locks out fully when extending, preventing scraping or marring of the ground. Another key feature is Felling's controlled flow air ramp technology which provides

Felling Trailer's Air Bi-Fold Ramps are 114 cm wide by 3.35 m (2.29+1.06 m) wood inlaid. The Air Bi-Fold ramps were designed to accommodate the load angle necessary when loading cumbersome low clearance equipment such as paving equip-

for soft ground contact of the ramp.

ment and directional drills. Their length provides the operator with a gentler, more gradual incline to provide ease in loading/

The new bi-fold ramp system is currently available on 18.1 t, 20.4 t, 22.7 t, and 27.2 t tag series with plans to expand into the



unloading with its 9.5° load angle with the option of air ride suspension when the air is dropped. Felling Trailers' Air-Ramp technology allows operators to use the tow vehicles' onboard air system to power the ramps, eliminating the maintenance of an onboard electric/hydraulic system. Furthermore, the patent-pending technology allows for minimal ground contact when deploying/retracting the ramps to reduce damage to new pavement when loading/unloading.

semi-trailer lines.

Felling Trailers will showcase their air-operated bi-fold ramps system at the World of Asphalt show, in Nashville, Tennessee, March 29-31, 2022.

The World of Asphalt Show & Conference is co-located with NSSGA's AGG1
Academy & Expo, providing an enhanced show experience for attendees by offering additional exhibits and education opportunities

Source: Felling Trailers, Inc.

### **Demag Crane at Work on an Offshore Wind Farm**

Crane service provider Sarens NV used a Demag® PC 6800-1 pedestal crane in the lifting of 89 steel piles from a barge on The IJsselmeer on behalf of customer Van Oord Offshore Wind, in the Netherlands.

All the lifts were carried out from a barge on open water, and since the IJsselmeer is very shallow, this meant the barge dimensions were 62 x 53 m, to have a small draft.

The Sarens' team decided to use a pedestal crane, as setting it up would be much easier than for a conventional lattice crane. The crane was transported directly from its previous place of use in Hungary to the Dutch coast.

"We first preassembled the crane on the shore and then put together and tested the larger components on the barge. This way, we minimized the potential risks of assembly on the water and at height," explained Mart van Hoorn, Sarens project manager. "It took the 6-person Sarens assembly crew a total of around one and a

half weeks to set up the crane, including the application of a protective coating to prevent saltwater corrosion.

The PC 6800-1 was set up with a SSL/ LSL S1 configuration, a 72 m main boom, and a 40.5 m

Superlift mast with a radius of 24 m. The superstructure counterweight came in at 250 t, while the Superlift counterweight at a radius of 27 m came in at 360 t that were placed on a Demag counterweight carrier. Finally, a double hook block with 9-part reeving was installed in order to pick up the loads.

The piles, each weighing up to 250 t and measuring up to 40 m, were picked up directly from a transport ship, placed in an upright position with the help of the



sheerleg, moved to the intended location, and driven into the IJsselmeer's lakebed.

One challenge consisted of the constant, and sometimes strong, winds.

"We needed new charts for the maximum lifting capacities at angles of inclination of up to 2° from Demag, and new software had to be loaded onto the crane's control system," reported Hendrik Sanders, who works at Sarens.

Source: Tadano Europe Holdings GmbH



It was a good night for Potain at the recent 3<sup>rd</sup> edition of the Tower Crane Awards, organized by the Federation of Construction and Handling Equipment (DLR) and the Professional Union of Crane technicians (SPMDG).

The awards ceremony took place at the Museum of Fairground Arts in Paris, France, on September 23, and Potain distributors were recognized in 3 categories – Top-slewing Assembly of the Year, Self-erecting Assembly of the Year and Construction Site of the Year.

The prize for Top-slewing Assembly of the Year went to GLI (Grues Levages Investissements) for the erection of a specially designed Potain MCT 58 on the Sainte-Rose dam in a remote area of La Réunion. Due to the difficult terrain, the crane elements needed to be transported to the site and lifted into place using a commercial helicopter. Potain designed the crane so that each element would not exceed the 1 t maximum capacity of the



Valente Grue Assistance, meanwhile, came top in the Self-erecting Assembly of the Year category for erecting a GTMR 386B at an altitude of 2,700 m in the Alps. The distributor's main challenge was to climb a ski slope, towing a 28 t load to the top of the resort.

Finally, Uperio took home the award for Construction Site of the Year for the assembly of 16 MR 608 luffing jib cranes with 10 m chassis and travelling mechanisms at the Fecamp offshore wind farm in Normandy. The assembly involved complex international logistics with 250 containers, as well as preassembly of certain components before starting the erection of the cranes. A huge and challenging construction site.

Source: The Manitowoc Company, Inc.



### **Enerpac EVO System Set for ITER Tokamak Magnet Lift**

Enerpac is set to have a key role in the final construction of the ITER fusion tokamak in 2024. On completion of assembly of the tokamak's vacuum vessel sectors, 9 cylinders now pre-installed at the bottom of the machine will lift a 11 m diameter, 290 t, circular poloidal magnet (PF6) into position at the base of the tokamak.

The ITER tokamak hosts the fusion reaction in which plasma particles collide and release energy at temperatures up to 150 million°C. To prevent the plasma touching any of the tokamak walls and disrupting the reaction, magnetic confinement is used with a combination of large circular toroidal and poloidal magnets.

Six ring-shaped poloidal field coils are positioned around the vessel to shape the plasma and contribute to its stability by "pinching" it away from the walls. The magnet is situated at the bottom of vessel on temporary supports while the ITER tokamak is constructed above it, after which it will be completely enclosed and unreachable by crane.

"We are faced with a challenging



problem: how to lift the PF6 ring to its final position and bolt it to the tokamak structure within tight space constraints and without access to a crane," said Nello Dolgetta, in charge of the operation. "To raise the PF6 ring by 2 m, we are performing a synchronized lift to provide a safe and secure lift operation. Early trials with a dummy load were very successful."

The poloidal magnet ring will be raised in stages while resting on 9 temporary supports each equipped with a cylinder connected to the EVO synchronized lifting system. The cylinders 200 mm stroke will allow stack beams to be inserted beneath the PF6 ring. After lowering the magnet onto the stack beams, the cylinders are repositioned on the next level of stack beams, and the process repeated until the magnet is finally bolted to the tokamak.

The pump maintains accurate positional control within 1 mm between lagging and leading cylinders. It features a flow control valve to reduce the lifting speed even more.

Source: Enerpac

### **Goldhofer Shortlisted for the German Sustainability Award**

The German Sustainability Award is the biggest award of its kind in Europe. It is presented by the Stiftung Deutscher Nachhaltigkeitspreis e.V. (German Sustainability Award Foundation) in collaboration with the German Federal Government and leading municipal and business associations. This year, the jury has shortlisted Goldhofer's electrically powered PHOENIX E towbarless aircraft tractor for the finals.

With its lithium-ion battery technology, the zero-emission powerhouse makes light work of moving cargo and passenger aircraft with a take-off weight of up to 320 t - including wide-body aircraft. At Munich Airport, where the goal is carbon-neutral operation by 2030, the machine has now completed an intensive test phase, proving that electric ground handling is feasible without any loss of performance.

As the flagship among Goldhofer's towbarless aircraft tractors, the zero-



emission PHOENIX E offers the same range of performance in terms of tractive power, maneuverability and reliability as the diesel version, plus additional advantages such as lower operating costs and longer maintenance cycles. The power is delivered by a high-performance electric drive combined with extremely efficient 700 V lithium-ion battery technology, which has already proved highly successful with electric commercial vehicles and meets the highest standards of safety. In addition,

the TMS system (Thermo Management System) that is part of the "lonMaster" concept is the key to long battery life. It also provides very short charging times, and supports fast and opportunity charging at all standard AC and DC charging points with up to 150 kW. The 220 kW direct drive quarantees reliable, high-performance aircraft handling with towing speeds of up to 32 km/h.

Source: Goldhofer AG

SWIFT, the industry's premier airfield conference is coming to Montreal, Quebec, in 2022, from September 13-15, at the Marriott In-Terminal Hotel - adjoining Montreal's Pierre-Elliott-Trudeau Airport – and will provide the excellent Airfield Studies visitors have come to expect.

In addition to the core conference, delegates can meet suppliers in the expo area at the main venue, and experience demos in a dedicated external space while those unable to attend face to face can still participate in sessions virtually.

SWIFT and CAPTG (the Canadian Airport Pavement Technical Group) continue to partner by expanding specialist sessions exploring technological developments in the design, construction evaluation with maintenance and operations of airfield pavements.

"We received fantastic feedback from delegates and sponsors on our first virtual 'SWIFT September' and are delighted



to provide the airport community an opportunity to come together again in Montreal, with the option to join virtually for SWIFT 2022. The hybrid nature of this event ensures that any members unable to travel can still interact with sessions and meet with suppliers and peers," said Roy McLeod, SWIFT Committee chair.

"We are pleased and excited to accept this opportunity to support the SWIFT and Montreal Teams for SWIFT 2022. We look forward to seeing everyone there!," added Steve McKeown, president of 2022 headline sponsor Team Eagle.

"Over the last year I have had the pleasure to get to know the committee, the delegates and the supporters and am constantly impressed at the strong bonds within the industry. The fact that the event has continued to thrive in these challenging times, is testament to the community so we are very glad to have this opportunity to support the group again as we head back to the first 'in-person' SWIFT for 3 years," said Andrew Organ, Aviation Events Group's operations director.

Source: Aviation Events Group

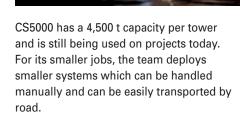
### Jacking Systems Used to Complete Bridge Installations

Old bridges around the world are constantly in need of rehabilitation, which can pose challenges to local communities who depend on them and recognizing this problem and the difficulties that can arise when accessing bridges for repairs is not always an easy task. Sarens, a global leader in heavy lifting, developed their climbing systems solution for even the most challenging jobs.

With the advancement of technology leaving more room diversity in terms of the materials used to construct massive bridges, larger and more powerful equipment is needed in order to conduct maintenance work or complete installation. In projects which face unique challenges, such as little to no room to lift bulky equipment or materials, Sarens has opted to use jacking systems to complete lifts as opposed to its typical cranes.

These systems, which are typically used to lift and install machinery or lift very large loads, can oftentimes be the most economical and efficient option to complete a complex lift. Sarens, which typically focuses on crane-based jobs, designs its jacking systems completely in-house, deploying them to play an extremely critical role in the construction of massive projects like bridges and offshore vessels. This equipment has been part of Sarens' fleet since the late 1990s, and currently operates 7 different types of climbing systems to be able to take on large projects with increasingly heavy materials.

Jacking systems are diverse enough to be deployed at several different project sites. Saren's biggest system, dubbed the



Sarens recently deployed one of its smaller CS250 jacking systems to install bridge sections in Adelaide, Australia, where it had previously installed a 2,700 t bridge. As part of the project near Darlington, it moved 3 large portions of the bridge for a project worth more than \$620 million. Due to the uneven nature of the ground at the project site, the team brought in jacking system to provide extra support to the bridge parts as it was being handled and it was able to successfully complete the lifts using the specialized equipment.

In Belgium, over 30 bridges along the Albert Canal were installed by Sarens since 2018. In a recent string of installations, it utilized several CS350 jacking systems to raise loads more than 6 m without bracing,

allowing for extremely efficient installation. This type of lift was made possible by the systems designed by the Sarens team and the precision ensured by project managers and their engineers.

"We've used this machinery most recently for bridge installation, however over the years, we've seen our climbing systems used in almost every segment of the industry," commented Peter Huygebaert, head of engineering at Sarens, "For example, lifting ship-to-shore cranes for leg extensions, installation of heavy industrial equipment, and even used as jacking device on SPMTs for transport when needed."

Source: Sarens





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#### eGen Power 100D Electric Axle Wins Award at Solutrans

Allison Transmission is honored to announce that its eGen Power™ 100D electric axle (e-axle) has earned a prestigious industry accolade. The e-Axle was recognized with a Silver I-nnovation Award in the equipment category during an awards ceremony at Solutrans 2021, a global tradeshow for heavy- and light-duty commercial vehicles held in Lyon, France.

I-nnovation Award recipients are recognized for their innovation in the safety of vehicles and people, connectivity, fuel consumption and CO2 emissions, efficiency, noise reduction and more. The I-nnovation Awards panel of judges is comprised of trusted industry professionals from various industry publications and vehicle manufacturers, including DAF, MAN, Renault Trucks, Volvo, Iveco and others.

Allison's eGen Power 100D was recognized for delivering superior electric vehicle propulsion efficiency, as compared to competitive solutions. This superior effi-

**Install Kits** 

Eaton's Vehicle Group

is now offering Master

Differential Install Kits

of upgrading to an Ea-

ton aftermarket differen-

tial. Each kit contains all the components needed

to properly install an

Eaton differential and/

or replace a ring and a

be available in 2022.

Source: Eaton Corporation

pinion.

that simplify the process

**Eaton Introduces Master Differential** 

"Our new Master Differential Install Kits are a fast and convenient option for improving

vehicle performance because they make it easy to order everything simultaneously," said

Corneliu Bogdan, director, Aftermarket Product Strategy, Eaton's Vehicle Group North

shopping for the components they need when replacing their differentials."

America. "The kits also include premium bearings and components, which help ensure

long life and quiet operation. The addition of these kits provides our customers one-stop

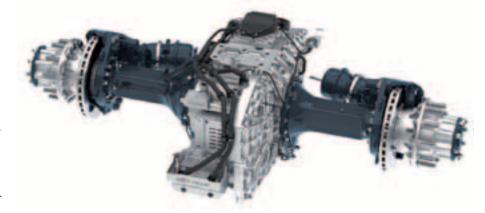
The new kits help with the installation of popular aftermarket differentials, including

provide improved traction in adverse conditions, such as snow, mud, or rock crawling, as well as increased stability while trailering. The differentials also enhance performance for

racing vehicles where less wheel slip can mean better track times. Applications include

Jeep JL/JT, General Motors, Chrysler, and Ford 9" axles. Additional axle applications will

ELocker®, Posi™, Detroit Truetrac®, and Detroit Locker®. Eaton's family of differentials



ciency results in increased range capability for the electric commercial vehicle with the same battery, or the potential to reduce the size of the battery required versus competitive solutions. Allison's eGen Power 100D e-Axle was also recognized for reducing greenhouse gases and noise emissions.

"Allison is proud to bring the eGen Power 100D electric axle to market, and we are equally honored that industry lead-

ers have recognized our e-Axle as a truly differentiated and purpose-built electric solution that delivers optimized efficiency and performance," said Manlio Alvaro, executive director, Europe, Middle East, and Africa Sales at Allison Transmission. "The 100D is part of a portfolio of electric and electric hybrid propulsion solutions designed to address the needs of Allison's diverse customers. Our differentiated solutions, proven Allison durability, decades of experience with vehicle propulsion, established customer relationships and extensive service network are formidable differentiators among electric propulsion solution providers."

One of the most powerful and efficient fully integrated e-Axle systems in the replace the traditional powertrain systems features 2 electric motors, each capable of generating greater than 200 kW of continuous power, with peak combined power integrates a 2-speed gearbox in the central housing, optimizing the e-Axle to enable eGen Power 100D is a highly engineered electric axles. This is achieved through ing of the e-Axle. These performance and capability or reducing battery pack size for the electric truck, optimizing the economic value delivered to the end user.

Source: Allison Transmission

world, the eGen Power 100D is designed to of heavy-duty trucks and buses. The e-Axle of 648 kW. The eGen Power 100D also the high starting gradeability to get heavy loads moving while also offering increased top speed and superior efficiency. Allison's and fully integrated solution that eliminates many of the inefficiencies of competitive Allison's differentiated design and package efficiency advantages translate directly to wide-ranging duty-cycles, increasing range

### Special Charity Kenworth T880S Mixer Displayed at WOC

Kenworth Truck Company, Con-Tech® Manufacturing, Inc., and Kenworth of South Florida have teamed up to exhibit a charity Kenworth T880S federal bridge formula mixer at the 2022 World of Concrete, held January 18-20 in Las Vegas. The T880S mixer was displayed in the Con-Tech Manufacturing booth during the show.

Soto Ready Mix, Inc., in Sylmar, California, purchased the special T880S and Con-Tech BridgeKing® mixer and chassis package with a US\$250,000 (\$316,000) winning bid at a recent live auction. All proceeds of the sale were equally divided to support Con-Tech-designated charities Ronald McDonald House® of Rochester, Minnesota, Make-A-Wish® Foundation of Minnesota, St. Jude Children's Research Hospital, and Wounded Warrior Project®.

"The auction offered a great opportunity to buy an excellent T880S mixer and see the purchase price dollars go directly to help children and veterans in a significant way through the special organizations

chosen by Con-Tech. It's an honor to exhibit this truck at World of Concrete. We look forward to putting this special truck into service," said Gilberto Soto, CEO of Soto Ready Mix, Inc.

"The US\$250,000 donation for these exceptional charities resulted from an outstanding industry effort by Kenworth, Con-Tech Manufacturing and Kenworth of South Florida, along with our other valued supplier partners," said Jim Walenzcak, Kenworth assistant general manager for

Sales and Marketing.

Other contributing supplier partners for the T880S charity truck are Allison (4500RDS 6-speed automatic transmission), Alcoa (front wheels) and Bridgestone (tires). The T880S is specified with a PACCAR MX-11 engine rated at 430 hp and 1,550 lb ft of torque. The Kenworth T880S with set-forward front axle is the go-to configuration for mixer customers required to comply with federal bridge formulas.

Source: Kenworth Truck Company



Terberg is proud to support Guinness and its Never Settle Zero Emissions Plan with the all-electric Terberg YT203EV. The ambition is for 70% of the vehicle fleet to be zero emission by the end of 2025, and 100% by the end of the decade.

Guinness already operates a zero emission Terberg tractor at their brewery. This is also being used in a trial to transport beer in Guinness tankers from St James's Gate to Dublin Port, to decide if it can be used to transport heavy goods beyond the brewery.

One of the great advantages of the electric Terberg is that it is allowed to drive through the city centre on its route to the port. A diesel tractor would have to make a large detour around the city.

Later this year, Guinness will be adding 4 zero emission Terberg yard tractors to the fleet. These will be used in a separate trial to deliver beer kegs to the hospitality trade in Dublin City, with an ambition to extend further.

Source: Terberg Special Vehicles



Metso Outotec has signed an agreement with Li-Cycle North America Hub Inc. for the supply of manganese, cobalt, and nickel solvent extraction technology for a battery recycling plant to be built in Rochester, New York. The contract value, which is not



disclosed, has been booked in the Metals Q4/2021 orders received.

The Metso Outotec delivery includes 3 modular VSF®X solvent extraction plants and related Dual Media Filters, and basic

"We are looking forward to working with Li-Cycle on this battery recycling project. The energy-efficient, modular VSF®X solvent extraction plant, which is part of our Planet Positive product range, reduces emissions and is safe to operate. The Li-Cycle project will be an important new reference for Metso Outotec in the battery recycling business," said Jari Ålgars, president of the Metals business area at Metso Outotec.

Source: Metso Outotec Corporation

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### **Partnership Tests Hydrogen-Powered Heavy Handling Tractor**

Gaussin, an engineering company that designs, assembles and sells innovative products and services in the transport and logistics field, recently announced a partnership with Terminal du Grand Ouest (TGO), operator of the Multipurpose Cargo and Container Terminal (MCCT) in Montnoir, near Saint-Nazaire, France, to test the first hydrogen-powered heavy handling

This partnership is part of the action led by the Neopolia network of companies, which brings together 240 industrialists in the Pays de la Loire region, including TGO. Neopolia aims to test in real conditions a hydrogen port tractor, used for container transport, while TGO has implemented a strong environmental policy and wishes to continue its approach by studying alternatives to diesel.

"It is with great pride that we will be testing the first French hydrogen port tractor from Gaussin at the Terminal du Grand



Ouest next spring. This cooperation, made possible thanks to the Neopolia network, will allow us to respond to public health issues and to strengthen our position in the energy transition. Thus, we hope to actively contribute to the development of

hydrogen in the Pays de la Loire region," said Olivier Hamelet, technical director of TGO.

With a power of 230 kW, Gaussin's APM H2 75T tractor will be able to tow 75 t of goods and will consume about 10 kg of hydrogen per day.

This project is in line with the announcements made by Gaussin and TGO in October 2021 at the Hyvolution trade show calling for the testing of a hydrogen-powered heavy handling tractor in a pioneering spirit shared by both partners.

The Hyvolution exhibition was an opportunity to confirm that hydrogen is a booming technology and that heavy handling equipment can benefit from it in an extremely promising way. The port and industrial areas of Saint-Nazaire, which are particularly well suited to the deployment of this energy vector, represent an ideal playground for developing this technology in real-life situations.

Source: Gaussin







Contact Shawn Regan for more info shawn.regan@sbdinc.com Phone: 514-264-1456

Stanley Infrastructure | Paladin Attachments



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### **FUCHS Announces New Design for Automotive Lubricants**

The FUCHS Group brings new small packs for the automotive sector onto the market, maximizing customer benefits: new labels for better orientation, ergonomic design for better handling, and gentle on resources thanks to the use of recycled material.

The range of lubricant products in the automotive sector is enormous - and for customers it is getting harder and harder to find what they need. The new small packs for all automotive FUCHS product brands - TITAN, AGRIFARM, MAINTAIN, PLANTO, and SILKOLENE - rise to this challenge. The Group has optimized its small packs globally for the quantities 1 l, 4 l, and 5 I, not just visually but also in terms of handling and environmental friendliness.

"The unique new design makes it easier



for our customers to choose the right product, improves user-friendliness, and saves on resources," summed up Krisztián Rada, head of Automotive Aftermarket division.

The new clearly structured design of the labels enables customers to identify all the relevant information at a glance.

The new ergonomically shaped bottles are easy to open without tools, fit better in the hand, and are easier for the user to handle. For example, the enlarged opening of the bottle and an optimized neck design allow accurate filling with no drops.

FUCHS has been pursuing its sustainability strategy for almost 10 years now, with the objective of carbon neutrality according to the "avoid - reduce - compensate" principle. As such, all FUCHS lubricants in the Group's plants are produced carbon-neutrally. The bottle material of the new small packs consists of up to 30% recycled material (PCR) and is 100% recyclable. The improved shape of the bottle also makes it possible to pour out even the smallest remaining volume of fluid, allowing complete emptying of the

FUCHS develops, produces and markets high-grade lubricants and related specialties for virtually all industries and areas of application. The company, which was founded in Mannheim, Germany, in 1931, employs around 6,000 people worldwide at 58 operating companies. FUCHS is the world's largest independent lubricant manufacturer. The most important markets in terms of sales revenue are Western Europe, Asia and North America.

Source: FUCHS PETROLUB SE

### **Hiab Expands Electric MOFFETT Truck-Mounted Forklift Range**

Hiab, part of Cargotec, recently introduced the MOFFETT E5 NX as the 3rd model in the eSeries of all-electric truck-mounted forklifts. The MOFFETT E5 NX is designed for medium- to heavy-duty tasks lifting up to 2,500 kg and it has been nominated for an IFOY AWARD in the category Special Vehicle / Warehouse Truck. It is the world's first electric truck-mounted forklift with a moving mast.

The MOFFETT E5 NX has all-

wheel drive and can be delivered with 4-way steering making it even more maneuverable as all wheels can rotate 90°. It can go forwards, backwards, left and right, making it possible to operate in confined areas and transfer loads quickly and safely off-road, through busy sites and inside warehouses. The E5's moving mast combined with Lift Assist gives the user true one side offloading.

The truck has MOFFETT's HMI (Human Machine Interface) display that provides rich information about the forklift's performance and maintenance needs. As it has access to Hiab's HiConnect™ service, the location, performance and other vital data can also be monitored online.

Source: Cargotec



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### **Appointments**

Rototilt Inc. is pleased to welcome Dane Keiter to its North American Product Support team. His main responsibilities will include field and technical support, as well as Rototilt tiltrotator installation across North America mainly focusing in the U.S.

Dane Keiter brings extensive experience in heavy equipment repair and service, both as a field technician and in-house mechanic. Highlights include 5

years at United Rentals as a level IV Field Service Technician. He is also a veteran, having served in Afghanistan.

We are confident his experience and skill set will be a huge asset to Rototilt and we are excited to have him as part of our team.

Rototilt Inc. has been established in Brantford, Ontario since 2007 as a dedicated North American subsidiary to service and support Rototilt customers throughout Canada and the U.S. Rototilt Inc. carries out a comprehensive inventory of Rototilt attachments and spare parts as well as offering a full rebuild facility to re-life tiltrotators after years of use. Rototilt Product Support representatives are available to provide customer technical support and to assist dealers on the installation and servicing of Rototilt attachments.

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Source: Rototilt Inc.

Formerly known as the Foundation for Pavement Preservation, FP2 Inc. recently announced the appointment of Rick Church as its new executive director, succeeding Jim Moulthrop, P.E.

Mr. Church brings a strong background in association management and pavement preservation. He is president of CM Services, Inc., and executive director of the Asphalt Emulsion Manufacturers Association (AEMA), Asphalt



After reviewing multiple candidate applications and conducting a thorough interview process with several highly qualified candidates. FP2's search committee and board of directors selected Rick Church and CM Services.

"CM Services and Rick Church bring both industry experience through their involvement with AEMA, ARRA and ISSA, as well as association management and leadership experience," said FP2 president Tim Harrawood, manager, Southern Contracting Division of Vance Brothers. "We look forward to working with Rick and his team to promote pavement preservation and help lead FP2 into the next chapters of its existence."

"An industry legend like Jim Moulthrop cannot be replaced," Mr. Church said. "We hope to continue the focus on the importance and value of pavement preservation that Jim has



championed for years. We look forward to working with the FP<sup>2</sup> leadership to develop a strategic plan to guide FP<sup>2</sup>'s future direction, engage FP<sup>2</sup> contributors in all aspects of the organization, develop regular FP<sup>2</sup> communications to contributors and the industry, as well as continuing the already successful advocacy and research programs FP2 supports."

Source: FP2 Inc.

**Sprayrog**, a specialist in spray-applied resin technology for structural rehabilitation and corrosion protection of water, wastewater, and other industrial infrastructure assets, recently announced the hire of Jeremy Alexander as president.

Previously, Mr. Alexander was the director of marketing at Line-X, LLC. In this role, Jeremy successfully lead the planning and execution of all marketing efforts across LINE-X retail, LINE-X Industrial Coatings, LINE-X National/Fleet services, and international sales channels.

The addition of Mr. Alexander comes on the heels of the firm's recent brand transformation in which they unveiled an entirely new visual identity, coupled with the launch of a new website and relocation of the firm's corporate headquarters.

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Source: Sprayroq, Inc.



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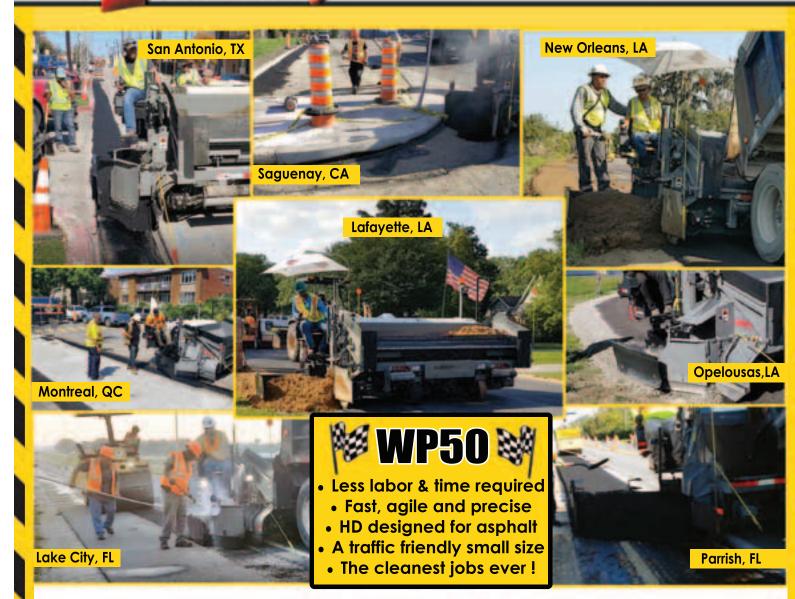
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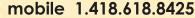
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### **Agenda**

Because of measures taken in many countries to counteract the coronavirus pandemic, it is STILL essential to check whether an event you are interested in will take place and... on what date.

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

**APOM Technical Day** 

May 12, 2022 Granby, QC Canada

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

**SWIFT 2022** 

September 13-15, 2022 Montréal, QC Canada

**APOM Technical Day** September 15, 2022

Saint-Zotique, QC Canada

InnoTrans September 20-23, 2022

Berlin, Germany

Rescheduled to October 24-30, 2022 Munich, Germany

boumo

World of Concrete 2023

January 16-19, 2023 (education) January 17-19, 2023 (exhibition) Las Vegas, NV USA

CONEXPO-CON/AGG

March 14-18, 2023 Las Vegas, NV USA



International Rental Exhibition (IRE) / APEX access show

Rescheduled to 2023 Maastricht, the Netherlands

stein*expo* Rescheduled to Summer 2023

Homberg/Nieder-Ofleiden, Germany



**INTERMAT Paris** 

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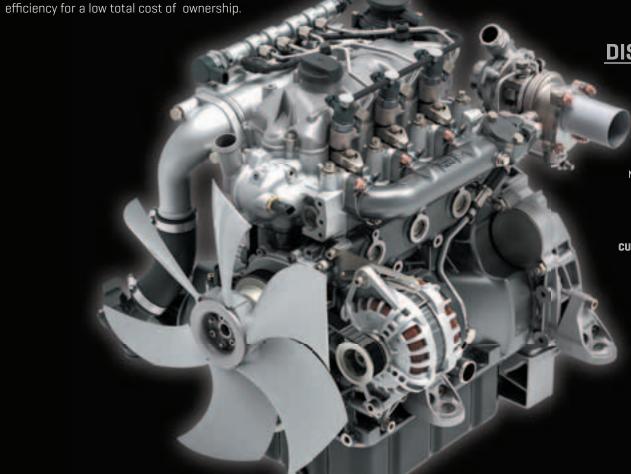
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