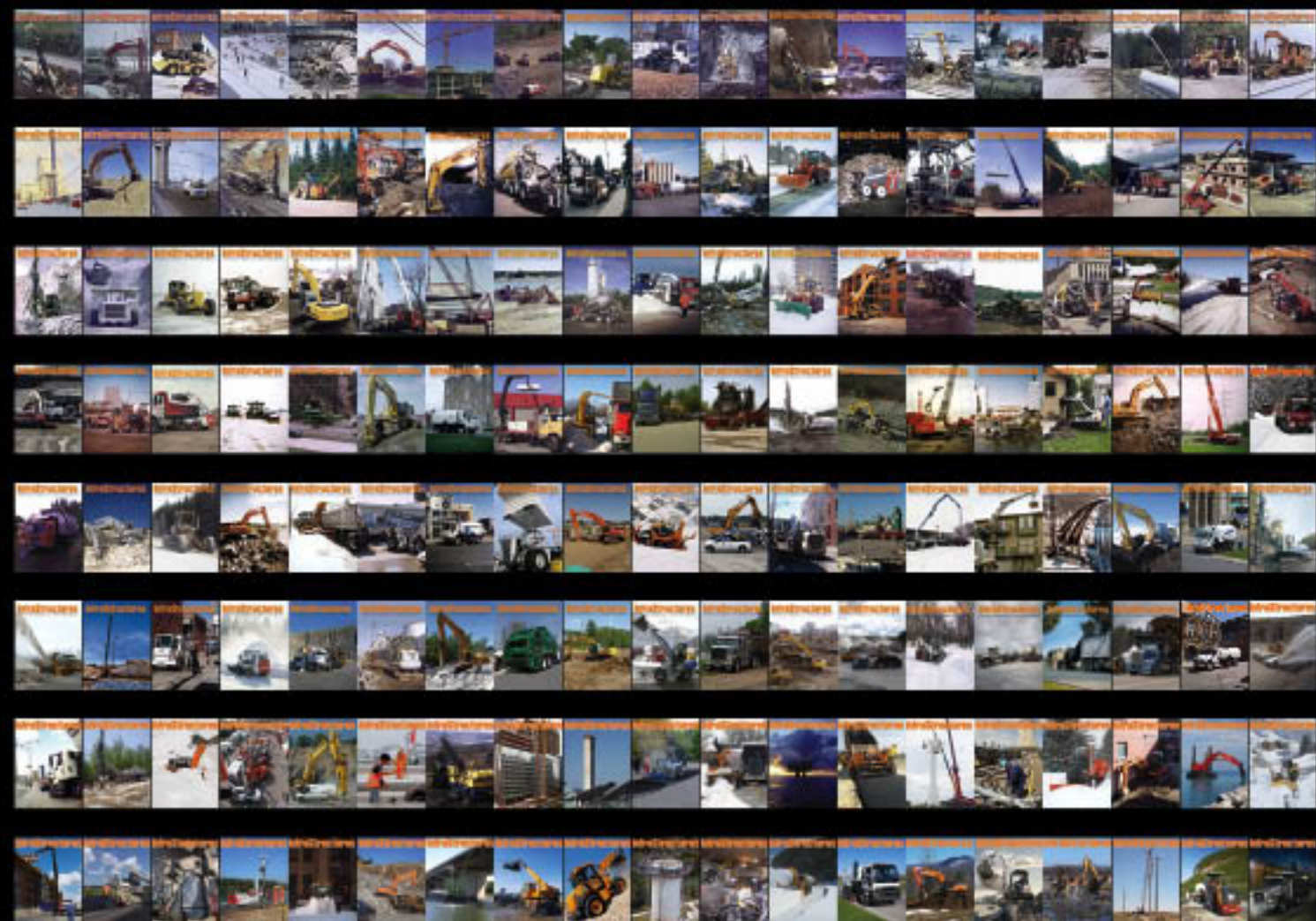


InfraStructures

CONSTRUCTION • PUBLIC WORKS • NATURAL RESOURCES

Volume 25 • Number 6 • June/July 2020 • *English Edition*





InfraStructures

**One Magazine for the Entire Industry
One Magazine for the Entire Country**

DOWNLOAD THE 2020 MEDIA KIT ON WWW.INFRASTRUCTURES.COM



CANADA'S EQUIPMENT MAGAZINE

**Volume 25 Number 6
June/July 2020**

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 either edition 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...

Most equipment users have been able to get back to work for some weeks now. The long, wet, and cool spring has most likely been a bigger curb on activity, in addition to the rattled clientele.

However, as Spring yields to Summer and Public Policy yields to public outcry, jobsites are getting busy and the race to catch-up is on!

Unfortunately the economic Tsunami has yet to hit, which means in-progress projects will be pushed for early/on-time completion and longer term procurement and spending put in limbo. That will require further public intervention where possible, so expect civil projects like road and bridge rehabilitation to get priority.

Hopefully that will encourage private sector investment which will occur primarily in the backbone of Canada's economy, the resource sector. This means it will be out of sight to much of the populace who have little grasp of the frailty of the nation's wealth generating structure. The service economy is in for a nail biting ride, particularly in southern Canada.

So it is a call to be more efficient, more diverse and better prepared. The only, if unsettling advice that can be given these days.

OptiFant 8000 / CityFant 60



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



Accessories Machinery Limited
www.amlm.com
1-800-461-1070

On the cover: The Patrol is an amphibious all-purpose vehicle manufactured by ATAC-V in Cookshire-Eaton, Quebec. Capable of transporting up to 10 people or equipment on land or water, it is ideal for transmission line and right-of-way maintenance, wildfire suppression, mining exploration or farming.

MERITOR AWARDED PACCAR BUSINESS FOR BATTERY-ELECTRIC REFUSE AND HEAVY-DUTY VEHICLES

Meritor, Inc. recently announced that it has entered into an agreement with PACCAR to be its non-exclusive supplier of electric powertrains for its Kenworth T680 and Peterbilt 579 and 520 battery-electric vehicles.

Meritor will be the initial launch partner and primary supplier for the integration of

functional battery-electric systems on these refuse and heavy-duty chassis. Production is targeted to begin in early 2021.

"The opportunity to equip Kenworth and Peterbilt battery-electric vehicles with Meritor's products allows us to partner with a valued customer and to continue bringing advanced technologies to market," said T.J. Reed, vice president of Global Electrification for Meritor. "We look forward to delivering on our goal to be the premier

supplier of electrification technologies for commercial vehicles."

This award further establishes the value of Meritor's Blue Horizon™ brand, which represents the company's emerging platform of advanced technologies centered on electrification.

With more than a 110-year legacy of providing innovative products that offer superior performance, efficiency and reliability, Meritor, Inc. serves commercial truck, trailer, off-highway, defense, specialty and aftermarket customers around the world.

Source: Meritor, Inc.

CUMMINS AND TULA COLLABORATE ON DIESEL ENGINE CYLINDER DEACTIVATION

Cummins Inc. and Tula Technology, Inc. recently announced their collaboration on a significant technical demonstration of diesel Dynamic Skip Fire (dDSF™). By using dDSF software to control cylinder deactivation, Cummins and Tula have demonstrated significant reductions in emissions and fuel consumption.

"At Cummins, it's our mission to power a more prosperous world. We do this by helping customers succeed through innovative and dependable products that are good for the customer and the environment. We will continue to innovate the diesel engine system to make it lighter, more reliable, powerful and fuel-efficient, and we are encouraged by the progress demonstrated in this collaboration and what it could mean for future diesel technology," said Lisa Farrell, director, Advanced System Integration, Cummins Inc.

The project started in early 2019 with the goal of optimizing cylinder deactivation strategies for diesel engines, which could result in emission reduction benefits. Advancements through the project are expected to help address future, more stringent NOx regulations.

The collaboration work was carried out on a Cummins X15 Efficiency Series diesel engine, which offers class-leading fuel economy. The joint development team modified the engine system to integrate and leverage Tula's Dynamic Skip Fire (DSF®) control algorithms to command combustion or deactivation on a cylinder event basis. On the challenging low-load cycle being proposed by the California Air Resources Board (CARB), modeling of dDSF technology predicted reductions in tailpipe NOx (nitrous oxides) emissions



REVERSIBLE SNOW PLOWS WITH TRIPPING EDGE

HEAVY DUTY MODEL "HD"

PUSHER BLADES

SIDE WINGS

- TRUCK
- WHEEL LOADER
- GRADER

MANUFACTURER SNOW REMOVAL EQUIPMENT & ACCESSORIES FOR HEAVY MACHINERY

BUCKETS FOR FRONT END LOADERS & EXCAVATORS

QUICK ATTACH FOR FRONT END LOADERS & EXCAVATORS

FORKS FOR FRONT END LOADERS & TOOL CARRIERS

EDF
EQUIPMENT FOR HEAVY MACHINERY

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

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

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

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

while simultaneously reducing CO₂ (carbon dioxide).

The reduction of tailpipe NO_x is achieved primarily by optimized exhaust temperature control, resulting in dramatically-improved conversion efficiency of the aftertreatment system. The technology achieves CO₂ reductions through improvements in combustion and reductions in pumping work. Further, dDSF delivers improved tailpipe emissions while simultaneously reducing fuel consumption, allowing for further optimization of these critical parameters.

"Our partnership with Cummins has given us the opportunity to expand our DSF technology beyond its success in gasoline engines. Demonstrating the capability to improve fuel efficiency while also achieving very effective emissions control is extremely important for all diesel engine applications in the future," said R. Scott Bailey, president and CEO of Tula Technology.

Cummins and Tula have released their joint paper *Diesel Dynamic Skip Fire (dDSF®): Simultaneous CO₂ and NO_x Reduction* for the 2020 Vienna Motor Symposium, which presented and quantified the success of dDSF in increasing efficiency and reducing CO₂ and NO_x. The paper reflected the successful partnership and collaboration between Cummins and Tula in evaluating dDSF for the diesel market. The collaboration will continue with exploring future system optimization and viability to control noise, vibration and harshness in commercial vehicle applications.

Source: Cummins Inc.

DEUTZ TO BRING POWER CENTER CONCEPT TO FLORIDA, NEW JERSEY, AND NEW YORK

DEUTZ Corporation, the U.S.-based subsidiary of DEUTZ AG, is introducing its Power Center concept to the Florida, New Jersey, and New York City markets. As of February 14, 2020 DEUTZ took over sales and service responsibilities for the state of Florida, with plans to launch DEUTZ Power Center locations in Jacksonville and in the Fort Lauderdale metropolitan area. The physical location of the facilities is to be determined in the near term. Until those new locations are up and fully operational, DEUTZ will support customers in Florida with mobile service technicians and through its existing dealer network.

"We look forward to serving customers

all across the state of Florida from our two locations," said Nick Vermet, general manager of DEUTZ Power Centers. "We've already begun assembling a solid team for the locations in north and south Florida."

DEUTZ Power Centers are fully stocked with DEUTZ Genuine Parts and provide both scheduled maintenance and an emergency service for DEUTZ engines, either at the Power Center location or at the customer's site. Power Centers also

provide dedicated application engineering and technical sales resources for OEMs that utilize DEUTZ products. Manufacturers in Power Center territories can receive customized, value-added production and assembly services that result in the best possible DEUTZ solution for their engine specification and configuration needs. Power Center customers can also purchase new DEUTZ engines, as well as DEUTZ Xchange remanufactured engines.



THE MOST COMPACT, POWERFUL MOBILE AIR COMPRESSORS AVAILABLE

UNDERHOOD™
AIR COMPRESSORS

- 40 CFM TO 140 CFM
- ENGINEERED TRUCK & VAN APPLICATIONS
- SAVE CARGO SPACE
- REDUCE VEHICLE GVW
- MINIMIZE MAINTENANCE COSTS

LEARN MORE AT:
VMACAIR.COM/UNDERHOOD

GET A DEMO: 1-877-912-6605

DEUTZ will also be taking over sales and service responsibilities in New Jersey and New York City. More information on these changes will follow shortly.

"Our Power Center model has proven to be very effective at providing customers with totally dedicated DEUTZ service and parts support," said Robert Mann, president and CEO of DEUTZ Corporation. "We've proven it in the Midwest and Carolinas, so we look forward to providing customers across Florida, New Jersey, and the city of New York with the top-notch sales and service support that our Power Centers offer."

Source: DEUTZ Corporation

WÄRTSILÄ WILL HELP MINIMIZE GEORGIAN COLLEGE'S GLOBAL ADJUSTMENT CHARGE

Wärtsilä Energy Business, a business of Wärtsilä Corporation, will supply a 2 MW/5.4 MWh state-of-the-art energy storage system to Ontario-based Alectra Energy Solutions, a subsidiary of Alectra Utilities. The system is to be installed at Georgian College, in Ontario, and is expected to notably lower the facility's

power costs by using energy storage to reduce electricity consumption when the electricity demand is peaking. This will decrease the College's Global Adjustment Charge, which is a fee billed to all hydro customers in the province under Ontario's 2009 Green Energy Act. These charges are typically 60% of the total annual electricity bill. The order with Wärtsilä was booked in December 2019.

The specified Wärtsilä system includes the company's containerized GridSolv solution with lithium-ion batteries, inverters, and all balance of plant equipment. The system is controlled by Wärtsilä's GEMS proprietary advanced energy management system. GEMS enables the batteries to be charged when the electrical load is less than a predetermined limit, and to discharge the batteries during peak loads, thereby minimizing consumption from the grid. Furthermore, by its ability to respond to energy price arbitrage fluctuations, GEMS can charge the batteries when the price is low and discharge them when the price rises. GEMS is also capable of responding appropriately to higher winter

energy demand.

"Ontario is committed to achieving a sustainable power supply and conforming with this objective by seeking a zero-emissions solution was important to us," said Angela Lockridge, Georgian College vice president, Student Success and Corporate Services. "The Wärtsilä energy storage solution will help to significantly reduce the College's electricity costs while supporting Ontario's climate change mitigation strategies."

"The system will be used in Ontario for effective power management. Managed by our advanced GEMS software, it is a highly efficient means for controlling demand charge type costs. By responding to Global Adjustment peak discharge events to cover the load, the system will deliver significant economic and environmental benefits to the customer," commented Wärtsilä's Risto Paldanius, business development director, Energy Storage and Optimisation.

The Wärtsilä system is scheduled to be delivered, installed and commissioned in autumn 2020 and the delivery will mark further market expansion for Wärtsilä in Canada.

GEMS is the leading energy management software platform globally, enabling use-case applications, optimizing more than 70 system portfolios, and integrating renewable thermal generation assets worldwide.

Source: Wärtsilä Energy Business, Wärtsilä Corporation

New Seat Concepts for Greater Safety and Longer Service Life

At this year's CONEXPO-CON/AGG, which took place last March in Las Vegas, Grammer Inc. presented new products and further developments of its proven seats.

Today's assistance systems for construction machinery transmit a variety of optical and acoustic signals to the driver. However, they are often overheard or overlooked during daily work, something that can lead to hazardous driving situations. Firmly integrated into the seat, the Haptic Warning System developed by Grammer creates a direct connection between the seat and the assistance systems. Reliable and perceptible haptic signals alert the driver via the seat cushion and thus improve safety significantly.

Grammer is confirming its role as a leading producer of commercial vehicle seats with a series of innovative additional functions. The "Smart Cover", a ceramic 3D printing process, opens up new possibilities with regard to protection, durability, and the optical design of seat cushions with imitation leather covers. Seat cushions can wear out quickly, especially in vehicles with frequent driver changes. The "Smart Cover" not only significantly improves the abrasion resistance of seat cushions, but also offers numerous attractive, customer-specific design options.

The proven MSG95EL/742 and MSG97EL/741 driver seats, which offer maximum seating comfort in construction machinery, have not only been given a new design but also come with additional functions. The upgrade with the new S700 seat top features pneumatic side contour control in the backrest cushion, allowing the seat to be adjusted even more individually to the driver's requirements and offering significantly improved side support. The active seat climate control system has now become more effective compared to the previous climate control system. The 2-stage seat heating also provides pleasant warmth. Together with the new multifunction armrest sector, the seat forms an operator system with which the driver can control relevant functions in the vehicle.

Source: Grammer AG

EARTHWAVE'S FLEETWATCHER APP

Earthwave Technologies, a manufacturer of wireless telematics platforms designed specifically for the heavy construction industry, announces its App as a Device (AaaD) to deliver tracking ability via a smart mobile device. Available for Android or Apple, FleetWatcher AaaD can serve as a FleetWatcher device and perform most tracking functionality of a permanently installed transponder. The capability of gathering data through a smart phone equipped with the FleetWatcher AaaD allows users more options to collect the data used by the FleetWatcher Materials Management Solution (MMS) platform.

The new app provides current FleetWatcher customers with Driver and Equipment assignment support as well as Driver Safety Reporting.

"We are excited to release this new func-

The Best Just Got Better!

Introducing The New Hercules...

H20

Easy to Use and Operate!

Excavator Mounted Impact Piling Hammer

Economical

Simple to Operate

Three Energy Settings to suit multiple pile driving requirements

4 Ft. Vertical Travel Leader

Able to drive load bearing pile to 197 tons

Paired with vibro to complete pile installation after reaching refusal on when bearing is required

Drive caps available for Sheet, H and Timber Pile



Sheet Pile



H-Beam Pile



Timber Pile



Hercules Machinery Corporation
Manufacturer and Supplier of Foundation Equipment

Call Toll Free // 800.348.1890

HMC-US.COM

tionality. It's just another 'device' in our tool chest that collects data utilized with our MMS," said Earthwave president Larry Baker. "We have developed this in answer to the requests of the market, but I believe the wholesale adoption of smartphone technology for the purpose of tracking trucks is a couple of years out. It works in some cases. Like any other technology, it will be an evolutionary process."

Ideal for Android and Apple devices, FleetWatcher Driver is available from Play/App stores for download and installation. It downloads quickly and can be operational in minutes.

Source: Earthwave Technologies

ISUZU OPENS NEW ENGINE AND POWER UNIT PROTOTYPE CENTER

Isuzu Motors America, LLC has recently opened a new technical engineering facility to better serve their engine and power unit customers and distributors in power generation, agricultural, construction and off-highway equipment manufacturing.

"The new facility allows us to design,

source prototypes and perform all validation tests in one building," said Cody Garcelon, director of Applications, Design and Sales Engineering for Isuzu Motors America. "This capacity helps us deliver validated engine system designs in a shorter time frame, while delivering superior quality control and reducing customer specific testing and engineering costs."

With design, applications and test engineers on site, this 745 m² facility can design and prototype customized accessory kits, which adapt the base engine types to specific customer applications. These kits typically include exhaust systems, wiring harnesses, urea lines, cooling packages, air cleaner systems and engine/component mountings.

Once the design and prototype are complete, they are manufactured according to specification. Each customized kit is validated as a turnkey, open power unit so that customers can meet current US EPA regulations if used in the same complete configuration.

The ability to perform this highly

complex work under the same roof as the design, sourcing and quality staff cuts the number of cycles needed and improves customer time to market. Enhanced training is another reason for this new facility. It is an extremely important feature to support our distributors and customers in this very demanding marketplace.

Source: Isuzu Motors America, LLC

CONCRANE SALES NAMED ENG CRANES EXCLUSIVE TOWER CRANE DISTRIBUTOR

Concrane Sales Inc. has been named the exclusive distributor in Ontario for ENG CRANES' range of luffing jib cranes, flat-top hammerhead cranes and derricks.

Based in Reggio Emilia in Northern Italy and with a branch in San Francisco, California, ENG CRANES has been designing and manufacturing their line of tower cranes, winches as well as custom solutions since 1981. With luffers ranging from 8-20 t and flat-top hammerheads ranging from 4-40 t, ENG CRANES have equipment erected all over Australia, Asia, Europe, and North America, including British Columbia and Nova Scotia, Canada. The first ETL253 20 t luffer and EDKH185 25 t derrick are set to be erected in Toronto, Ontario in Fall 2020.

"I've been working with Ricky for over 20 years," explained Massimo De Lazzero, export manager of ENG CRANES. "With his experience and the relationship I have built with him and now his grandson Daniel (Wright), it just made sense for Concrane Sales to represent ENG CRANES in Ontario. We took the time to understand the challenges the Ontario construction market is currently facing through the guidance of Ricky and Daniel, as well as our own experience. We're confident we have developed the right equipment to tackle the harsh weather conditions and long working hours typical to jobsites in Ontario."

"ENG CRANES is a manufacturer that really listens and reacts in a timely manner," explained Ricky Redigonda, president of Concrane Sales. "We worked with ENG CRANES' designers and engineers to assist in developing standards for any crane coming to Ontario – whether it's a luffer or a hammerhead. The cranes must be able to move fast and be powerful enough for our high-rise buildings. They must also be able to withstand our winter weather and, most importantly, the cranes must be safe. ENG CRANES have taken all of our recommen-

Pettibone Announces New Dealer for Atlantic Provinces and Quebec

Pettibone/Traverse Lift, LLC recently announced the addition of Super Equipment Inc. to its dealer network. Located in Vaudreuil-Dorion, Québec, Super Equipment will carry Pettibone Traverse and Extendo telehandlers, mobile elevating work platforms, and Cary-Lift product lines for Quebec and the Atlantic provinces.

"We are excited to welcome Super Equipment to the Pettibone team," said David Chase, director of sales and marketing for Pettibone. "Their experience and focus in the lifting equipment market is a natural complement for our product offering. We look forward to working with them to grow their coverage in eastern Canada."

Founded in 2010, Super Equipment specializes in sales, long-term rentals and refurbishments of cranes and material handling equipment. Super Equipment recently acquired a new 13,000 m² facility to expand service capabilities for its customer base.

"Pettibone has a wonderful product, and we are eager to start marketing their telehandlers in our area," said Patrick Tremblay, vice president of Super Equipment. "The Traverse telehandler line, in particular, provides a unique solution with the horizontal traversing boom that nobody else offers, and we believe there's a great opportunity to be successful with that product in our territory."

Source: Pettibone/Traverse Lift, LLC



dations and have developed equipment we're really excited to have in Toronto. And you can trust that the crane you order from ENG CRANES is the crane that you're going to get and that it will arrive on time."

Source: Concrane Sales Inc.

SOURCEWELL CONTRACT AWARDED TO STERTIL-KONI

Heavy-duty truck and vehicle lift manufacturer Stertil-Koni recently announced that the company has been awarded a 4-year contract with established cooperative contracting innovator Sourcewell for "Vehicle Lifts, with Garage and Fleet Maintenance Equipment".

In essence, the new agreement (#013020-SKI) represents a contract extension for Stertil-Koni – It runs through April 13, 2024. Previously, Stertil-Koni enjoyed a successful, 4-year contract with Sourcewell (formerly known as "NJPA").

For the thousands of customers across North America that routinely select and purchase Stertil-Koni heavy-duty vehicle lifting systems, shop equipment and accessories, the Sourcewell contract streamlines the procurement process – saving time and money.

"Any public agency in a locale that is part of the Sourcewell network which wants to purchase the full range of Stertil-Koni lifting products, including mobile lifts, platform lifts (such as our SKYLIFT), in ground lifts both piston type and scissors, can easily and quickly do so through Sourcewell's competitively bid contact," noted Jean DellAmore, Stertil-Koni president. "As a result, public agencies can avoid the hassle of the formal bidding process because the work has already been done by Sourcewell. That's a tremendous win for Sourcewell, its valued customer base, as well as for Stertil-Koni and our dedicated distributor network."

Sourcewell is a self-supporting organization with more than 40 years of dedicated service helping government, education, and nonprofit agencies operate more efficiently through a variety of solutions. Sourcewell contract purchasing solutions are competitively solicited nationally, offering more than 400 award contracts to save time and money by combining the buying power of more than 50,000 government, education, and nonprofit organizations across the U.S. and Canada.

Source: Stertil-Koni

Continental Equips Goldwind Wind Turbines with Drive Belts

Continental was chosen by Chinese manufacturer Xinjiang Goldwind Science and Technology to equip its wind turbines with drive belts. In the unique and patented construction, the belts allow the rotor blades to be adjusted at any time without the aid of gears or hydraulics. Continental engineers used an optimal combination of 2 tried-and-tested timing belt technologies to develop the belts. Goldwind

is one of the few providers on the market to use a drive without a gearbox to adjust the blades, which is becoming vital to be able to respond flexibly to changing wind strengths.

"Goldwind relies on timing belts," said Rolf Marwede, who heads Continental's location in Dannenberg, Germany. "There are some advantages to this. For instance, the system is less complex and therefore less prone to vibrations and disturbances at the top of the nacelle. Our belts are also extremely low-wear and durable."

The belts provided by Continental do not require any oil for lubrication and are very low-maintenance overall and also largely corrosion-resistant. In offshore wind turbines in particular, this last point presents a major advantage over conventional metal designs that are permanently exposed to salty sea air.

The chosen belt solution is based on Continental's Synchrodrive technology. Galvanized steel cords are integrated into the belt's interior and coated with polyurethane, which furnishes both the teeth and the back of the belt and forms an outstanding connection with the tension member. Polyurethane is particularly abrasion-resistant.

The 2 opposing impact directions of the steel cords and their strands result in neutral running properties, making the belts extremely resilient. But what makes the belts used by Goldwind so unique is the special fabric.

"The fabric reduces wear and absorbs noise and also provides a much more stable structure for the timing belt. This enables us to significantly improve the belt's performance yet further," explained Mr. Marwede. "The fabric reinforces the teeth and improves run-in behavior, which in turn boosts efficiency. Ultimately, we have brought together 2 product groups to develop the ideal solution for Goldwind's application."

Wind is an unlimited resource. Wind turbines are considered clean, with the wind power they provide being the ideal complement to other energy sources. By the end of 2019, wind turbines with a total output of around 650 GW had been installed around the world. With installed power of well over 200 GW, China is by far the world's largest wind market.

Source: ContiTech division, Continental AG



Donaldson Introduces Space-Saving PowerCore® Edge Engine Air Cleaner



Donaldson Company, Inc. recently introduced the PowerCore® Edge, a compact, high-efficiency engine air cleaner for use in heavy dust environments. Released at CONEXPO-CON/AGG in March, this new filtration device is specifically designed to fit into tight under-hood spaces in off-road

equipment and offer easier servicing than previous generations of air cleaners.

Donaldson PowerCore air cleaners have been meeting the demanding specifications of on- and off-road equipment manufacturers for 20 years, delivering continuous improvements in filtration tech-

nology and packaging flexibility. Bringing the smallest footprint yet to the PowerCore filter line, PowerCore Edge offers front-service access for easy filter changes, a unique seal design with heat tolerance up to 100°C, and can fit either vertically or horizontally into tight engine compartments – solving the space constraint needs of today's equipment manufacturers.

Kubota Debuts New Engine and Micro-Hybrid at CONEXPO-CON/AGG 2020

Kubota Engine America exhibited the S7509, a high power density, 300 hp, large displacement industrial diesel engine, at CONEXPO-CON/AGG. The new addition to Kubota's 09 Series was announced by Kubota Corporation at the company's headquarters in Japan on March 2, 2020.

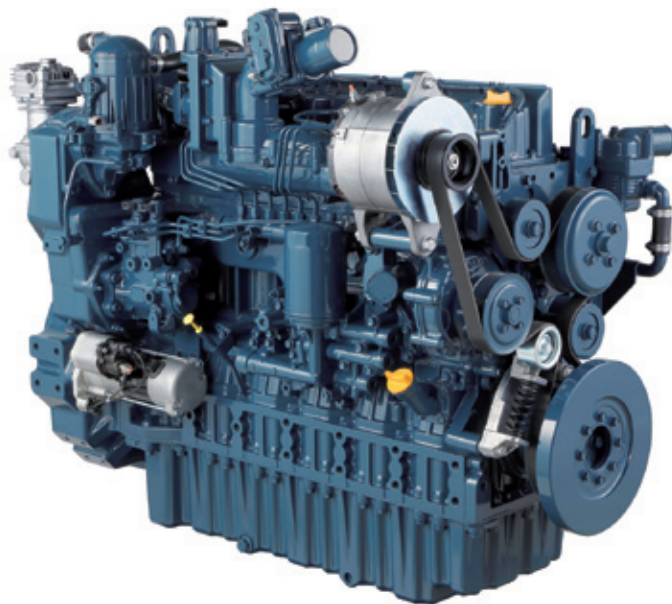
The new large displacement industrial diesel engine, will comply with EU Stage V emission regulations.

"Kubota integrates state-of-the-art design to produce high performance and durability in all of our engines and the S7509 is no exception," said Tomokazu Matsushita, president of Kubota Engine America. "The S7509 further expands the 09 series and Kubota's goal is to become the number one supplier of engines up to 300 hp."

The compact 7.5 l, 6-cylinder engine possesses low fuel consumption with its optimized, direct injection combustion system. It provides 100% power take-off at the flywheel and fan side, as well as selection of flywheel housing and flywheel

for OEM coupling. The S7509 provides great versatility because the exhaust side auxiliary PTO takes up to 2 hydraulic pumps in addition to the intake side PTO. The engine also features a one-side easy maintenance and automatic belt tensioner. Mass production of the S7509 will begin in 2023.

Kubota Engine America also featured a prototype of its Micro-Hybrid System. It made its debut in North America at CONEXPO-CON/AGG. Kubota's Micro-Hybrid System provides power assistance instantaneously during peak overloads to the engine providing an additional electrical power boost of up to 10 kW. The immediate torque available offers an



efficiency boost at the most crucial time while recuperating and recharging its battery pack when not initiated. Kubota first demonstrated its concept at Intermat, in France on April 2018. In 2019, at bauma, Kubota displayed the prototype system installed in a forklift. The Micro-Hybrid

"The widespread adoption of large, heat-emitting emissions control devices means less under-hood space is available for components like engine air cleaners, and under-hood temperatures are higher," said Al Hovda, general manager of Donaldson Engine Air Systems. "PowerCore Edge responds to these demands and still delivers the high dust-holding capacity and filter life that have distinguished PowerCore filters for the last 20 years."

PowerCore Edge air cleaners can be smaller due to Donaldson's PowerCore G3 media pack, which delivers all the filtration capability of a conventional pleated air filter in 65% less space. This innovation continues the Donaldson-led trajectory toward increasingly smaller, more powerful media technology that has defined the PowerCore filter line and enabled Donaldson to respond to Original Equipment Manufacturer (OEM) engineering requirements.

PowerCore Edge is also easier to maintain on the job. In a multi-stage air cleaner, an integrated pre-cleaner removes the heaviest dust before it can reach the primary filter. Because pre-cleaners can clog in the most extreme off-road conditions, Donaldson designed the pre-cleaner on the PowerCore Edge to easily separate into 2 pieces to allow for fast and easy cleaning.

In heavy dust or debris laden off-road environments, OEMs may choose to add a scavenge vacuum system for more efficient removal of dust and debris from the pre-cleaner. When a scavenge system is used, PowerCore Edge improves serviceability by allowing the scavenge line to remain in place while servicing the pre-cleaner or the primary filter. PowerCore Edge also offers improved pre-cleaner performance in non-scavenged applications.

Source: Donaldson Company

Bentley's Great Eight Ends Production



The mighty Bentley 6¾-litre V8 engine has finally reached the end of its manufacturing run. In production for more than 60 years, and with the same configuration and bore spacing as the very first version from 1959, the last L-Series engine will spend its life powering the last specially-commissioned Mulsanne 6.75 Edition by Mulliner.

"Our venerable 6¾-litre V8 has powered the flagship Bentley for more than 6 decades, and so has earned its retirement. I am extremely proud of the generations of skilled craftspeople that have meticulously assembled every one of these engines by hand over the years. That this engine stood the test of time for so long is testament to the ingenious engineers who kept making the engine ever more powerful, refined and reliable. Now, we look forward to the future of Bentley, powered by our exceptional W12, sporting V8 and of course our efficient V6 Hybrid – the start of our journey to electrification," commented Peter Bosch, Bentley's member of the board for manufacturing.

Originally designed in the 1950s to deliver a step change in performance over the I6 it replaced, the L-Series V8 first saw service in the 1959 Bentley S2 – developing around 180 hp, deemed "adequate" by Bentley at the time. Since then, through continual design improvement and turbocharging, the engine has evolved into a 530 hp low-revving engine delivering a "wave of torque" that characterize Bentley cars.

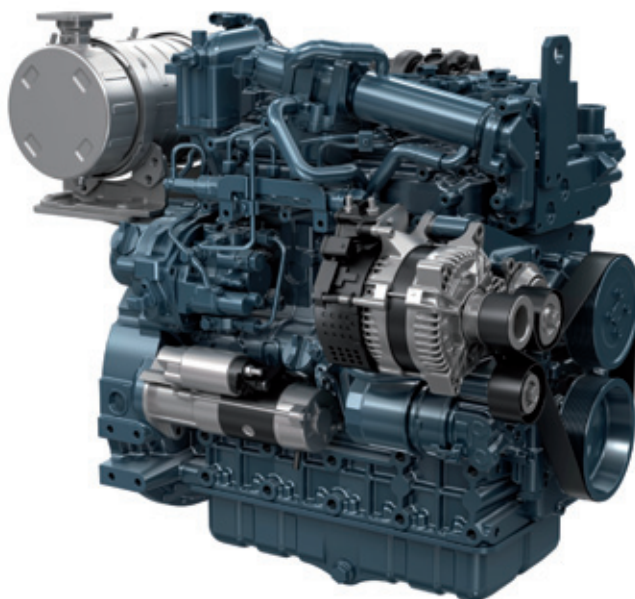
Over the last 60 years 36,000 L-Series engines have been hand-crafted in the engine workshops of Bentley's Crewe headquarters.

Source: Bentley Motors Ltd

System started with the 1.8 l engine and now it has expanded to a larger 3.3 l engine. The peripheral key components, such as DC-DC converter and 48V lithium-ion battery have also been enhanced.

"Kubota's Micro-Hybrid System allows for engine downsizing yet maintaining performance, productivity and efficiency," said Mr. Matsushita. "The enhancement of the lineup will provide benefits to more OEM customers and equipment users."

In addition to all the new engine products, Kubota Engine America also launched its service mobile application at CONEXPO-CON/AGG. The app can connect users to an engine service dealer, while



also providing product registration and a knowledge center with resources on maintenance schedules, operation manuals and warranty information.

Source: Kubota Engine America Corp.

Caterpillar Announces TH55 E70 & E90 Reman Transmission for Oil & Gas

Caterpillar Oil & Gas recently introduced the Cat® TH55 E70 and TH55 E90 Reman transmissions for use in Oil & Gas pressure pumping applications. With units available to order, customers can now purchase the well-known TH55 transmission through Cat Reman.

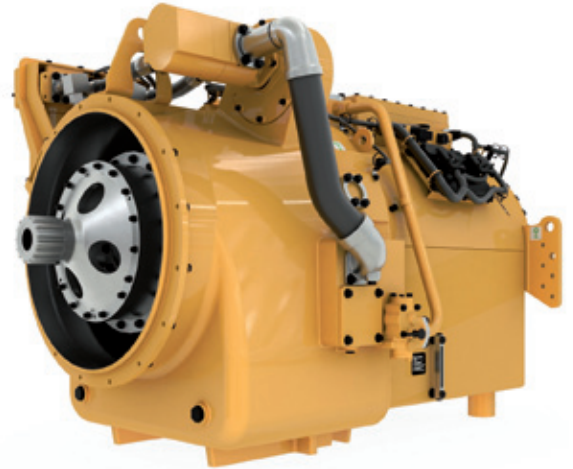
The TH55 transmission is known as the most powerful, longest-lasting transmission available for well service operations. By expanding this product offering into the Cat Reman product line, Caterpillar is offering customers the same great product at a lower price.

Since 1973, Cat Reman has helped Caterpillar, Cat dealers, and their customers succeed by offering high quality, lower-cost replacement parts remanufactured from genuine Cat components. Reman contributes to the business by bringing the value at the core of every Cat product back to life, so customers can reduce waste, lower their total cost of ownership, and get more

value from their investment. On average, Cat Reman parts cost 40% less than new parts, yet they have the same quality and standard Cat parts warranty.

Cat Reman and Caterpillar Oil & Gas focus on environmental practices to provide customers with valuable products.

Customers want engines and transmissions that are well matched. Rated at 3,300 hp, both models of the TH55 provide exceptional power, last four to five times longer than the competition, and are compatible for use with Cat 3512 engines. The 7-forward speed TH55 E70 has no reverse gears and a deep first gear ratio (6:25:1). For customers with the need for additional gear choices, the 9-forward speed TH55 E90 is a viable option, as this transmission provides power and can still maintain a first gear ratio deeper than any



competitor. Customers also have the flexibility to exchange a TH55 E70 transmission core for a TH55 E90 transmission.

Caterpillar Oil & Gas and Cat Reman look forward to providing customers with exceptional solutions through the Cat Reman product line.

Source: Caterpillar Inc.

Eaton Cummins Automated Transmission Technologies introduces All-New Endurant XD Heavy-Duty Transmission

Eaton Cummins Automated Transmission Technologies recently announced it is expanding its Endurant automated transmission lineup with the introduction of the all-new Endurant XD™ series.

The Eaton Cummins Endurant XD series are purpose-built, high-performance automated transmissions designed for on-highway applications with high gross combined weight ratings, such as double and triple trailer trucks, and severe-duty on/off-highway applications like dump and logging trucks.

The Endurant XD series has torque and horsepower capacity to cover all Class 8 North American engines, including the Cummins X15™. Endurant XD transmissions will be available starting in 2021.

"The DNA of the Endurant platform is efficiency, lightweight and low cost of ownership," said Charles Masters, general manager, Eaton Cummins Automated Transmission Technologies. "We've taken that DNA and added the durability and unique features that customers demand

from trucks operating in severe heavy haul and vocational applications to create the Endurant XD series."

Because reliability is critical for customers, the Endurant XD series is currently going through an extensive development testing program that puts the transmission through evaluations under extreme conditions.

The Endurant XD series has 18 forward speeds, making it highly versatile and allowing it to be utilized in many applications and driving scenarios. It is designed for ease of use, with impressive low-speed maneuverability, up to 6 reverse gears and optimized software that makes smart shift decisions to instill confidence in difficult conditions. The Endurant XD series features provisions for bottom 8-bolt and rear 4-bolt high-capacity power take-offs,



and a transmission oil cooler provision is available when required.

Eaton Cummins Automated Transmission Technologies is a 50/50 joint venture between Eaton and Cummins, Inc. The global joint venture produces industry-leading heavy-duty automated transmissions for the commercial vehicle market.

Source: Eaton Cummins Automated Transmission Technologies

Edelbrock Supercharger System Enhances Chevrolet Colorado and GMC Canyon Performance

Edelbrock recently announced the availability of a supercharger kit for 2017-2020 Chevy Colorado and GMC Canyon vehicles equipped with second-generation HFV6 engines. With this supercharger, owners will experience a 24% boost in horsepower, allowing for enhanced performance and an improved towing ability.

This bolt-on supercharger kit is designed to fit under the stock hood without the need for permanent modifications and provides a gain of 71 hp and 70 lb ft over stock. This increases this popular midsize truck's output to 345 hp and 306 lb ft of torque at the rear wheels. The unit features an Eaton R1740 rotor assembly with an integrated air-to-water intercooler core and front-mount heat exchanger, which allows for a low inlet air temperature and increased power.

Colorado and Canyon owners can be confident that they have received a quality product that will last. For this kit, Edelbrock

includes an industry-leading 3-year/36,000-mile (57,940 km) powertrain warranty. The self-contained oiling system allows for a 160,000-km service interval which limits unnecessary maintenance. Additionally, the supercharger kit is 50-State emissions legal under CARB EO D-215-113.

"Our Edelbrock Supercharger kits are easy-to-install, reliable and provide owners with substantial power to enhance daily driving and towing capabilities," said Don Barry, president and CEO of Edelbrock.

"This kit is part of a long line of innova-



tive products that represent the future of Edelbrock, and we are proud to provide this product for Colorado and Canyon owners."

Source: Edelbrock, LLC

Autocar DC™-64R Severe-Duty Conventional Refuse Truck Working Hard For WCA Waste

Autocar® recently announced the delivery of the first production model DC-64R conventional roll-off to WCA Waste Corporation of Houston, Texas.

In an unprecedented departure from refuse industry tradition, Autocar mounted the roll-off hoist body onto the DC chassis on the OEM production line. Autocar refers to this game-changing capability as the Power of One™ integration of the chassis and body.

"This is VIN number one, the first DC off our assembly line. It's not just a custom-engineered truck for WCA – we do those every day – but, for the first time ever, it was built with a roll-off hoist integrated on the same truck chassis assembly line right here in our Birmingham plant," reflected Eric Schwartz, Autocar Specialty Vehicle Group managing director, on the DC-64R development process and the significance of Power of One™ integration of the roll-off body.

Power of One™ offers abundant benefits to customers over the traditional body

mounting process which takes longer from order to delivery and may include post-production modifications. It is designed to protect the integrity of the OEM build, reduce production cycle time and achieve significant advances in safety and reliability by avoiding disassembly at the body builder.

In addition to the Ultimate Power of One™ a myriad of additional engineering innovations debuted on the DC-64R: ultra-high-strength 160,000 PSI steel frame rails and the new Always Up® digital display. Also, Autocar engineered in the recently launched Cummins X-12 light-weight engine package, power and torque exactly where you need it, coupled with



the bulletproof Allison 4700 transmission is the DC-64R right powertrain for this application.

The new DC-64 also represents the rebirth of Autocar's DC, first introduced by The Autocar Company in 1939 as its premier severe-duty and, for the time, revolutionary, diesel-powered work truck.

Source: Autocar, LLC

Link's 85K Air Link Tandem Drive Chassis Suspension Released to Fill Super-Heavy-Duty Niche

Link Mfg., Ltd. recently announced that its 85K Air Link Tandem Drive Chassis Suspension is now commercially available for select makes and models. Originally designed to meet the demands of the U.S. military, the 85K Air Link has been optimized for heavy vocational commercial applications and was revealed to the industry for the first time last March at CONEXPO-CON/AGG 2020.

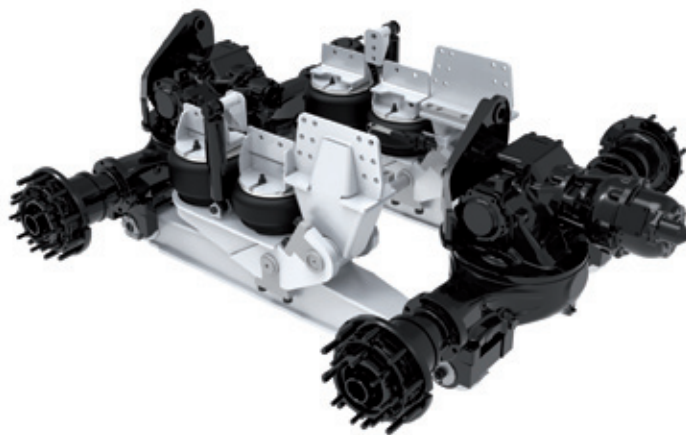
As North America's highest-capacity air spring suspension, Link's 85K Air Link Tandem Drive Chassis Suspension is designed with large, high-volume, low-frequency air springs that enable occupants to experience a consistently smooth and comfortable ride whether their vehicle is under load or empty. Dual height-control valves ensure that proper ride height and vehicle leveling are maintained, thus maximizing roll stability regardless of the weight and balance of a vehicle's cargo.

Link's revolutionary air-over-walking-

beam technology was patented close to 30 years ago and was originally designed to cope with extreme payloads and the rigors of harsh off-highway defense applications. Vastly superior to heavy-duty leaf spring, rubber block walking beam, 2-spring "6-rod" and trailing arm suspensions, the 85K Air Link Tandem Drive Chassis Suspension provides a smooth, comfortable, uncompromising ride.

"Link's 85K Air Link Tandem Drive Chassis Suspension has been optimized for select heavy vocational axles and will now

deliver Link's legendary ride quality at the highest capacity for any air spring suspension in North America," said Neil Mardell,



manager – defense programs and heavy vocational products for Link. "Not only is our 85K the highest-capacity tandem air spring suspension around, but because of

Volvo and Daimler Partner on Fuel Cells Production

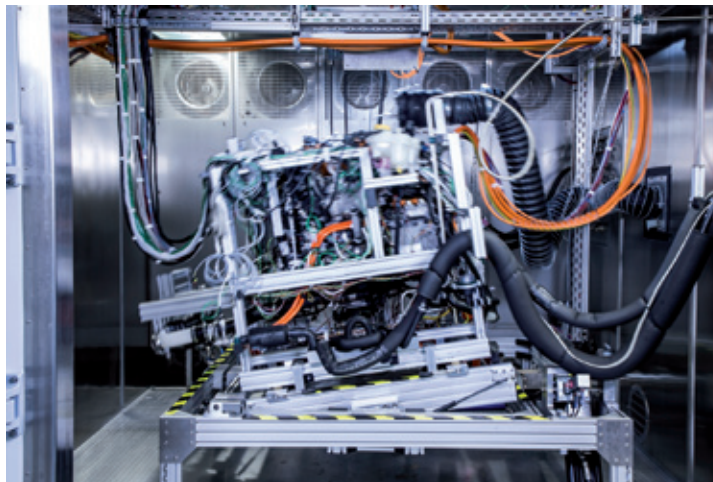
Sharing the Green Deal vision of sustainable transport and a carbon neutral Europe by 2050, Daimler Truck AG and the Volvo Group, have signed a preliminary non-binding agreement to establish a new joint venture. The intention is to develop, produce and commercialize fuel cell systems for heavy-duty vehicle applications and other uses. Daimler will consolidate all its current fuel cell activities in the joint venture. The Volvo Group will acquire 50% in the joint venture for the sum of approximately €0.6 billion (\$0.9 billion) on a cash and debt free basis.

"Transport and logistics keep the world moving, and the need for transport will continue to grow. Truly CO₂-neutral transport can be accomplished through electric drive trains with energy coming either from batteries or by converting hydrogen on board into electricity. For trucks to cope with heavy loads and long distances, fuel cells are one important answer and a technology where Daimler has built up significant expertise through its Mercedes-Benz fuel cell unit over the last 2 decades.

This joint initiative with the Volvo Group is a milestone in bringing fuel cell powered trucks and buses onto our roads," said Martin Daum, chairman of the Board of management Daimler Truck AG and member of the Board of management of Daimler AG.

"Electrification of road transport is a key element in delivering the so called Green Deal, a carbon neutral Europe and ultimately a carbon neutral world. Using hydrogen as a carrier of green electricity to power electric trucks in long-haul operations is one important part of the puzzle, and a complement to battery electric vehicles and renewable fuels. Combining the Volvo Group and Daimler's

experience in this area to accelerate the rate of development is good both for our customers and for society as a whole. By



forming this joint venture, we are clearly showing that we believe in hydrogen fuel cells for commercial vehicles. But for this vision to become reality, other companies and institutions also need to support and contribute to this development, not least in order to establish the fuel infrastructure

its air-over-walking-beam design, it's also one of the most resilient, able to continue functioning even if a loss of an air spring were to occur."

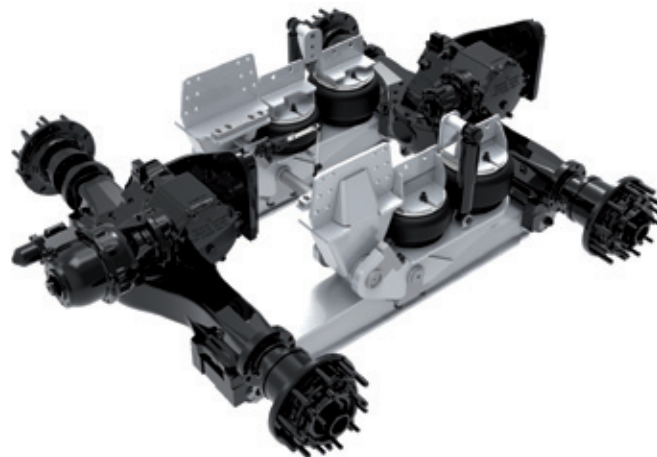
The system's ability to equally distribute weight, its high roll stability and its tractive superiority make operating on challenging off-highway terrain safer, more comfortable and ultimately more controlled. Like all Air Link suspensions, the 85K is 100% off-highway rated, designed to not only survive but thrive in punishing off-highway environments, and once wheel alignment is set on an Air Link, no future adjustments are required.

"With 3 times more roll stability than any other vocational air-ride suspension, the Air Link rides 4 times smoother than a conventional spring pack and 10 times smoother than a rubber block suspension," said Mr. Mardell. "The Air Link also offers users all the advantages of a combined air spring and walking beam suspen-

sion without all the downsides of more primitive steel or rubber walking beam suspensions."

All Air Link suspensions are treated with Link's exclusive Link-KOAT migratory self-healing metal treatment. Link-KOAT provides unparalleled corrosion resistance and rust protection, even when surfaces are exposed to excessive abrasion, harsh chemicals and other severe-duty environmental factors. The 85K Air Link Tandem Drive Chassis Suspension includes an extended 3-year warranty.

"Our 85K has been engineered to seamlessly interface with tier-one online installation processes," said Neil Mardell.



"The Air Link 85K has served its time in the military and is ready to do super-heavy duty in the commercial sector."

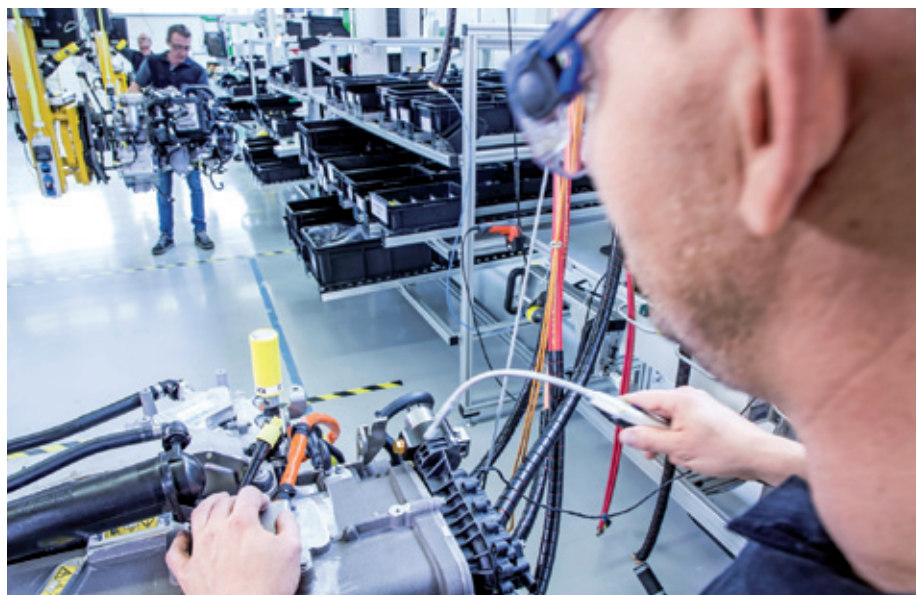
Source: Link Mfg., Ltd.

needed," said Martin Lundstedt, Volvo Group president and CEO.

The joint venture will operate as an independent and autonomous entity, with Daimler Truck AG and the Volvo Group continuing to be competitors in all other areas of business. Joining forces will decrease development costs for both companies and accelerate the market introduction of fuel cell systems in products used for heavy-duty transport and demanding long-haul applications. In the context of the current economic downturn cooperation has become even more necessary in order to meet the Green Deal objectives within a feasible time-frame.

The common goal is for both companies to offer heavy-duty vehicles with fuel cells for demanding long-haul applications in series production in the second half of the decade. In addition, other automotive and non-automotive use cases are also part of the new joint venture's scope.

To enable the joint venture, Daimler Trucks is bringing together all group-wide fuel cell activities in a new Daimler Truck



fuel cell unit. Part of this bundling of activities is the allocation of the operations of Mercedes-Benz Fuel Cell GmbH, which has longstanding experience in the development of fuel cell and hydrogen storage systems for various vehicle applications, to Daimler Truck AG.

The joint venture will include the operations in Nabern, Germany (currently headquarters of the Mercedes-Benz Fuel

Cell GmbH, with production facilities in Germany and Canada.

The signed preliminary agreement is non-binding. A final agreement is expected by Q3 and closing before year-end 2020. All potential transactions are subject to examination and approval by the responsible competition authorities.

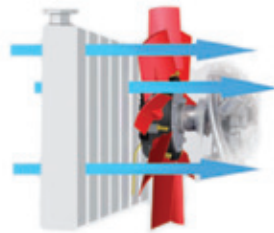
Source: Daimler AG, Volvo Group

Cleanfix Reversible Fans, A Solution to Your Radiator Plugging Issue

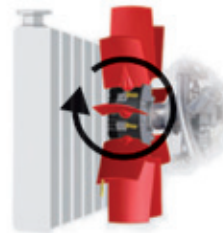
When you take into account the increasing thermal loads brought about by lower emissions diesel engines in the environments which heavy-duty OEM off-highway machines often work in, it is clear to see how cooling can be a challenge. A challenge not just in terms of having enough cooling capacity for effective, efficient heat transfer in engines and high flow hydraulic systems, but also in dealing with significant issues resulting from dirt, debris and other contaminants that can clog radiators, coolers and air intake screens. Airflow restriction caused by dirty or plugged coolers can result in a range of problems, everything from overheating of engines and powertrain components to higher fuel consumption and increased maintenance for the machine operator/owner. It can even result in less comfortable cabin conditions for machine operator as a plugged A/C condenser will reduce the efficiency or stop the A/C system from operating.

A major benefit is to have a Cleanfix Reversible fan installed on the engine or hydraulic fan drive. Cleanfix Reversible fans have been in production since 1998. They have been an OEM factory

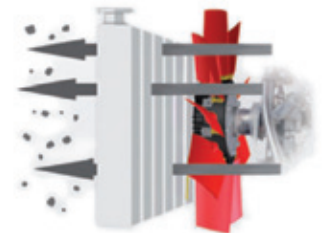
option for several years – amongst them: Case, New Holland, Fendt, Oxbo, Caterpillar, Flory, Komatsu forestry, and many others. The principle of radiator/cooler cleanout has remained the same since the beginning. The blades of the Cleanfix fans have a curvature which creates a high static pressure. When the fan



Cooling



Reversing at full-trottle



Cleaning

performs a cleanout, the blades rotate approximately 180° which changes the air direction and creates the same static pressure in the opposite direction.

Cleanfix offers air control and hydraulic control systems. For air-controlled fans, it can be tied into the onboard compressed air system of the machine. If there is no onboard compressed air system on the machine, a compressor can be used to control the fan. For hydraulic-controlled fans, it is tied into the machine's



POWERFUL

VERSATILE

RADIO-CONTROLLED

PRODUCTIVE

MERLO

THE ULTIMATE TELESCOPIC HANDLER

WE OPTIMIZE YOUR OPERATIONS

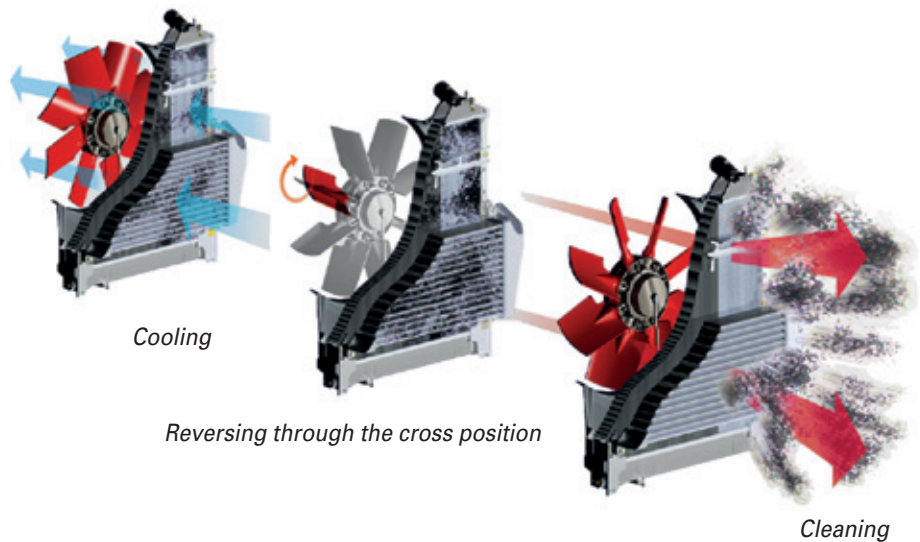
MANULIFT

1 877 641-8355

hydraulic pilot pressure circuit. Both of these control systems can be equipped with the Cleanfix timer module. The hydraulic Cleanfix fan has a patented smart seal design which prevents the chance of external hydraulic oil leakage from the fan.

In addition to the reversing function, Cleanfix offers a continuously variable blade angle adjustment. Blade angle is based on the temperature of the air passing through the radiator/cooler package. When air temperature is low, the blade angle is low, as air temperature increases, the blade angle increases. This reduces fuel consumption, because the power consumption of a fan depends on the angle of its blades. This is all performed without the need of complicated electronics. In a defined temperature range, Cleanfix automatically adjusts the angle of the blades in order to meet the cooling requirements of the engine at the minimum possible power draw. Variable pitch fans can also be used strictly to prevent overcooling in the cold months. When you have a variable pitch fan, the larger the fan diameter and/or the higher the fan rpm will result in a more significant fuel and horsepower savings.

Many heavy-duty OEM off-highway machines are operated and/or controlled by either viscous clutches or hydraulic motors. The fan RPM gets matched based on the cooling need of the ECU



and the temperature underneath the enclosure to better address cooling requirements. Contamination such as debris and/or clogged radiators increase the static pressure. A restriction of airflow due to contamination can be compensated with an increase of fan speed, but this costs power! Power which is required by the engine and power which costs fuel.

The viscous clutch, or the electronically-controlled hydraulic-motor will increase the fan speed automatically perhaps unnoticed (as long the temperature gauge is not in the red range) to the machine user.

Cleanfix offers the Pulstronic and Hytronic fans for machines requiring continuous OEM controlled cooling.

For OEM's requiring full ECU fan control for cooling and/or cleanout, Cleanfix offers a fan with hall effect sensor which communicates the fan position to the machine ECU.

Seasonal fans can be used on machines that require reverse airflow in cold months to prevent overcooling of the engine and hydraulic systems.

Fans can be specified with 12, 9, 8 and 4 blade arrangements, based on the cooling requirements, fan diameters and engine size. Fan diameter range from 350 mm to 1,300 mm.

Different fan blade types are available. From narrow blades to wide blades, fixed pitch blades, variable pitch blades, heavy-duty blades, puller and pusher blades.

Overheating damages engines, hydraulic, and hydrostatic systems. Even minor failures can put your machine down at the worst time, and major component failures can cause significant downtime and expense. Cleanfix Reversible fans eliminate tedious cleaning of cooling components. This ensures that critical machine cooling systems operate at their best, when working in the field and provides a substantial long term payback to the operating/maintenance costs of the machine.

Source: Cleanfix

CLEANFIX

Reversible Fans
For Radiator Cleaning

Improved Air
Conditioning

Increased
Horsepower

Less
Downtime

Toll Free 1-855-REV-FANS (1-855-738-3267)
Phone 519-275-2808 | www.cleanfix.org



Danfoss Powers a Fully-Electric Aircraft Pushback Tractor

A fully-electric aircraft pushback tractor, manufactured by Panus Assembly and powered by a Danfoss Editron drivetrain, is currently being trialed at a major international airport in Thailand. The project is part of the ongoing trend to electrify the aviation industry, including ground service equipment.

Direct emissions from the aviation industry account for more than 2% of global greenhouse gas emissions. Global annual aviation emissions are already approximately 70% higher than they were in 2005. Furthermore, the International Civil Aviation Organization predicts that, without the introduction of additional measures and new technologies, they could grow by greater than 300% further by 2050.

Panus Assembly Co., Ltd., based in Chonburi, Thailand, is a supplier of specialized cargo carriers, systems, services and logistics solutions. The company's electric aircraft pushback tractor has been ergonomically designed with a fully

composite cabin to provide operators with 360° visibility. Other features include robust business management and control systems to ensure safe operation, plus intelligent on-board diagnostics so maintenance needs can be handled remotely.

Danfoss Editron drivetrain system provides continuous power of 100 kW, with a maximum power of 200 kW and speed of 4,000 rpm. The Editron system has been designed to ensure maximum efficiencies, while the software-based approach allows for greater intelligent management of power distribution, delivering superior operational performance.



A prototype of the fully-electric aircraft pushback tractor is currently undergoing testing. It is anticipated that 60 of the machines entering operation will save 6,000 t/y of CO₂ compared to current diesel alternatives.

"Airlines, ground service operators and airports can do something positive during

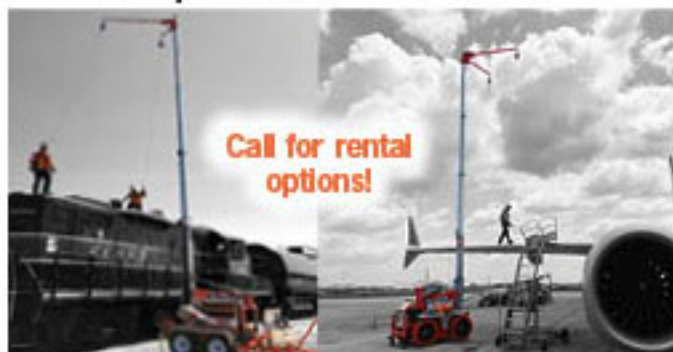
ATTACH YOUR LANYARD

ALWAYS ATTACH THE LANYARD IN BOOM TYPE MACHINES

IPAE
THE WORLD'S LEADING IN PERSONAL PROTECTION
Specialized Personal Protection Equipment for the Construction Industry

EXOSPHERE ANCHOR

- No tripping hazard
- Tied off from the ground up
- Increase productivity
- Set up in less than 5 minutes
- Rescue capabilities
- Up to 40ft tall with 94in offset



Manufactured by:

TUFF BUILT
PRODUCTS INC.

Scan the QR Code for videos and more information or visit our website!



Tel: 1-204-222-4025

www.tuffbuiltproducts.com



the current reduced demand for air travel by trialing new, innovative sustainable technology that can be introduced when demand increases again," commented David Hunter, Danfoss Editron's Business Development director for Asia-Pacific and Australasia. "There is no better time to test new equipment and put electrification into practice as there are more free air slots, less congested pushback times and idle aircraft. Airports can come out of this downturn with reduced operating costs and much-improved emission reduction policies and targets."

"This machine is reflective of the way the ground service equipment industry is changing. The automotive sector is moving to electric and the airport tractor segment is going the same way, with many airports and countries pushing for the introduction of green technology," said Bernard Dubois, Product and Business Development Director at Panus Assembly. "This fully-electric pushback tractor will boast a wide range

of benefits for those that order it, including low operating costs and reduced maintenance needs. The fact that it is a Thai company blazing a trail with this machine – rather than a European or American one – is a first too."

Danfoss Editron specializes in hybrid and electric powertrain systems for off-highway and marine markets. A business division of Danfoss, it develops and manufactures high-performance, Editron power systems for heavy duty vehicles, machines and marine vessels, based on its unique synchronous reluctance assisted permanent magnet (SRPM) technology.

Source: Danfoss Editron

23 years on the web!

Looking for more stories? Visit
www.infrastructures.com

Kenworth T880S with Set-Forward Axle Adds Optional Fixed Grille

The Kenworth T880S with set-forward front axle has added a new fixed grille option.

A radiator-mounted grille is now available for the T880S equipped with the 114-inch BBC short hood. The new option allows the hood to be opened in applications where equipment is mounted to the front of the T880S.

"The fixed grille is an excellent option for truck operators who use the Kenworth T880S as snowplows, cranes, vacuum trucks or other applications that require equipment mounted in front of the hood," said Laura Bloch, Kenworth assistant general manager for sales and marketing.

The T880S is offered with a set-forward front axle ranging from 6,622 kg to 10,341 kg, and is standard with the PACCAR MX-13 engine with up to 510 hp and 1,850 lb ft of torque. For weight-sensitive applications, the 10.8-l PACCAR MX-11 engine is 180 kg lighter than larger displacement engines, and provides up to 430 hp and 1,650 lb ft of torque.

The Kenworth T880S offers low operating cost, excellent performance and productivity, and outstanding driver comfort.

Source: Kenworth Truck Company



YANMAR Delivers Engines for Life-Saving Pumps in Algeria

Shortly after the launch of YANMAR's distributor network in North Africa, the first major successes were already achieved. At the end of 2019, an order for 285 YANMAR engines was shipped to SARL ALPHAS, a pump manufacturer and hydromechanical equipment supplier, in Algeria.

YANMAR is very active in the African market developing opportunities for its



products and services with a dedicated network of distributors and OEM partners.

The YANMAR 3TNV70-AVG engines were installed in water pumps for Civil Protection to pump out water due to flooding, which is common in Algeria all year round, especially in autumn and winter. The floods take a toll on human lives every year and are a serious disruption of public life.

The 854 cm³, 4-cylinder, engines belong to the TNV range of water-cooled engines which comply with strict emission regulations while also satisfying customer demand for performance such as power, fuel consumption, and work efficiency thanks to an advanced direct injection technology and have a maximum output of 17 kW (22.8 hp) at 3,600 rpm.

With beginnings in Osaka, Japan, in 1912, YANMAR was the first ever to succeed in making a compact diesel engine of a practical size in 1933. Moving on, with diesel engines as the cornerstone of the enterprise, YANMAR has continued to expand its product range, services, and expertise to deliver total solutions as an equipment manufacturer.

Source: YANMAR Europe BV

Intercomp LS630-WIM™ Keeps Weight of Australian Haulers in Check

In 2018, Australia's National Heavy Vehicle Regulator Law, was amended to provide that every party in the heavy vehicle transport supply chain has a duty to ensure the safety of their transport activities. The Chain of Responsibility (CoR) law holds organizations that utilize or contract commercial vehicles responsible for the breaches of road transport law. When an organization hires a transportation company, the vehicle owner and client share responsibility for any violation that occurs.

Fleet Plant Hire, a Melbourne-based civil plant hire logistics company, needed to find an efficient way to ensure vehicles leaving excavation worksites comply with axle weight restrictions.

"Among our competitors, we are currently the only company offering on-site weight monitoring of our vehicles, safeguarding our clients from potential citation fees," said Garry Higgs, Fleet Plant Hire Business Development. "Intercomp's LS630-WIM™ Portable Weigh-In-Motion system was the most attractive option due to the quick deployment time, increased efficiency while weighing vehicles and flexibility to set up weighing locations where full-length systems cannot fit."



Fleet Plant Hire provides excavating and material removal services for a variety of projects. The company needed a weighing solution due to involvement in the Metro Tunnel project to expand rail access for Melbourne and its surrounding communities. Since mid-2018, Fleet Plant Hire ordered several LS630-WIM™ systems to ensure road haulage vehicles loaded with excavated material leaving Metro Tunnel sites are within legal weight limits. In order for Fleet Plant Hire to be part of the project, government planners stipulated Fleet Plant Hire must follow all relevant heavy vehicle regulations, including the new CoR rules.



ACCESSORIES MACHINERY LIMITED
Phone: 1-800-461-1979
Fax: 1-877-544-5030 • Internet: www.aolamtl.com



BUCHER schörfling
 Full-Size and Compact Vacuum Sweepers
 From 1 to 10 m³

**USED STREET SWEEPERS
 VACUUM OR MECHANICAL
www.usedsweeper.co**

SWEEPERS AVAILABLE FOR RENT



- Replacement Parts for Most Makes of Sweepers
- Street Sweeping Brushes
- Weed Brushes




BRING ON THE BRAWN
READY, CONNECT, SWEEP





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

Work Truck Show Electrified for Its 20th Anniversary

Among the most important features of the Intercomp system was its portability, efficient throughput and small footprint when deployed. Employees working the scales can quickly re-deploy the system allowing scales to be available exactly where and when needed. The space requirements of an alternative system made placement at a jobsite impossible, but could also delay truck traffic due to the system's inability to weigh dynamically. An off-site location was the only solution to the space issue, but that would require un-weighed trucks to travel on public roads and expose those involved in the project to possible commercial vehicle citations.

Fleet Plant Hire further benefited from weight compliance by ensuring all vehicles were close to their respective gross vehicle weight rating (GVWR). This also results in fewer vehicles needed to fulfil the obligations to relocate excavated material. The company also found that they were able to offer clients protection from fines and citations not offered by competitors.

Source: Intercomp

Looking for a supplier's website?
Visit www.infrastructures.com

EQUIPMENT FOR CRACK SEALING & ASPHALT REPAIRS
Sale and Rental (day, week, month)

CIMLINE

K-M INTERNATIONAL

Marathon Equipment Inc.

MANY NEW & USED UNITS IN STOCK
visit www.insta-mix.com to view our inventory

COMMERCIAL PAVERS **ASPHALT DISTRIBUTORS** **MOTOR GRADERS**

INSTA-MIX

Distributor for Ontario and Quebec:
1-866-643-4849 • 905-807-1649 • 514-643-4649
www.insta-mix.com

The atmosphere at The Work Truck Show 2020 was electric — and not just because it was the show's 20th anniversary. Electrification was a major theme of the event, as the commercial vehicle industry gathered for what has become the annual launching pad for new vocational trucks, vans, chassis, engines, bodies and equipment. Work Truck Week took place in March in Indianapolis, Indiana.

At the Show, Ford Commercial Vehicles announced its new all-electric Transit, XL Fleet introduced 2 new hybrid electric Chevrolet Silverado options, Morgan Olson unveiled its new Storm Class 2 step-van with both gasoline and electric powertrains, Motiv showcased its F-59 electrified chassis, Workhorse debuted its C650 all-electric step van, and Proterra and Freightliner Custom Chassis Corporation displayed their new MT50e all-electric delivery truck chassis.

In other sustainability news, Cummins announced the Cummins Westport B6.7N natural gas engine was recently certified to meet the optional Low NOx standard of 0.02 g/bhp-hr, which makes it "near zero" certified. Go Power! introduced a solar-powered auxiliary power system, Dynamo Solar Generator, enabling customers to run equipment without generators or idling. And Isuzu revealed 2 new "efficient and eco-friendly" gasoline engines for its N-Series trucks.

Other products debuting at the Show ranged from equipment and accessories like an available new Digital Rearview Mirror on 2021 Ram ProMaster and ASA Electronics' Voyager auto-calibrating 360° camera system, to full-size trucks like the new Crane Carrier Company Low Narrow Tilt Signature Chassis designed to be easier to maneuver through tight city alleys and the Mack MD Series of FET-exempt medium-duty trucks.

The Work Truck Show will return to Indiana Convention Center March 9-12, 2021.

Source: NTEA – The Association for the Work Truck Industry





Trottex Transit Inc.
Specialized Transport CAN • U.S.
CAN # 8-Q-300501 • US EIN # 08-0508750
Move your Equipment Easily & Efficiently
Transport of Industrial Equipment & Oversized Loads
Services adapted to your needs: Anyway, Anytime, Anywhere
From the U.S. to CANADA or CANADA to the U.S.
STEP DECKS • 3 AXLES • DOUBLE DROP DECK • RGN • DRY VAN
Quebec • Ontario • Atlantic Provinces • Western Canada • United States
Phone: 450-887-7727
francine@trottextranet.com



Francine Tremblay



CAF
FILTRATION/PRESSURIZATION SYSTEMS
"WE CLEAN THE AIR YOU BREATHE"
MEETS EN 15695 in qualifying cab
CLEAN AIR FILTER
CAF@CLEANAIRFILTER.COM
1-712-748-3642
LOUIS BELANGER
LMB@CGOCABLE.CA
1-819-818-2848



Canada's Equipment Magazine • 134 magazine • 17 equipment in Canada
Facebook
InfraStructures magazine
Extra content that you may well find interesting...
Content that you will not find elsewhere!
<https://www.facebook.com/InfraStructuresMagazine/>

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..... ✂

Name: _____
Title: _____
Company: _____
Mailing address: _____
City: _____
Province / Postal Code: _____
Phone: _____
Fax: _____
Website: _____
E-mail: _____

Agenda

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

Hannover Messe

Cancelled
Hannover, Germany

Expo Grands Travaux

Postponed
Saint-Hyacinthe, QC Canada

CIM 2020 Convention

Cancelled
Vancouver, BC Canada

IFAT 2020

Cancelled
Munich, Germany

WasteExpo 2020

Cancelled
New Orleans, LA, USA

APOM Technical Day

Cancelled
Drummondville, QC Canada

AORS Municipal Public Works Trade Show

Cancelled
Barrie, ON Canada

The BIG Event Canadian Mining Expo 2020

Postponed
Timmins, ON Canada

Svenska Maskinmässan

Cancelled
Stockholm, Sweden

5th International Rental Exhibition (IRE) / APEX access show

Rescheduled to June 15-17, 2021
Maastricht, the Netherlands

Hillhead 2020

Rescheduled to June 22-24, 2021
Buxton, Derbyshire, UK

steinexpo

Postponed
Homburg/Nieder-Offeiden, Germany

steinexpo

Intermat ASEAN

September 9-11, 2020
Bangkok, Thailand

APOM Technical Day

September 17, 2020
Saint-Zotique, QC Canada

InnoTrans 2020

September 22-25, 2020
Berlin, Germany

MINExpo 2020

Postponed
Las Vegas, NV USA

Intermat INDIA

Rescheduled to March 4-6, 2021
Mumbai, India

bauma CHINA

November 24-27, 2020
Shanghai, China

inter airport south east asia

February 24-26, 2021
Singapore

**inter
airport**
south east asia

Work Truck Show

March 9-12, 2021
Indianapolis, IN USA

INTERMAT Paris

April 19-24, 2021
Paris, France

INTERMAT

Appointments

Nikki Lannert has been promoted to Customer Service manager at **Hatz Diesel of North America, Inc.** Ms. Lannert is part of a worldwide team of customer service professionals working to bring Hatz customers superior service. Her experience and leadership will bring a new emphasis on the customer experience.



Established more than 140 years ago, Motorenfabrik Hatz GmbH & Co. KG has become a globally renowned and valued engine manufacturer and technical service provider of industrial diesel engines. Established in 1978, Hatz Diesel of North America has been active in all sectors of the industrial engine market.

Source: Hatz Diesel of North America, Inc.

Kohler Co. recently announced that **Brian Melka** has been named Group President – Power. He reports to David Kohler, president & CEO. Prior to this appointment, he served as president – Engines since February 2019.



As Group President, Mr. Melka will provide full-scope strategic and operational leadership and will be responsible for accelerating growth and profitability of the global Power Group businesses:

Power Systems, Kohler Engines, Clarke Energy and Kohler Uninterruptible Power.

Brian Melka joined Kohler Co. in 2013 as vice president – Kohler Engines Americas, where he delivered consistent results and the best run of profitable growth in the history of the Engines business. In his most recent role, he oversaw leadership of the global engines business which includes Engines Americas, Engines China and Engines EMEA, and executed strategic plans for both the gasoline and diesel markets. Mr. Melka brings a passion for winning and building high performing teams. Prior to Kohler, he held senior leadership roles with Rexnord, Inc. and Textron, Inc.

Source: Kohler Co.

Heléne Mellquist has been appointed president of **Volvo Penta** and member of the Volvo Group Management Team. She is currently president for the European Division of Volvo Trucks. She began her career at the Volvo Group in 1988 and has held many senior positions at the company, as well as being the CEO at TransAtlantic AB between 2012-2015. Ms. Mellquist will replace Björn Ingemansson, who after a long and successful career at the Volvo Group, will retire in September 2020.



Source: Volvo Penta

**Advertise
your equipment
from \$75 plus tax**

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

High Dump single engine mechanical sweeper

MOBIL/ATHEY mounted on 2000 Freightliner FL70 chassis, Cat 3126, Allison, 2-speed rear axle, 98,000 miles, 10,623 hrs, stainless steel hopper. Stock B69309 Price: P.O.R. Accessories Machinery Ltd 1-800-461-1979

NATIONAL 900A 26 t crane mounted on a 2013 WESTERN STAR, only 6500 hrs certified, very clean Super Equipment Inc. patrick@superequipment.com Patrick Tremblay Phone: 514-237-6281

OSA Demolition Equipment HYDRAULIC ROTATING PULVERIZERS manufactured with Hardox 400, hydraulic 360° rotation. Crushers 4 Sale Ltd paul@crushers4sale.com Phone: +44 (0) 7710 058 066

WORLDWIDE SHIPPING ARRANGED

2016 Finlay I-110 RS Impactor, ±3,784 hours The machine is in excellent working order. Available for immediate sale/dispatch. Stock ID: TER-28 Price: P.O.R. Crusher Exports Phone: +44 7515 576 103

2001 JOHNSTON 610 vacuum sweeper, mounted on Freightliner FC70 cab over chassis. Stock: H39469 Price: P.O.R. Accessories Machinery Ltd Phone: 1-800-461-1979

2012 TEREX RT780 80 t crane, only 6,000 hrs, very clean, ready to work. MANY OTHERS IN STOCK! Super Equipment Inc. patrick@superequipment.com Patrick Tremblay Phone: 514-237-6281



PERFORMANCE PASSION INNOVATION



MUNICIPALITY | CONTRACTOR | AIRPORT | SKI RESORT

**OUR
MODELS**

D25

D30

D35

D40

D45

D50

D55

D60

D65

D77

D87

D97

T60

T70

T80

T85

T95

FB

www.jalarue.com