TOUGH SEASON AHEAD? WE WOULDN’T HAVE IT ANY OTHER WAY.

Exceptional comfort and an easy to maintain Kubota Tier IV Diesel engine combine for an impressive piece of equipment in Kubota’s SSV Series. New side lights expand the operator’s visibility on the job site, and the roll up door and wide operator area make for a more alert and productive work environment during those long all-day jobs. But best of all, our SSV Series are easy to maintain, so you can focus on your job site, not on your equipment.
A Brief Word...

Last November, I mentioned how the 1914-1918 War led to much of the technology we use in this industry every day.

This month we commemorate the 75th Anniversary of the Allied landings in Normandy. Again, there is much that lingers in the DNA of our equipment from that period.

Like Ike, let’s hope the weather improves so our missions can progress. InfraStructures will bring all the up-to-date intel to help you maintain command and control over the jobsite.

Hoping by the time you read this the elusive summer may have arrived.

See you on the beach,
MARINDUSTRIAL AND DAC APPOINTED JCB POWER SYSTEMS DISTRIBUTOR FOR EASTERN CANADA

Effective May 1st, 2019, MarIndustrial and DAC Industrial Engines have signed a strategic agreement with JCB Power Systems for the distribution rights to sell and service JCB industrial engines in Eastern Canada (MarIndustrial for Quebec and Ontario and DAC for the Atlantic provinces).

Founded in 1945, JCB has production plants on 4 continents. JCB Power Systems released their own engine for sale to independent OEMs with the production of the JCB DieselMax in 2004. The Tier 4 final-certified EcoMax series is covering a power range from 74 to 173 hp, with 4 cylinder engines offered in 3.0 l, 4.4 l and 4.8 l displacements.

JCB’s 74 hp engines (3.0 l and 4.4 l) require no after-treatment system. A compact and highly efficient SCR system is fitted to the 90 hp to 173 hp (4.4 l and 4.8 l) engines. No diesel oxidation catalyst (DOC) and no diesel particulate filter (DPF) – hence no regeneration – is required. The innovative “one can solution” provides compact and innovative technologic solution to OEMs.

“In addition to representing HATZ Diesel and DEUTZ, we are excited about the addition of JCB Power System - EcoMax series industrial engines to our portfolio”, said Éric Nadeau, president of MarIndustrial and DAC Industrial Engines. “It will provide a new solution with a simplified after-treatment system to original equipment manufacturers in Eastern Canada.”

JCB Power Systems engines are used in JCB equipment, Johnston Sweepers and Godwin Pumps, among others. The JCB Dieselmax streamliner holds the land speed record for diesel-powered vehicles.

Source: MarIndustrial Inc.

PROVENTIA TO SUPPLY EXHAUST AFTER-TREATMENT SYSTEMS TO KOHLER

Proventia, a Finnish-based emission and testing technology company, recently announced that engine manufacturer Kohler has selected Proventia as a development partner and supplier for exhaust after-treatment systems used in Kohler Stage V engines.

The collaboration includes the development and manufacturing of EU Stage V compliant exhaust systems for the new Kohler KDI3404 engines in the 105 kW (140 hp) power range. The Stage V emission standard comes into force in this engine category in January 2020, limiting not only the nitrogen oxides (NOx) and overall mass of particulate matter (PM) in the exhaust gas but also the number of particles (PN). Proventia develops, designs, tests and supplies complete Stage V compliant exhaust after-treatment systems for Kohler engines. Systems include emission control technologies such as diesel oxidation catalyst (DOC), diesel particulate filter (DPF) and selective catalytic reduction (SCR) technologies, as well as thermal insulation components. The Kohler 105 kW engines are used, for instance, in agricultural and construction equipment, as well as industrial gensets, and the exhaust systems must meet the mechanical, operational and durability requirements of both mobile and stationary applications.

“The systems used by Kohler for
after-treatment operations represent the state-of-the-art in the technology currently available on the market. Thanks to the all-in-one configuration, manufacturers will be able to make best use of small footprints during the installation due to the very compact design of Kohler engines. In addition, the regeneration will be totally transparent to the end user, thus ensuring high levels of productivity and efficiency for the entire machine,” declared Massimiliano Bonanni, Kohler Engineering director.

“Kohler is a world-renowned manufacturer of engines, and we are pleased that they have chosen Proventia as their Stage V emission partner for 105 KW engines. We will do everything to ensure the project is a success and leads to new cooperation and business opportunities between Proventia and Kohler in the future,” said Jari Lotvonen, president & CEO, Proventia Group.

Source: Proventia Oy

MERITOR TO ACQUIRE AXLETECH

Meritor, Inc. recently announced that it has entered into an agreement with an affiliate of The Carlyle Group, a global investment firm, under which Meritor will acquire AxleTech for approximately US$175 million ($235 million) in cash, adjusted for changes in working capital at closing and subject to regulatory approvals and customary closing conditions.

The transaction advances Meritor’s M2022 objectives to accelerate global sales and growth by leveraging the company’s core competencies to grow strategically in adjacent markets. The addition of AxleTech enhances Meritor’s growth platform, bringing a highly complementary global product portfolio across the off-highway, defense, specialty and aftermarket segments. AxleTech’s offerings include a full product line of independent suspensions, axles, braking solutions and drivetrain components. These capabilities will enable Meritor to offer global customers a wider array of differentiated products and solutions while further diversifying the company’s portfolio.

Headquartered in Troy, Michigan, AxleTech is a privately-held leading technology company that designs, engineers, manufactures, sells and services drivetrain systems and components, with a focus on off-highway applications.

“We are delighted to welcome AxleTech back to the Meritor family. The addition of AxleTech is a compelling value-creating opportunity to broaden our position in attractive, adjacent markets and advances our M2022 strategy,” said Jay Craig, Meritor CEO and president. “Meritor’s technical expertise, operational excellence and proven track record will be a powerful platform to accelerate growth. Our product portfolios are highly complementary and we share a commitment to our people and customers. We look forward to realizing the full benefits of the transaction by serving as a premier supplier to our global customers and enhancing shareholder value.”

“AxleTech has positioned itself as a strong, advanced drivetrain solutions manufacturer in the off-highway and defense market segments. These solutions range from heavy-duty axles to new remanufacturing capabilities and electric powertrain systems for our global customer base,”
Volvo CE Opens Parts Distribution Center in Canada

Volvo Construction Equipment (Volvo CE) has opened a new parts distribution center in Toronto, Ontario, to better serve its customers in the country. The new facility is part of the company’s strategy to ensure the highest uptime in the industry, as it cuts parts delivery time and enables dealers to restock both common and business-critical parts much faster.

The Canadian distribution center increases the company’s distribution footprint and reinforces Volvo CE’s best-in-class customer experience initiative. With the new center, Volvo CE will be able to deliver critical parts the next day after an order is placed to dealers in most major markets across Canada.

“We’re very excited with the opening of this modern, efficient parts distribution center, which is part of our strategy to improve uptime not only in Canada, but across North America,” said Stephen Roy, president, Sales Region Americas. “It shows Volvo CE’s commitment to provide our customers with premium machines and premium aftersales services.”

Volvo CE dealers in Canada foresee huge benefits to having a distribution center based in the country. Prior to the opening of the center, the company shipped all parts to its Canadian dealers from the U.S. This entailed processing through customs, which could cause delays in delivery and increase machine idle time.

“This Canadian parts distribution facility gives our Strongco customers improved access to critical Volvo OEM parts inventory on this side of the border,” said Oliver Nachevski, vice president and COO for Strongco, a Volvo CE Canadian dealer. “This is a very exciting initiative, as both Strongco and our customers will benefit from enhanced parts availability, which enables us to offer next day express delivery capabilities.”

Volvo is making impactful strides to help deliver industry-best parts service to its customers. In 2018, the company opened a 92,903 m² distribution center in Byhalia, Mississippi, in addition to other parts distribution centers in Columbus, Ohio, and in Reno, Nevada.

Volvo Group Service Market Logistics operates the new parts distribution center, which will not only provide parts for Volvo CE dealers, but will also provide parts for Volvo’s other business areas, such as Volvo Trucks. The new distribution center, which is 16,815 m², replaced a regional parts depot in Toronto.

Source: Volvo Construction Equipment

AxleTech will operate within Meritor’s Aftermarket, Industrial and Trailer segment. The transaction is currently expected to close in the 4th fiscal quarter, subject to regulatory approvals and customary closing conditions.

Source: Meritor, Inc.

HYUNDAI CE AMERICAS SECURES STATUS AS SOURCEWELL-APPROVED PROVIDER

Hyundai Construction Equipment Americas recently announced it has been awarded a contract for procurement of construction equipment and accessories by Sourcewell, a national cooperative representing more than 50,000 American and Canadian government, education and nonprofit organizations.

Sourcewell awards competitively solicited cooperative contracts which its members can use to order and purchase equipment and services across a wide range of categories. Under the heavy construction equipment contract, Hyundai facilitates transactions with Sourcewell members through its North American network of authorized Hyundai Construction Equipment dealerships. Hyundai offers Sourcewell members guaranteed machine and accessory pricing. Hyundai authorized dealers provide customers with machine prep, delivery, service and warranty-covered repairs.

“Sourcewell is excited to unveil our newly awarded vendors in our heavy construction equipment category,” said Scott Carr, Sourcewell’s contract administration supervisor. “We have a robust set of construction equipment solutions to meet our members’ unique needs while saving them time and money.”

“Under Sourcewell’s heavy construction equipment contract, Hyundai will enjoy awarded vendor status with a large and diverse market of government and educational customers for our full line of excavators, wheel loaders, compaction rollers, breakers and components,” said Tom Owen, vice president, National Construction Equipment Sales, Hyundai Construction Equipment Americas. “Sourcewell helps its members – our customers – save time and money through its contract purchasing solutions. We look forward to serving the needs of Sourcewell member organizations across U.S. and Canada.”

Hyundai and its dealer network will provide Sourcewell and its members product, technical and operational training, including corporate-based training for large groups, onsite training at customer locations, and online training via webinars and links to training programs, including technical and operational subject matter.

Source: Hyundai Construction Equipment Americas

ACROW BRIDGE AND MABEY BRIDGE JOIN FORCES

Acrow Bridge, a leading international bridge engineering and supply company,
Movax® SG-75V
Variable Moment

Welcome to the Next Level!

Ideal Choice when Working in Urban Areas, or near Historical Buildings or in any Sensitive Environment

SG(V) Models Cause Less Noise and are Faster and more Comfortable to use

Minimized Disturbance to the Surrounding Environment and Structures

Resonance-Free Start-up & Shut Down

High Frequency Vibratory Pile Drivers

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Hercules Machinery Corporation
Manufacturer and Supplier of Foundation Equipment

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recently announced it has completed the acquisition of the assets and employees of UK-based Mabey Bridge. The combination results in a prominent global provider with unsurpassed critical mass and a team with the ability to offer more extensive premium quality infrastructure solutions to customers. Located in Lydney, England, Mabey Bridge is a subsidiary of Mabey Holdings, Ltd, a 4th-generation family-owned global bridge and engineering services group. Both firms will continue to operate under their own brands. Financial terms of the deal are not being disclosed.

Specializing in accelerated construction, pre-engineered modular bridging solutions that help develop, improve and repair essential infrastructure in urban and rural areas, Acrow and Mabey have shared a similar mission in the industry. Uniting the companies provides customers with solutions that are based on a more expansive global reach, enhanced manufacturing capabilities, a larger product portfolio, more access to commercial and governmental banking solutions that provide flexible and innovative project financing, and a wide-ranging talent pool of engineers, production, and commercial team members all working to the success of customers’ projects.

“Mabey is a business that we have long thought would be an outstanding fit with Acrow,” said Bill Killeen, Acrow CEO. “We have great respect for Mabey and the strong business its team has built, and we are excited to bring together the immense-ly talented Acrow and Mabey teams from around the globe to drive our businesses to new strata of success.”

Source: Acrow Bridge

SANY CAPITAL USA IMPLEMENTS IDS-CLOUD
SANY Capital USA (a subsidiary of SANY Group) recently selected IDS for its IDScloud platform for asset finance. SANY, the 5th largest heavy equipment manufacturer globally, selected IDScloud based on both the functional strength of the solution and the ability to move quickly from their existing asset finance accounting system. With IDScloud, SANY now has the ability to streamline portfolio management operations, respond to new market opportunities, and accelerate their business plans.

“We needed to move quickly to ensure we had the right system in place to support our aggressive growth goals,” stated Dean Waters, president of SANY Capital USA. “After looking at our options, IDScloud was the only system which met our functional needs, both now and as we expand, and could deploy quickly. Now that we are live, the IDS team provides ongoing comprehensive management of the system allowing my team to focus on what we do best – growing our business.”

“The strength of IDScloud is its ability to support the entire spectrum of asset and equipment financing firms, including high-growth companies like SANY,” commented David Hamilton, IDS CEO. “We value the opportunity to partner with SANY to quickly migrate their portfolio to our SaaS solution and to provide them with a system designed to scale with their business. Implementing SANY in just 10 weeks demonstrates the power of the IDScloud platform and our ability to provide unparal-
leded time-to-value to our customers.”

IDScloud is a 100% SaaS solution which offers the full capability of IDS’ market leading Rapport origination and InfoLease portfolio management solutions along with integrations to an ecosystem of leading third-party services including credit bureaus, e-signature, CRM, sales tax, insurance and payments. In addition to onboarding new customers in a short amount of time, the solution is highly configurable and allows customers to adapt quickly to changing sales and servicing needs in their front, middle and back office. IDScloud provides comprehensive support for a full range of asset classes, deal sizes and deal types. With IDScloud, customers only pay for what they use, enabling the solution to scale in line with customer growth and as their business requirements change.

Source: SANY Capital USA

SANY CAPITAL USA NAMES LEAF AS FINANCING PARTNER

LEAF Commercial Capital, Inc., a subsidiary of People’s United Bank, N.A., recently announced that it was chosen by SANY Capital USA, Inc. as its financing partner.

SANY Capital USA, Inc. is the finance unit of SANY America, Inc., a company manufacturing, selling and supporting construction and material handling equipment. With this partnership, SANY will simplify the equipment acquisition process and support increased sales.

“SANY’s selection of LEAF was in large part due to the way our award-winning technology platform and professional marketing capabilities complement our leading equipment finance offering,” said Joe Banister, LEAF vice president of Business Development and Program Management. “As SANY’s financing partner, we look forward to working closely with its dealer network to streamline sales and support the outstanding reputation SANY has built in the marketplace.”

“We’re excited to make LEAF’s customizable, affordable financing options available through SANY Capital,” said Dean Waters, President of SANY Capital USA, Inc. “Leveraging LEAF’s expertise, technology and programs, we look forward to helping our valued dealers further strengthen customer relationships, capture market share, and grow their businesses.”

Source: LEAF Commercial Capital, Inc.

NORTH AMERICA’S LARGEST LINEAR FRIC- TION WELDER NOW OPERATIONAL AT LIFT

The first and only linear friction welder capable of full-sized part development in North America is now fully operational and ready for project work at LIFT – Lightweight Innovations for Tomorrow, a national manufacturing innovation facility operated by the American Lightweight Materials Innovation Institute, in Detroit, Michigan.

The friction welder, built and installed by the global leaders in friction welding, Manufacturing Technology, Inc. (MTI), has the largest tooling capacity of any linear friction welder in the world – the LF35-75 measures 6.7 m x 2.4 m x 4.3 m and weighs 61 t. This allows for the production of the largest full-scale parts available. Previously, companies interested in using a linear friction welder of this scope would have to travel to Europe. Currently, linear friction welding

Weland at Hannover Messe

This year, Sweden was the partner country of the world’s leading and largest industrial trade fair, in Hannover 2019.

“Weland Solutions and Weland Plastic will be representing the Group together at one stand. This is an excellent opportunity to showcase our products to 220,000 visitors and thousands of other exhibitors. It’s going to be exciting,” said Björn Karlsson, CEO of Weland Solutions AB prior to the show that was held April 1-5 in Hannover, Germany.

Weland Solutions is a leading supplier of solutions for warehouse management and logistics such as customized vertical storage lifts.

Weland Solutions has partnerships with international customers that include Iberia, Königsegg, Volkswagen, Rolls-Royce and Jaguar Land Rover. It has customers in 27 countries worldwide, but this was the first time it has exhibited at the Hannover Messe trade fair.

Weland Plastic is an expansive full-service company that develops and produces thermoplastic injection-moulded products. The company has exhibited at Hannover Messe before and is an established supplier to the German automotive industry.

“A relatively large amount of our work is with German industries and the trade fair is a huge venue where we are able to meet existing customers and present our company to new business partners. Between 70 and 80% of our production is for the automotive industry and we are fully certified in compliance with the industry’s standards. Today, we are a Tier-1 supplier to Scania, MAN and other manufacturers. The bulk of the products that we supply are technical components, like pedals and engine covers, as well as interior parts such as mouldings, dashboard details and speaker grilles,” says Per-Olof Axelsson, CEO of Weland Plastic AB.

Source: Hannover Messe, Weland Solutions AB
Canadian Contractors Among Winners of B2W 2019 Client Innovation Awards

B2W Software, a leading provider of heavy civil construction management software, named 2 contractors from Toronto, Ontario, among the 3 winners of its 2019 Client Innovation Awards during the company's annual User Conference in March.

Priestly Demolition was recognized for Best Use of the B2W ONE Platform for its success with multiple, unified B2W products for estimating and operations.

Soletanche Bachy Canada earned Best ROI with a Single B2W Element for results achieved after replacing spreadsheets with B2W Estimate for its estimating and bidding process.

Casella Construction of Mendon, Vermont, won the award for Visionary Use of the ONE Platform for tailoring the software in a unique manner to address challenges of a transportation division that serves internal and 3rd party customers.

B2W presents its Client Innovation Awards annually. Winners are selected based on applications submitted by the contractors to highlight measured ROI and improvements to operational efficiency.

Priestly Demolition specializes in demolition and remediation services and emphasized in its award application how all 5 elements of the B2W ONE Platform help to answer 2 critical questions: “How much did we spend yesterday and how can we make data-driven decisions?” The company said it had doubled its bid capacity since adding B2W and also cited transparency and information sharing across departments, increased equipment uptime and efficiencies in exporting of data to its accounting and project management systems.

“Soletanche Bachy Canada, with the help of B2W software, has been able to secure large, complex projects over the past year and increase our hit-rate,” according to Sean Firth, senior estimator and business development manager. The award application also described how the ability to generate and analyze multiple bid scenarios in minutes and present options to general contractors is extremely valuable. Soletanche Bachy Canada (formerly Bermingham Foundations) completes pile foundations, excavation and shoring, marine construction and specialized foundation work.

Casella Construction uses all 5 elements of the ONE Platform. In its award application, the company emphasized creative use of the software to address complex challenges within its transportation division. By replacing manual, paper-based processes, Casella Construction was able to standardize tracking of labor, tasks and materials while also cutting redundant data entry, billing more quickly and leveraging data to measure performance and increase efficiency. The company specializes in infrastructure and utility construction, site development, demolition, landfills and remediation.

Source: B2W Software
JCB Wins Construction Equipment Contracts With Canadian Government

JCB has executed contracts with the Canadian Army, Agriculture and Agri-Food Canada (AAFC) and the Blanc Sablon Airport to deliver a total of 10 large excavators and wheel loading shovels valued at more than $2.5 million.

The Canadian Army has taken delivery of 6 JCB JS130 tracked excavators and 2 JCB 220X tracked excavators. AAFC has received a JCB 411 HT wheel loader and the Blanc Sablon Airport in Quebec has received a JCB 457 ZX wheel loader.

“After more than a decade of providing rugged construction machines for U.S. government applications, we’re excited to grow our relationship with the Government of Canada,” said Scott Whitehurst, government sales manager at JCB North America. “In addition to these recent orders, JCB is included in the Canadian Department of National Defense contract for backhoe loaders and skid steer loader purchases. And we’re working with Canadian officials to identify cost efficient solutions.”

JCB will leverage its Canadian dealer network to support JCB machines at Canadian government facilities across the nation. In addition, JCB’s comprehensive global parts supply network will enable rapid parts delivery to maximize the uptime throughout the service life of each machine.

Source: JCB North America
MTU Engines From Rolls-Royce Are Winners at Bauma

Rolls-Royce presented its EU Stage V certified MTU engines for the construction equipment and industrial sectors at Bauma, in Munich, Germany. Series 1000, 1100, 1300 and 1500 engines were given certificates of compliance with EU Stage V emission requirements in March 2018, and have been available as standard production engines since June 2018. The first units have already been delivered to vehicle manufacturers Tadano, Hidromek, Kato, Manitowoc, Bomag, Bell and Hyster.

Based on Daimler commercial vehicle engines, these diesels cover a power range of 115 to 480 kW (154 to 644 hp). The new limits are achieved by internal engine enhancements and by adding an SCR system and an additional diesel particulate filter. As well as reduced CO\textsubscript{2} emissions, the torque, performance and fuel consumption of the engines have all been improved.

“The first EU Stage V engines have been tested rigorously in numerous prototypes, at times under extreme weather and altitude conditions. This way, we’ve been able to evaluate a wealth of application data and operating experience, and the engines finally went into full production seven months before the new directive came into force,” explained Lars Kräft, Head of Industrial Business at Rolls-Royce Power Systems.

After almost 110,000 hours of field testing, the first MTU EU Stage V engines are already shipping to customers, destined for a variety of applications. Hyster heavy-duty forklift trucks over 8 t, container handlers and reach stackers are to be fitted
with MTU Series 1000 and Series 1100 EU Stage V engines.

“The added performance will enable our European customers to streamline operations and boost productivity – whether they’re handling containers during a Swedish winter or steel pipes in the Italian summer heat,” said Jan Willem van den Brand, director Big Truck Product Strategy & Solutions at Hyster Europe.

Articulated dump truck specialist Bell Equipment also recently took delivery of the first EU Stage V certified MTU Series 1000 to 1500 engines from Rolls-Royce. As early as 2016, Rolls-Royce provided 2 prototypes for external testing at Bell, which were duly trialed in the hot, dusty climate of South Africa and endurance-tested at extreme altitudes of up to 3,000 m.

Rolls-Royce offers a 1-box SCR-DOC-DPF solution to integrate all components into the limited installation space of the machines. This exhaust gas after-treatment system is both compact and robust. The box meets the requirements of vehicle manufacturers and operators by being simple to install, operate and maintain. As well as being certified to EU emission Stage V, MTU engines are also certified to the U.S. Environmental Protection Agency’s Tier 4 final. This dual certification gives Rolls-Royce customers full flexibility when it comes to selling machinery.

Also MTU Series 2000 engines producing 567 to 970 kW (760 to 1,300 hp) for construction equipment, industrial and mining applications will be available with EU Stage V certification from the end of 2022.

Source: Rolls-Royce Power Systems AG

Polygon Company recently announced its line of PolyLube® high-performance custom-engineered and standard composite plain bearings (bushings), ideal for challenging applications in construction and mining equipment such as wheel loaders, excavators, backhoes, and compact track loaders, as well as other applications requiring pivot joints with a very long life expectancy.

Featuring high load-bearing capacity, low frictional values, and corrosion resistance, the Polygon composite bearings are self-lubricated, requiring no greasing. This reduces maintenance labor costs and increases the maintenance interval before maintenance is required on rental equipment. It can also lower the number of greasing locations, ultimately resulting in fewer equipment warranty claims. The greaseless bearings also help maintain cleanliness inside warehouses, avoiding any potential contamination of the work area by pallet lifting equipment.

Polygon composite bearings are made of continuous filament-wound glass fibers, polymer resins, and polytetrafluoroethylene (PTFE) fabric liners. The fiberglass filament and epoxy resin combine together to form a high strength backing. This precise filament-wound fiberglass structure allows for thin-walled, light-weight bearings. The bearings are typically retained through outside diameter (OD) interference fit. Experts tailor material to fit custom requirements and provide engineering consultation and expertise.

The field retrofittable Polygon bearings can replace existing metallic bushings without changing mating parts, so they can be used to improve wear material without requiring complete equipment redesign. Availability of small-batch/short-run drop-in replacements means customers can increase bushing OD and length without a large tooling investment.

Working closely to help determine the right product for the application, Polygon engineers specify the proper bearing dimensions for the given available space, interference fit, clearance fit, and any limiting factors associated with retention, bearing OD/ID, axial stress, and hoop stress.

Source: Polygon Company
Innovative Powertrain Solutions Making Construction Machinery More Efficient

From excavators and dump trucks to tractors, Bosch offers a variety of solutions for construction and agricultural machinery that significantly reduce both operating costs and emissions in off-road applications. The company is now expanding its proven portfolio with innovative solutions like connected exhaust-gas treatment. Bosch presented its range of products last April at Bauma, in Munich, Germany.

On large construction sites in particular, the location and current running performance of construction machinery are often unclear. The Bosch Asset Tracing Solution, or Bosch TRACI, provides this data in real time, helping operators plan vehicle deployment as efficiently as possible. The IoT-based connectivity solution enables further improvements in the efficiency and utilization of the vehicle fleet. The Bosch solution is comprised of the highly robust sensor box, the cloud-based analysis software, and a range of digital services. It is easy to retrofit in existing vehicles.

The off-road segment is also seeing increasing diversity and complexity in the powertrain. Legal provisions require better exhaust-gas treatment systems, while new drive solutions like natural gas, electric motor or fuel cell are increasingly being used alongside diesel and gasoline. With the vehicle control unit (VCU), Bosch offers an extremely flexible, high-performance control unit that coordinates all components in the powertrain. By partially taking on some of their tasks, it enables simplification and standardization of the subordinate control units closer to the components. The VCU can also connect the powertrain with other domains like infotainment, telematics, or driveline. This makes it easier to introduce

Redesigned PACCAR Powertrain Website Aids Kenworth Customers

The redesigned PACCAR Powertrain website (PACCARPowertrain.com) aids Kenworth customers in their search for the latest product information on PACCAR engines, PACCAR transmissions, and PACCAR axles. The website features new engine and powertrain videos, and updated literature supported by enhanced navigation and mobile-responsive design to provide seamless access on any device.

The integrated PACCAR Powertrain, which includes the PACCAR MX engine, PACCAR 12-speed automated transmission, and PACCAR 40K tandem rear axles, is engineered to optimize performance to maximize the value provided to fleets and truck operators.

The 12.9 l PACCAR MX-13 engine is rated up to 510 hp and 1,850 lb ft of torque, and combines efficiency and flexibility for a high-performance solution. The 10.8 l PACCAR MX-11 engine, which is rated up to 430 hp and 1,650 lb ft of torque, delivers superior performance in a lightweight design. The PACCAR MX engine series has an industry-leading B10 design life of one million miles (1.6 million km) in line haul applications, which means 90% of PACCAR MX engines will log one million miles without a major overhaul.

The PACCAR PX-9 and PACCAR PX-7 power Kenworth’s medium duty conventionals and cabovers.

The PACCAR 12-speed automated transmission is ideal for linehaul and regional haul applications up to 49,895 kg gross vehicle weight. The transmission is up to 50 kg lighter than comparable transmissions, allowing for greater payloads. The PACCAR transmission also offers the best overall gear ratio coverage and provides excellent low-speed maneuverability.

The proprietary PACCAR 40K tandem rear axles, which are the industry’s lightest and most efficient in their class, complement the superior performance and fuel economy of PACCAR MX engines. They
AdBlue injection systems, combined with SCR catalytic converters (selective catalytic reduction), ensure comprehensive exhaust-gas treatment. These systems help vehicle manufacturers make sure that their construction machinery comply with statutory exhaust-gas standards up to EPA Tier 4 final or EU Stage V. The Denoxtronic 2.2 evo metering system is a more robust version of Bosch’s Denoxtronic 2.2. Bosch designed the highly compact version Denoxtronic 6-5 for smaller construction machinery. The 6-HD variant features a metering rate of up to 15 kg/h, making it particularly suitable for large engines.

Bosch’s new IoT application Web-based Validation will shorten development times in future. The cloud-based function constantly transfers powertrain data from the connected vehicles. This information allows Bosch and the customer to adjust exhaust-gas treatment systems and their components more quickly and precisely to various applications.

Bosch offers injection systems for a range of diesel engines in both the on and off-highway sectors, from cars and medium-duty to heavy-duty and large engines. In addition, the portfolio includes engine control and a range of sensors, as well as exhaust-gas treatment systems.

The electronic engine control unit takes care of engine management. Together with the sensors, it forms the central control unit for the injection system. The sensors deliver precise and up-to-date information from the engine and exhaust tract, forming the basis for all functions from mixture generation to exhaust-gas treatment.

Source: Robert Bosch GmbH

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New 3.0 l Duramax Turbo-Diesel Redefines Expectations

The all-new 3.0 l Duramax I6 turbo-diesel engine adds choice and versatility for full-size truck customers. It is the first-ever I6 turbo-diesel offered in Chevrolet’s full-size light-duty trucks. Available on LT, RST, LTZ and High Country models, the Duramax is rated at an SAE-certified 206.56 kW (277 hp) and 624 Nm (460 lb ft) of torque delivering 95% of peak torque at just 1,250 rpm.

The 3.0 l Duramax is paired with GM’s 10L80 10-speed automatic transmission, featuring a centrifugal pendulum absorber torque converter that reduces vibrations to improve smoothness, reinforcing its performance, efficiency and refinement. This combination also offers exhaust braking, which uses the diesel engine’s compression to help slow the vehicle, requiring fewer brake applications by the driver when in Tow Haul mode.

A lightweight aluminum block and cylinder head reduce overall mass, and Active Thermal Management enhances efficiency and cold-weather warm-up. Ceramic glow plugs also help with shorter heat-up times and a quicker cold start, meaning the engine block heater is not needed until -30°C.

Source: Chevrolet Canada
Meritor® Launches Brake Solutions for Off-Highway Applications

Meritor, Inc. recently announced the launch of several new braking solutions for multiple off-highway applications, including a full line of wet disc brakes, a high capacity hydraulic disc brake and a 500 mm drum brake. These new offerings expand Meritor’s range of off-highway brake options and enhance its portfolio of modular brakes, differential carriers and wheel-ends for multiple market segments.

“These new brakes, when combined with our global carriers and wheel-ends, will help us quickly meet customer requirements around the world,” said Joe Muscedere, vice president, Off-Highway, Specialty and Defense for Meritor. “Global product designs combined with our regional manufacturing facilities around the world allow us to deliver world-class products with fast lead times.

Meritor’s line of wet disc brakes are available in multiple configurations and range from 228 mm to 460 mm in diameter. The sealed designs are perfectly suited for a range of vehicles operating in adverse conditions.

Also launching is Meritor’s new high-capacity hydraulic disc brake. This option can be used in single- or dual-caliper configurations, suitable for multiple applications and machine capacities. Both configurations offer ample brake torque with the four 85 mm pistons acting against a 500 mm rotor.

The new lineup also includes a 500 mm drum brake, which incorporates Meritor’s improved S-cam design and lining materials to deliver high performance in a compact package. This brake is built for off-highway trucks with large wheel and tire combinations or for vehicles requiring higher brake torque than a 16.5” cast shoe brake.

Source: Meritor, Inc.

Kobelco Celebrates Production of the 1000th Excavator at Its USA Manufacturing Facility

KOBELCO Construction Machinery USA continues to provide customers with quality products from its North American manufacturing facility in Moore, South Carolina. KOBELCO recently produced its 1000th excavator at the USA facility and celebrated the milestone by hosting a ceremony on March 27, 2019.

The 1000th KOBELCO machine produced is the SK210LC-10 model. KOBELCO dealer, Southeastern Equipment, sold the unit to A Crano Excavating, a family-owned residential and commercial developer based in Akron, Ohio. The SK210LC-10 was given to A Crano Excavating at the event.

“This achievement further solidifies KOBELCO’s commitment to producing industry-leading machinery with exclusive features and cutting-edge technologies, as well as providing superior service and sales support to our dealers and customers,” says Jack Fendrick, COO and vice president, KOBELCO USA.

Fourteen models are currently being produced at the facility, including standard KOBELCO excavators in the 15 t to 45 t range as well as Long Reach, High & Wide, and removable counterweight system models. KOBELCO’s production schedule has the company on track to achieve its 2019 goal of 737 units per year, which is a 15% increase since 2018.

“The KOBELCO manufacturing facility has experienced incredible growth since opening three years ago,” said Ralph Wabnitz, general manager of the facility. “And we’re still growing by adding other excavator models to the production schedule. The SK260LC-10 is the latest model that was added in February.”

Manufacturing capacity will continue to increase in accordance with market development. And as production capacity continues to grow, so will the KOBELCO USA manufacturing team.

“Expanding our team of experts is the first step in continuing to aggres-
As the market leader in vehicle connection systems and components for truck and trailer applications, JOST is continually innovating to offer its customers industry leading performance. Its latest innovation is a high-performance lubricant for its fifth wheel couplings that is completely biodegradable. The eco-friendly solution was launched in the UK in March 2019.

Conventional connections between truck and trailer are made of steel and need to be lubricated regularly in order to avoid wear and damage.

Under normal operating conditions, a fifth wheel coupling requires about 10 kg of lubricating grease per year. With a vehicle fleet of around 600,000 vehicles in Europe, this makes around 6,000 t/y. This high amount of grease requires an eco-friendly solution like the biodegradable organic grease.

With the development of the electronically-controlled LubeTronic system, JOST has already succeeded in reducing the amount of grease needed to about 1.6 kg/y. Now, the company is taking the next step by introducing a grease that is biodegradable in accordance with the OECD 301 B biodegradation test. In independent tests the high-performance lubricant exceeded the demands of the standard and received the rating of “readily biodegradable”, which means it degrades especially quickly and easily.

The lubricant is ideally formulated for use in combination with LubeTronic and is offered at the same price as the standard lubricant product – making it easy for all end-users to switch and improve their ecological footprint.

Danny Broomfield, JOST sales director for the UK and Ireland, is excited by the new biodegradable, high-performance lubricant. “As our business expands, so does our responsibility for the environment. Our products play an important part in reducing the ecological footprint left in the areas we specialize in and by the commercial vehicle industry in general. The development of the fully biodegradable organic grease means that JOST has taken an important step in the right direction.”

Source: JOST UK Ltd.

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**Scania Expands Sustainable Portfolio With New V8 Biogas Engine**

Scania launched a new V8 biogas engine at this year’s Middle East Electricity (MEE) trade fair held in Dubai, March 5-7, 2019. As the product portfolio expands to meet customer demands and emission legislations, Scania is presenting engines for power generation using alternative fuels in order to provide sustainable solutions.

“Scania is at MEE to show that our engines are adaptable to the different needs of our customers. This new biogas engine is ahead of the curve. We hear more and more from our customers that they are interested in this type of gas engine,” said Hans Petersson, global product manager Power Generation, Scania Engines. “The offering is a part of Scania Engines’ sustainability goals. We see an increased interest in gas engines across the world.”

The OC16 V8 biogas engine, is a 16 l V8 for power generation purposes. It features output ranges from 320 kW for COP (continuous operating power) and is switchable between 1,500 / 1,800 r/min at 360 kW for PRP (prime power).

Source: Scania
K-HEM | It Is the Age of Rightsizing

The Bauma trade fair is the beating heart of the construction industry. Each edition offers a glimpse of what is coming to the market in terms of state-of-the-art technology and latest developments.

In this context, Kohler is responding to the new demands of a constantly changing market for solutions that are more dynamic and flexible and greater focus on what customers really need. Kohler is expanding its range of hybrid solutions, ensuring everyone can choose the best engine for their application.

Electrification refers to the design of a system running on electricity: in the construction industry, these can be hybrid systems or purely electrical systems. In the panorama of hybrid solutions, there is also a distinction to be made between series and parallel hybrids.

A series hybrid system simply converts chemical energy into mechanical energy, and this is converted in turn into electrical energy. A parallel hybrid system can deliver mechanical energy, coming from chemical energy, at the same time as it delivers electrical energy, coming from a previously-charged battery pack. This offers the advantage of using mechanical and electrical energy simultaneously. The combination of the 2 types of energy is the main plus point of any parallel hybrid system.

The range of K-HEM hybrid units is based on the concept of a parallel hybrid system. This enables constructors to fit K-HEM units onto the hydraulic system of their applications, just like they used to do with internal combustion engines. Later, when they decide to re-engineer their machines in order to exploit the full benefit of running applications on electrical power, our engineers will be ready to support them step by step to design increasingly efficient machines.

After analyzing the market case by case, Kohler realized there is a series of applications fitted with over-dimensioned engines for specific features. Their operating cycles do not need all the power that the engine is capable of delivering, or does not need it all of the time.

Consequently, Kohler offers an alternative solution consisting of a KDI 2504TCR 55.4 kW (74 hp) diesel engine and a 48 V electric motor that guarantees 19.5 kW (26 hp) peak power and 9 kW (12 hp) continued power, and a high safety levels due to the low voltage. The new K-HEM 2504 hybrid unit offers an even more efficient DPF management making the regeneration processes fully transparent for the end user, as it is possible to exploit the temperatures reached to recharge the battery pack.

The modern and advanced DNA of the KOHLER KDI 2504TCR engine makes it the perfect partner for an electrical unit. KDI engines deliver a very high performance and the combination with electrical power can equal, if not exceed, the performance of a combustion engine.

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offered by higher-spec engines in terms of horsepower, as well as a smaller footprint.

Kohler hybrid solutions are not designed to offer just a simple downsizing, but to be part of a broader concept of the rightsizing of applications, namely choosing the right size – the most suitable size for each specific application.

Kohler offers equipment manufacturers a full range up to 105 kW (140 hp), which investigates different sources of energy that are increasing and diversifying as time goes by.

Hybrid solutions not only save OEMs the complexity of post-processing systems and add extra power, they also offer a range of possibilities. They can simply replace an internal combustion engine without worrying about installation problems because K-HEM units have the same integration with the hydraulic system or with the mechanical transmission as a diesel engine. Otherwise, the application can be re-engineered in order to make it more efficient – the current generated by the electric motor can run a series of actuators and guarantee more punctual and optimized management, leading to improved machine performance as a whole. Hybrid units guarantee the general optimization of machines and the possibility to store surplus energy in the batteries to be delivered when needed, drastically reducing running costs. The applications will enjoy the inherent flexibility of parallel hybrid systems, namely the possibility to run on mechanical energy, on mechanical energy plus electrical energy, or with electrical energy alone, soon available for the K-HEM range.

Source: Kohler Co.

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EnviCat® Catalyst Portfolio to Offer Extruded SCR NOx Solution for Chemical and Industrial Applications

Clariant has expanded its EnviCat® series of catalysts to include a high-performance solution for selective catalytic reduction (SCR) to combat nitrogen oxides (NOx).

Clariant offers methodology to remove high levels of NOx via its EnviCat NOx SCR catalyst. The catalyst, an extruded honeycomb structured block made from a vanadium based composite, is designed to facilitate NOx reduction reactions in an oxidizing atmosphere. With high selectivity, EnviCat NOx significantly decreases NOx levels using ammonia as a reducing agent for the conversion of NOx pollutants into nitrogen (N\textsubscript{2}) and water. EnviCat NOx SCR has been demonstrated to effectively lower NOx emissions from gas fired exhaust streams and is well suited to a multitude of chemical and industrial applications.

NOx consists primarily of nitric oxide (NO) and nitrogen dioxide (NO\textsubscript{2}), of which NO\textsubscript{2} is listed as one of the Criteria Air Pollutants under the Clean Air Act by the U.S. Environmental Protection Agency. The product of fossil fuel combustion and industrial processes, NOx contributes to the formation of smog, ground level ozone, acid rain, and other hazards. The effect is significant and harmful to the environment, wildlife and human health. In particular, results of studies suggest that through the formation of pollutant particles penetrating into the lungs, NOx can aggravate or even cause respiratory diseases such as emphysema and bronchitis, among other serious health conditions.

The largest output of NOx emissions from non-automotive, stationary sources emanate from coal fired boilers, especially those in power generation. Petrochemical processes also produce large amounts of NOx originating from utility boilers, cogeneration units, process heaters, steam methane reformers, ethylene cracking furnaces and fluid catalytic cracking (FCC) regeneration units.

Other major sources include kilns and furnaces from the cement, lime, ferrous and non ferrous metals industries.

EnviCat NOx SCR is available in module designs of varying lengths and cell densities, is easily installed and can be configured to the plant’s particular dimensions. The catalyst supports to achieve plant specific emission limit targets while effectively controlling NH\textsubscript{3} slip under low to mid-temperature operation.

Source: Clariant
Are Your Work Truck Specifications Creating an Optimized Product?

Bob Raybuck, director of Technical Services, NTEA
Special Collaboration

Many times, similar vehicles that are purchased within a few years of each other are based on the same specification. Although using previous specifications may seem more efficient when purchasing or replacing a vehicle, you may ultimately overlook new and important changes related to design, technology and regulations that can impact overall vehicle optimization. The fast-paced technological changes we encounter today at work and in our everyday lives are equally prevalent in the commercial vehicle community. For this reason, it is important to update specifications to reflect today’s vehicles, technology, and safety and emissions compliance.

Ensuring the most up-to-date specifications involves exploring questions such as:

- What are current and future safety standards – Federal Motor Vehicle Safety Standards (FMVSS) and emissions requirements — that will apply to vehicle sizes I am specifying?
- What current and emerging technologies can help with safety and efficiency?
- What advancements in collision warning, automated braking, vehicle tracking and fuel savings (such as automated stop-start or component hybridization) would be advantageous?

Asking questions like these at each procurement cycle will help you identify which new features would be beneficial to the vehicle’s designed application and should potentially be added to the specification. With multi-stage commercial vehicles, it is critically important to maintain accurate documentation to help ensure a vehicle has remained in compliance with applicable safety and emissions standards through the upfitting process.

When reviewing specifications, recognition of emission and safety standards is key as you could inadvertently ask your supplier to build a vehicle that cannot meet FMVSS and emission requirements based on size. As an example, preferred specifications may call for a gross vehicle weight rating (GVWR) of 4,535 kg or less in order to ease driver restrictions. However, vehicles in this GVWR range must meet more FMVSS than those exceeding 4,535 kg. Some standards related to vehicles with a GVWR under 4,535 kg (such as FMVSS 208 occupant crash protection, FMVSS 216 roof crush, FMVSS 301 fuel system integrity and FMVSS 126 electronic stability control) entail complicated and expensive dynamic testing. For this reason, chassis OEMs provide specific requirements for meeting some of these safety standards, which include limiting total weight of the completed vehicle and placing limitations on size, weight, and center of gravity of truck bodies and related equipment. Vehicles may have strict limitations on maximum weight and frontal area of the completed vehicle in order to meet increasingly stringent emissions standards.

The chassis OEMs provide an incomplete vehicle document (IVD) and body builder documentation with detailed information on these limitations to assist in your specifications review. If vehicle specifications exceed these limitations, as provided by the chassis OEM, ability of the completed vehicle to meet mandated compliance regulations should be closely examined.

It is important to maintain appropriate documentation on each upfitted vehicle as proof that the specification meets all safety and emissions requirements. If the specifications fall outside chassis OEM limitations, you should have a documented compliance pathway from the body company or upfitter. Documentation may include independent testing, engineering analysis, or simulations that have been performed and should contain a payload analysis to ensure your specifications have sufficient payload capability and a weight distribution analysis to verify no axles are overloaded.

A robust set of specifications can help procurement of the right truck for the right application. Well-crafted specifications add to vehicle reliability, translating into more uptime, reduced maintenance and reach more heavy machinery and specialized equipment users than any other trade magazine in Canada.

The Media Kit is available on InfraStructures’ website at www.infrastructures.com
greater driver productivity. However, the specifications must be timely and address new requirements in safety, emissions and advanced technologies to help guarantee the safest, most productive vehicles for each application.

**LEARN MORE**

NTEA offers the industry access to publications and reference materials on current regulations, safety standards, and other technical issues. To learn more about the tools, resources and solutions available exclusively to members, visit ntea.com/memberbenefits.

Established in 1964, NTEA – The Association for the Work Truck Industry represents more than 2,100 companies that manufacture, distribute, install, sell and repair commercial trucks, truck bodies, truck equipment, trailers and accessories. Buyers of work trucks and the major commercial truck chassis manufacturers also belong to the Association. NTEA provides in-depth technical information, education, and member programs and services, and produces The Work Truck Show®.

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**Comairco Equipment Acquires D.R. Guilbeault Air Compressors**

Comairco Equipment Ltd., a major distributor of electric and diesel compressors in North America, recently announced the acquisition of D.R. Guilbeault, a Sullair distributor in New Hampshire and Massachusetts.

Founded in 1986 by Don and Cyndi Guilbeault, D.R. Guilbeault Air Compressor, LLC has more than 24 employees at 2 different locations. Like Comairco, D.R. Guilbeault aims to provide the best possible service and support to its customers. This is possible thanks to the dedicated service department, made up of staff that is properly trained by leading manufacturers, and to the outstanding expertise of its devoted sales team.

Comairco’s acquisition of D.R. Guilbeault is great news for both companies. By combining their strengths and sharing years of experience in compressed air, Comairco will be able to position itself as a major player in the northeastern U.S. Comairco will continue its operations, keeping the same staff, management team and branches, and will benefit from all the support of a major distributor, in terms of inventory, reputation and technical knowledge in the industry.

Founded in 1972, Comairco quickly established itself as the solution for all compressed air needs in industrial centers. Comairco is a respected distributor that also offers exclusive solutions to rebuild air compressors. It is headquartered in Buffalo, New York, and has been operating in 2 U.S. states since the 1990s. Comairco is also present in 8 Canadian provinces, with nearly 225 employees in over 20 branches.

The entire Comairco team would like to extend a warm welcome to all D.R. Guilbeault employees.

Source: Comairco Equipment Ltd.

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**Electrohydraulic steering systems for rear axles**

Electrohydraulic steering systems for rear axles have been standard in many commercial vehicles and complex construction machinery for many years. In the case of commercial vehicles, the use of electrohydraulic auxiliary steering is primarily to ensure compliance with the legal requirements. Without a steered rear axle the legally defined minimum turning circle, also known as “BOKraft-Kreis” in German, cannot be maintained.

In addition to compliance with legal requirements, complex construction machines such as mobile cranes have to meet very high requirements for maneuverability, which can only be met by electrohydraulic auxiliary steering. Steering modes such as crab steering, manual steering intervention or automatic rear swing out suppression are standard here, as is the complete power decoupling of the rear axles from the front axle.

Simple construction machines, such as 2-axle loaders, usually have hydrostatic front axle steering and are often rear axle steering-ready. However, this is purely hydraulic and may only be switched-on manually on the construction site. It is obvious that application possibilities and flexibility, as well as operating comfort are very limited.

Mobil Elektronik from Langenbrettach, Germany, has committed itself to providing these vehicles with the same features that are already standard in mobile cranes. Operation will be easy and convenient. The steering mode can be changed at any wheel position. The synchronization of the axles with each other is done automatically.

The EHLA® PLUS auxiliary steering system has been in use for a long time and is well known.

Source: Mobil Elektronik GmbH
Link Mfg., Ltd. recently announced that it has delivered the first set of its new Triton Tri-Drive Air Suspensions. The industry’s first ultra-high-capacity tri-drive air suspensions are engineered to be used in multi-axle configurations for heavy-haul and off-highway applications. Designed for traditional production line installation, Triton’s brawny 105K carrying capacity gives OEMs a viable and efficient path to broaden their product offerings by increasing the load-bearing capabilities of existing vehicle platforms.

Triton Tri-Drive Air Suspensions are engineered for application flexibility and can be combined to provide a variety of vehicle carrying capacities, including 35K single-drive, 70K dual-drive and industry-leading 105K tri-drive configurations. Regardless of disposition, Triton Air Suspensions are designed to seamlessly integrate with most major heavy-haul axle makes and models.

“Using our new Triton Tri-Drive Air Suspensions, OEMs will now have higher-capacity equipment to offer, giving them access to off-highway mining, quarry and logging markets they may not currently serve,” said Bill Ott, vice president of engineering for Link Manufacturing. “Our line of Air Link Suspensions have been 100% off-highway-rated for 25 years, giving us decades of practical engineering experience in that market space. The Triton Air Suspension is the by-product of that experience.”

Mr. Ott explained that the Triton’s heavy-duty mounting system was another innovation born of the company’s off-highway experience. He noted that through voice-of-the-customer feedback, many of the problems associated with other tri-drives have been engineered out of the Triton, making its capacity equipment to offer, giving them access to off-highway mining, quarry and logging markets they may not currently serve,” said Bill Ott, vice president of engineering for Link Manufacturing. “Our line of Air Link Suspensions have been 100% off-highway-rated for 25 years, giving us decades of practical engineering experience in that market space. The Triton Air Suspension is the by-product of that experience.”

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high-mounted air springs and under-slung spring saddles, which allow +/- 100 mm of articulation, minimizing roll.

“Link’s experience in designing rugged military suspensions has also contributed to the development of the Triton Tri-Drive Air Suspension,” said Neil Mardell, manager – defense programs and heavy vocational products for Link. “Triton’s ability to articulate, providing maximum traction over the most punishing terrain, is partly the result of its highly-advanced, military-grade beam design.”

Triton is also equipped with both longitudinal and lateral control rods that ensure proper axle tracking and alignment. Trailing beams are interconnected by a torsion bar, further improving ride stability. Unique dual-height control valves help the suspension maintain optimum ride height independent of load levels, and all units are fitted with heavy-duty shock absorbers.

Triton Tri-Drive Air Suspensions are engineered to maximize durability, while minimizing maintenance requirements. Polyurethane bushings provide longer service life and eliminate lubrication requirements. Polyurethane is also far more resilient than natural rubber bushings and resistant to petroleum distillates and other common contaminants.

All Triton 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.

Source: Link Manufacturing, Ltd.

Just a few months ahead of the world premiere of the Taycan, the first fully electric sports car from Porsche, the development of the High Performance Charging infrastructure from IONITY in Europe also comes closer to the finish line. Founded in 2017, the joint venture from Porsche and Audi for the Volkswagen Group as well as BMW, Daimler and Ford opened it is 100th High Power Charging Point (HPC) in May. The location in Rygge, Norway, offers 6 charging points and state-of-the-art charging technology with 350 kW charging power and is equipped with the European charging standard Combined Charging System (CCS). A further 6 charging points are prepared, with space to expand to up to 18 HPC stations if required.

Next to the 100th (HPC) site there are a further 51 sites under construction. All over Europe, there will be 400 sites in business until the year 2020. For about 95% of the planned stations, the contracts with the respective site owners have already been signed.

The Porsche Taycan will make its debut in September, and market launch is scheduled to take place before the end of the year. The first purely electrically-powered sports car from Porsche offers a range of about 500 km and can take on the energy to travel 100 km in just about 4 minutes. More than 20,000 people around the world, with serious interest in buying one of their own, have made a deposit.

“With the Taycan, we are shaping the future of e-mobility at all levels,” says Detlev von Platen, Member of the Executive Board for Sales and Marketing at Porsche AG.

“This includes an intelligent ecosystem with coordinated charging options - at home and on the move. We are not only expanding the charging infrastructure in Europe with IONITY, we are also establishing a fast-charging infrastructure at our worldwide Porsche Centres and charging facilities at popular destinations, such as restaurants and hotels.”

Source: Porsche AG
At WasteExpo, held in Las Vegas last May, Autocar® Trucks announced the launch of the Autocar DC™-64R, a completely new conventional truck purpose-built from the ground-up for severe-duty refuse applications. Autocar’s guiding mission is to build trucks to be “Always Up®”, that is, to stay in service despite the challenges of severe-duty applications. The Autocar DC-64R (the R stands for refuse) brings several notable innovations that make it uniquely suited to refuse-hauling.

“The DC-64R is the direct result of the requests, insights, data, and guidance we received from many waste haulers across the industry. We could not have engineered a truck this good without all their feedback that resulted in innumerable improvements. We’re grateful for their help and proud to bring to this market a truck that is honestly customer-built,” said James Johnston, the president of Autocar.

“The DC’s cab is totally new and was designed by Autocar from the beginning for exceptional productivity, durability – and especially safety – in the refuse industry,” said Eric Schwartz, managing director of Autocar Trucks. “The workspace of the cab maximizes productivity for drivers from the biggest guys to petite women, with everything visible and within easy reach. The cab also easily fits 3 people, so work crews can get to and from their routes comfortably. Our unique raked windshield provides exceptional visibility for safety. And, true to our Always Up® mission and Autocar’s legendary toughness, the interior uses authentic materials like a full steel structure inside the dashboard and aluminum sheets as dash panels. Even the interior door handles are aluminum tubes, not plastic. The totally new cab structure is built from a combination of steel, judiciously chosen aluminum components, and corner castings to withstand years of refuse abuse.”

The Autocar DC-64R is the first truck ever built to feature ultra-high-strength 1,100 MPa (160,000 PSI) steel frame rails, 24% stronger and lighter than the rails on other trucks on the market, completely eliminating the need for frame liners in nearly all refuse applications. The primary benefit for the waste hauler is a significant weight savings that directly increases effective payload – and therefore, profitability.

“One of the things we’re most proud of – because it will make a big difference in
our customers’ business – is our totally upgraded electric system to resist the worst the garbage business can dish out,” continued Mr. Johnston. “The DC also brings our customers the Autocar Always Up® display, with game-changing ‘one-touch diagnostics’. It actually tells the operator or technician what fault has occurred and shows them how to fix it. It gets trucks back into service and making money faster than anything anyone has had before.”

“Everything about this truck is designed to solve problems our customers have with other trucks and achieve our goal of Always Up®,” added Mr. Schwartz. “There are so many other innovations, from the engines up to 500 hp that are hundreds of pounds lighter, to a real breakthrough in body integration. This truck is just revolutionary in the ways it will help waste haulers serve their customers and create ROI.”

The DC-64R is the first new conventional truck for the Autocar brand in 31 years and joins the ACX® and ACMD® cabover trucks and the ACTT® terminal tractor, as Autocar’s 4th line. The new truck also represents the rebirth of Autocar’s DC, first introduced by The Autocar Company in 1939 as its premier severe-duty and, revolutionary for the time, diesel-powered work truck.

The DC is also the first of Autocar’s lines to carry the recently announced Autocar bow tie logo, reborn on its 100th birthday. “We’ve gone back to Autocar’s roots with the logo to symbolize that we are staying true to all the things that made Autocar the gold standard for customer-focused, purpose-built, severe-duty vocational trucks, commented James Johnston. “That will never change. It’s the perfect time to show that we are inspired by the best of our history to build something fantastic for the future.”

Source: Autocar, LLC
Mack Trucks unveiled its Mack® LR battery electric vehicle (BEV) at WasteExpo 2019, in Las Vegas last May. Combining the refuse industry-leading design of the Mack LR model with a fully electric Mack drivetrain, the demonstration model will begin real-world testing in 2020 in the demanding operations of the New York City Department of Sanitation (DSNY).

“The Mack LR BEV is the latest example of Mack’s leadership within the refuse and recycling industry,” said Jonathan Randall, Mack Trucks senior vice president, North American sales and marketing. “Built on our decades of experience in powertrain innovation, the electric LR delivers a powerful yet quiet, zero-emission solution designed to tackle one of the most demanding applications in one of the largest cities in the world.”

The Mack LR BEV is powered by Mack’s integrated electric powertrain consisting of 2 130-kW motors producing a combined 496 peak hp and 4,051 lb ft (5,500 Nm) of torque available from zero RPM. Power is sent through a 2-speed Mack Powershift transmission and put to the ground by Mack’s proprietary S522R 52,000 lb rear axles. The Mack LR BEV features a copper-colored Bull-dog hood ornament, signifying that it is an electric vehicle.

All of the LR BEV’s accessories, including the hydraulic systems for the Heil DuraPack 5000 body, are electrically driven through 12 V, 24 V and 600 V circuits. Four NMC lithium-ion batteries (lithium-nickel-manganese-cobalt-oxide) are charged via a 150 kW, SAE J1772-compliant charging system.

DSNY is the ideal choice to test the first LR BEV model in a real-world application. It is the world’s largest sanitation department, collecting more than 10,000 t of refuse and recyclables each day. DSNY is also a sustainability innovator and has initiated several programs designed to
reduce waste sent to landfills, as well as cut emissions.

Even as electromobility technology and supporting infrastructure continues to develop, refuse and recycling collection represents an ideal application for BEVs because of the potential to deliver the most value to customers. Collection vehicles operate on predetermined routes and return home every off shift, helping eliminate concerns about range and finding a location to charge. The frequent starts and stops, which can occur thousands of times per shift, also provide a significant regenerative braking opportunity to recapture energy.

Fully electric trucks like the Mack LR BEV also produce significantly less noise, enabling nighttime operation, a particularly attractive option for refuse operators in urban environments.

Source: Mack Trucks

Freightliner Trucks Featured New Engine Option at World of Concrete

At World of Concrete 2019, held in Las Vegas last January, the Freightliner 114SD concrete mixer specified with the new Cummins X12 engine was shown for the first time.

Up to 270 kg lighter than other medium-bore engines in the 10-13 l category, the Cummins X12 engine is made to increase payload and productivity. Paired with the durable 114SD, this powerful combination is ideal for applications where weight savings are a priority, such as concrete mixers, dump trucks, cranes and more. A second X12 powered 114SD was showcased in the McNeilus Truck & Manufacturing booth.

“World of Concrete is a great opportunity to share our most recent solutions for vocational customers and Truck Equipment Manufacturers (TEMs) as well as demonstrate our wide range of options,” said Kelly Gedert, director of product marketing for Freightliner and Detroit. “Visitors to the Freightliner booth can learn more about our focus on developing durable and reliable products that deliver all day, every day.”

Source: Freightliner Trucks

Nissan’s Blueprint for Affordable Overlanding Experiences

“Hobbies don’t have to cost a fortune.” That’s the statement Nissan was making with the recent debut of the one-off Destination Frontier, a highly capable, high-quality overlanding truck built on a budget.

Overlanding is an exciting form of outdoor adventuring taking participants into sometimes-extreme terrain and climate conditions – often thought to be only for ultra expensive modified trucks and SUVs. All in, the Destination Frontier one-off truck can be created for around US$40,000 ($54,000).

Starting with a 2019 Frontier Crew Cab SV 4x4 Midnight Edition, the modifications concentrate on enhanced ground clearance and overall body and drivetrain protection from off-trail obstacles. First, a Nisstec lift kit and Nitto Trail Grappler off-road tires mounted on American Racing AX201 wheels were installed, providing the overlanding-necessitated extra height and rough terrain traction.

A Hefty Fabworks front bumper, skid plates and rock sliders were added for an additional level of protection for the engine, transmission and body. Also added up front was a powerful WARN Industries ZEON 10-S winch, WARN Winch Roller Fairlead and WARN Epic Winch Hook for helping negotiate extra tough situations.

Since overlanding adventures are known to extend beyond simple day trips, a Leitner Designs bed rack, topped with a CVT Mt. Shasta rooftop tent, was added along with items such as a Dometic fridge/freezer and slider, Rhino Rack Pioneer Tray and Baja Designs LP6 Pro lights. Helping keep the dirt and mud where it belongs – off the carpet – are WeatherTech floor mats.

Frontier offers exceptional acceleration, towing capacity and all-around off-road ability. Its powerful engine – a 4.0 l V6 producing 261 hp and 281 lb ft of torque – is specifically tuned for the unique demands of truck use. Frontier’s maximum towing capacity is rated up to 3,000 kg when properly equipped.

“Frontier has a tremendous reputation for quality and durability – making it a terrific platform for overland adventures where the nearest service station or road could be miles away,” said Tiago Castro, director, Light Commercial Vehicles, Nissan North America, Inc. “We believe Destination Frontier will spark the imagination of customers who would like to get into overlanding but don’t want to spend a fortune in the process.”

Source: Nissan North America
Roy Slack formally assumed the role of Canadian Insitute of Mining (CIM) president for the year 2019-2020 at the end of the CIM Convention on May 1st, 2019.

Mr. Slack is a professional engineer, the founder and past president of Cementation Canada, and is a director of Cementation Americas, a mine contracting and engineering firm that provides design-build and construction management services to the mining sector.

Cementation Canada has been recognized numerous times as one of “Canada’s Top 100 Employers”. It has also been recognized as Safest Employer in Canada in 2014 (Gold), 2015 (Silver), 2016 (Gold) and 2017 (Gold) in the mining and natural resources category.

Roy Slack has been active in numerous safety initiatives and in 2013, he was appointed to the Province of Ontario’s first Prevention Council to advise the government on workplace safety. He currently chairs the CIM Safety Committee.

A long-time member of CIM, Mr. Slack was the chair and a member of the team that was instrumental in reviving the CIM Northern Gateway Branch, which was recognized in 2008 with the Mel W. Bartley Outstanding Branch Award. In the same year, he was awarded the Engineer’s Medal for Entrepreneurship by the Professional Engineers of Ontario.

In 2009, Roy Slack was awarded the Metal Mining Society Award by CIM. In 2012, he was named a Paul Harris Fellow by Rotary International. In 2017, Nipissing University bestowed upon him an honorary doctorate and in 2018, he was inducted into the SAMSSA Hall of Fame.

Mr. Slack’s goals for his presidency are a focus on the strategic goals of CIM including advancing public awareness of the industry, increased engagement with mining schools and fostering interaction between other mining associations in Canada as well as internationally.

Source: Canadian Insitute of Mining (CIM)
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**APOM Technical day**  
September 12, 2019  
Saint-Raymond-de-Portneuf, QC Canada

**ICUEE - International Construction and Utility Equipment Exposition**  
October 1 - 3, 2019  
Louisville, KY USA

**CONEXPO Latin America 2019**  
October 2 - 5, 2019  
Santiago, Chile

**inter airport Europe 2019**  
October 8 - 11, 2019  
Munich, Germany

**waste&recycling expo Canada**  
October 9 - 10, 2019  
Toronto, ON Canada

**APEX Asia co-located with CeMAT ASIA**  
October 23 - 26, 2019  
Shanghai, China

**64th Canadian Technical Asphalt Association conference**  
November 24 - 27, 2019  
Montreal, QC Canada

**INFRA 2019**  
December 2 - 4, 2019  
Montreal, QC Canada

**Landscape Ontario’s Congress**  
January 7 - 9, 2020  
Toronto, ON Canada

**The ARA Show**  
February 9 - 12, 2020  
Orlando, FL USA

**bauteC 2020**  
February 18 - 21, 2020  
Berlin, Germany

**The Work Truck Show**  
March 3 - 6, 2020  
Indianapolis, IN USA

**CONEXPO-CON/AGG 2020**  
March 10 - 14, 2020  
Las Vegas, NV USA

**SMOPYC**  
April 1 - 4, 2020  
Zaragoza, Spain

**Hannover Messe**  
April 20 - 24, 2020  
Hannover, Germany

**Expo Grands Travaux**  
May 1st - 2nd, 2020  
Saint-Hyacinthe, QC Canada

**CIM 2020 Convention**  
May 3 - 6, 2020  
Vancouver, BC Canada

**5th International Rental Exhibition (IRE) / APEX access show**  
June 9 - 11, 2020  
Maastricht, the Netherlands

**steinexpo**  
August 26 - 29, 2020  
Hombreg/Nieder-Offleiden, Germany

**MINExpo 2020**  
September 28 - 30, 2020  
Las Vegas, NV USA

**bauma CHINA**  
November 24 - 27, 2020  
Shanghai, China

**inter airport south east asia**  
February 24 - 26, 2021  
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Lorsque Mathias Hatz a fondé Hatz en 1880, il ne savait pas que quatre générations de la famille Hatz suivraient son leadership. Il ne pouvait pas non plus imaginer, lorsque Hatz a débuté la production de moteurs diesel en 1906, qu'ils évolueraient dans les moteurs révolutionnaires qui sont produits aujourd'hui. Mais il y a quelque chose dans l'ADN qui fait en sorte que Hatz est en voie de devenir l'une des entreprises familiales les plus performantes dans le monde. C'est pourquoi Hatz peut offrir un niveau de service et de soutien personnalisé à sa clientèle sans inertie corporative. Et c'est pourquoi les unités de puissance ouvertes et fermées de Hatz arrivent pleinement assemblées et testées de l'usine. La tradition chez Hatz veut que “la qualité soit incorporée avant que les moteurs soient livrés”. C'est dans l'ADN!