Inited Structures

CONSTRUCTION - PUBLIC WORKS - NATURAL RESOURCES

Volume 27 • Number 5 • May 2022 • English Edition





A legacy of hard-working trucks since 1897

A newcomer in the Class 7 & 8 **Cabover category**

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

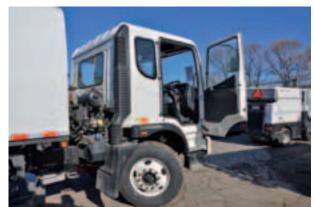




The Autocar Xpert is designed to ensure the best sight lines in any cabover or conventional truck. The spacious cab features a huge windshield, side, and rear windows.

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

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







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users of heavy machinery and specialized equipment in construction, public works, and natural resources across Canada in both French and English.

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A Brief Word...

Another May Day has come and in the spirit of International Workers Day our daily routines seem to be resuming.

The economy has shot out of the blocks and, with Russian sanctions and electric vehicle development, Canada's economy promises a positive future. A resource economy needs equipment, innovation and exploration to turn that potential into results.

So, like May flowers, InfraStructures sprouts from our roots deep in the equipment industry and blossoms with news and information that may inspire your jobsite plans. Like a prairie harvest, our pages are rich with sustenance to feed your dreams and aspirations.

Go safe, work safe and watch out for those workers around you.



On the cover: Aqua Cutter robot in a hydroelectric dam steel penstock for coating removal using high-pressure water up to 40,000 PSI. The deteriorated coating is being removed in preparation for a new coating to extend the life of the infrastructure.

> Robotic equipment is used to limit having workers inside the penstock. Photo: Walco Industries Ltd.

ROTO-MILL RECOGNIZED FOR ROI RESULTS USING B2W PLATFORM FOR ESTIMATING AND OPERATIONS

B2W Software presented its 2022 Innovation Awards to 4 contractors during its annual User Conference in California last February.

Among them, Roto-Mill, based near Toronto, Ontario, won for best use of a single B2W application for the company's success with B2W Schedule.

Judges selected winners based on applications submitted by contractors throughout North America. B2W established the Innovation Award program in 2017. In the past 6 years, 20 contractors have been recognized for exceptional ROI results using either a single element or multiple elements of the ONE Platform in combination.

Roto-Mill specializes in asphalt recycling throughout Ontario and other areas of

Canada. The company, which won for ROI with a single B2W application, relied primarily on whiteboards prior to deploying B2W Schedule for real-time scheduling and dispatching.

"Schedulers used to spend 2 to 3 hours per day calling or texting up to 150 field employees to notify them and sort out resource requirements," explained Josh Guest, manager of innovation and fleet operations. "Now, assignments are communicated with the click of a button, we can forecast 1 or 2 months in advance instead of 1 or 2 days, and we have a better understanding of equipment and operator requirements."

Source: B2W Software

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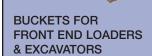
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M-D BUILDING PRODUCTS FORMS **4 STRATEGIC BUSINESS UNITS**

M-D Building Products Inc. recently announced it has formed 4 brand portfolio strategic business units, including a presence in Toronto, Ontario. The new strategic business units will create efficiencies to strengthen the customer experience. The Oklahoma family-owned company is an industry leader in developing, manufacturing, and marketing a range of residential and commercial weatherization, flooring, caulking, and specialty extrusion products with manufacturing and distribution operations across the U.S., Canada and Mexico.

The new business units will include M-D Consumer; M-D Manufactured Solutions and Cardinal Aluminum; M-D Pro and Canadian Consumer; and Tower Sealants. M-D will continue to operate Morse Industries in Seattle, Washington, and Cardinal Architectural in Louisville, Kentucky, as independent operational groups.

"As the market continues to evolve, we are creating simplicity and greater efficiencies for our customers and partners with a focus on improving consumer experience on a channel-by-channel basis," said Ryan Plotkin, M-D Building Products president. "This strategic formation of our business units occurs as the company experiences another strong year. The strategic business units create multiple career growth opportunities for our employees as we continue investing in our people so they can have long, rewarding careers at M-D."

"M-D has always put customers at the forefront of its business, which helps us look for ways to improve and better serve them. The formation of strategic

business units is a great example of that as we remain committed to delivering excellent consumer experiences and are well positioned for company growth," said Joe Comitale, M-D Pro and Canadian Consumer president. "I'm honored to serve the company in a new role that will ensure we experience continued efficiency and momentum for years to come."

Joe Comitale has worked with the Bengard and Loxcreen companies, which M-D acquired, for over 40 years. Since joining M-D, he has served as executive vice president and president of M-D Canada.

Source: M-D Building Products

FRONTIER POWER ACQUIRES M-K POWER **PRODUCTS**

Frontier Power Products ULC recently announced the acquisition of full ownership of M-K Power Products Corp. and has begun new license agreements.

With the completion of this acquisition, Frontier Power Products adds Ontario to its current coverage areas of Yukon, Northwest Territories, Nunavut, British Columbia, Alberta, Saskatchewan, and Manitoba.

Both Frontier and M-K have long histories of service to their customers, strong relationships with their vendors, and building healthy, productive work environments for their employees.

Headquartered in Mississauga, Ontario, M-K Power Products was founded in 1982 and is a distributor of John Deere, Kubota, Ford industrial, Zenith and Beta Marine engines. M-K also sells and services Funk powertrain components and Flowserve process equipment.

Frontier Power Products ULC was formed in 1983 in Delta, British Columbia. It specializes in engines and power generation products. It sells and services industrial, marine and power generation engines from John Deere, Kubota, Mitsubishi and GE, along with equipment from Kohler, Funk powertrain products, pumps, light towers and accessories.

Source: Frontier Power Products ULC

CARCO CELEBRATES 90 YEARS IN THE WINCH INDUSTRY

CARCO, a member of the PACCAR Winch family, is celebrating 90 years of delivering innovation and engineered performance to the tractor tail winch industry.

The first CARCO winches were introduced in 1932 for the Pacific Northwest logging industry for use with cleat tractors and logging arches. Developed alongside the world's first track-driven dozers, CARCO quickly became a staple in forestry, construction and pipeline applications.

The origins of CARCO are tied to metallurgist Alex Finlayson who was working for Pacific Car and Foundry (now PACCAR). Mr. Finlayson is credited for developing a new metal with low-carbon content but high in manganese. With twice the strength of

basic steel, and good for annealed castings with a degree of elastic strength, Carcometal was patented and used by engineers to design a line of winches, arches, and hoists that offered superior service and longer machine life.

The first CARCO production model winch, the HS-101, was the first tractor winch with a fully-housed gear train and anti-friction bearings in an oil bath, cutting maintenance expenses and reducing

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InfraStructures English Edition May 2022 - page 4 InfraStructures English Edition May 2022 - page 5 downtime for repairs.

Over the last 90 years, subsequent generations of CARCO products have continued to set the standard for tractor winches, creating a balance of pulling power, speed and overall machine control. Today's equipment is designed to adapt to multiple working environments while improving operator comfort, reducing fatigue, and creating safer, more productive lifting and pulling environments.

Line pull capacities on CARCO winches and hoists range from 8,165 to 90,718 kg, including skidder and sideboom applications. Configuration options include freespool, drive-away and powered reel out. Variable speed and proportional load control offer optimal handling capabilities. In addition, multiple drive options are available including power take off (PTO), open loop hydraulic and closed loop hydraulic.

The newest CARCO tail winch, the H50 Hystat, includes a dedicated closed loop hydrostatic circuit and is equipped with market-leading electronic controls. This introduction propels CARCO to the

Electric Minibus

successes on and off the pitch.

The new

14-seat L2H2

MWB, painted

in the team's

colors will be

used primarily

to transfer the

Forest Green

Academy and

Ladies teams

between trai-

ning grounds.

The minibus

provides a range of about 130 km

Rovers'

Forest Green Rovers FC Gets First

EFL League Two football club Forest Green Rovers, in the UK, has acquired its first

that is ideal for local routes, supporting local marketing events in Gloucestershire and

transporting VIPs on match days, cutting an estimated 6.4 t/y of CO2 emission each year.

The minibus is powered by an R75 electric motor and 33 kWh batteries charged using

100% green energy from power firm Ecotricity, which includes some energy generated

all-electric team minibus, a Renault Trucks Master E-Tech, in the latest of a string of

forefront of compatibility in the 22,680 kg line pull class in terms of working with contemporary crawler dozers outfitted with smart machine technology.

In 1980, PACCAR formed the PACCAR Winch Division to include CARCO, BRADEN and Gearmatic. Sales and manufacturing for the 3 brands were moved to Broken Arrow, Oklahoma in 1985. This consolidation resulted in a synergy of knowledge and experience that has created one of the industry's most dynamic and flexible manufacturers of winches, hoists and drive systems in the world.

Source: PACCAR Winch Inc.

THE UK CMA BLOCKS THE MERGER BETWEEN CARGOTEC AND KONECRANES

The UK Competition & Markets Authority (CMA) has blocked the merger between Cargotec and Konecranes. According to the CMA's final report, the remedies - which would have removed all overlapping businesses of the 2 companies and were accepted by the European Commission - would not be effective in addressing the CMA's concerns and thus the planned

merger between Cargotec and Konecranes cannot be completed. The completion of the planned merger would have required approvals from all relevant competition authorities. Thus, Cargotec and Konecranes have then decided to cancel the planned

Cargotec and Konecranes will immediately cease the pursuit of the merger and the related processes and continue to operate separately as fully independent companies.

Source: Cargotec Corporation

EEX BECOMES FOUNDATION MEMBER OF H2GLOBAL

The H2Global Foundation, which was established to promote the market rampthe European Energy Exchange (EEX). By joining, EEX is demonstrating its commitfor hydrogen.

"The trading of green hydrogen and its downstream products such as ammonia on the exchange ensures transparency in prices and trading volumes," explained Dr. Tobias Paulun, chief strategy officer of EEX. "The development of liquid exchange markets for hydrogen and its downstream products is important so that producers and consumers can meet under reliable conditions. The work of H2Global lays the foundation for this."

EEX has been operating transparent



up of green hydrogen in Germany and Europe, is getting a prominent addition with ment to establishing reliable marketplaces

trading markets for energy products such as power and natural gas, Guarantees of Origin, CO2 emission allowances within the framework of the European Emissions Trading Scheme (EU ETS) and other commodities for more than 20 years. Building on its experience, EEX is committed to the ramp-up of a European hydrogen economy and established a working group dedicated to hydrogen at the end of 2020. Together with the participants from various sectors of the economy, the exchange is working on a hydrogen index which is based on

price assessments by market participants.

With its commitment to H2Global, EEX joins a series of important industrial companies such as Siemens Energy Global GmbH, Thyssenkrupp AG, Deutsche Bank AG, Salzgitter AG or Uniper SE. They all support the approach, which was developed with an interdisciplinary team of experts with significant participation of the BMWK, to ensure a rapid market expansion in green hydrogen through a foundation. The BMWK is funding its provision through the H2Global Foundation with almost €1 billion (\$1.38 billion).

Source: H2Global-Stiftung

MAKING HYDROGEN EFFICIENTLY USABLE

The Eberspaecher Group will be at Hannover Messe, from May 30 to June 2nd, to present its activities related to the trendy topic of hydrogen technology to a broad audience for the first time. Purem by Eberspaecher is the specialist for Exhaust Technology in automotive applications, while Eberspaecher Vairex can confidently draw on decades of experience in fuel cell technology.

Hydrogen & Fuel Cells is the expert meeting place for fuel cell technology at Hannover Messe. Through its participation, the Eberspaecher Group is underscoring the importance of hydrogen as a climatefriendly energy carrier of the future. It is an essential building block for decarbonization in transport and industry. The experts will be showcasing solutions for air supply and exhaust-gas routing in stationary and mobile applications.

Purem by Eberspaecher relies on its experience in developing and manufacturing exhaust gas aftertreatment systems for conventional combustion engines and hybrid drives. In Hannover, the specialists will show 4 examples of how expertise from exhaust technology can be used in fuel cell systems and hydrogen combustion engines.

The concept of an exhaust system specially developed for fuel cell systems diverts the water vapor and is capable of separating larger water droplets. The solution also enables virtually silent operation of the systems, which are already very quiet to begin with. A gas control valve is used to control mass flows and to bypass other components. An innovative cathode blocking valve positively influences the durability of the fuel cell stacks. Here, Purem

by Eberspaecher applies its expertise in the widely used exhaust flap technology.

As a CO2-neutral drive type, hydrogen combustion engines will play a significant role in the future – especially in heavy-duty transport. The combustion process produces nitrogen oxides. To clean up these emissions, Purem by Eberspaecher relies on its expertise in catalysis and materials science to present an exhaust system developed specifically for this purpose.

Eberspaecher Vairex's air compressors for cathode gas supply are a key component for the performance of the entire fuel cell system. They control airflow and pressure, thus influencing efficiency, output, and durability. The broad portfolio covers the requirement of fuel cell systems in stationary applications up to 50 kW.

The new VRC compressors are designed for fuel cells up to 150 kW - think truck and bus applications, for example. Here, the reliable Vairex technology has been adapted to larger, more powerful air compressors with higher pressure. The first prototypes

are already being tested by customers.

By adding fuel cell solutions to its product portfolio, the Eberspaecher Group is pursuing its goal of shaping the clean and quiet mobility of the future. By incorporating Eberspaecher Vairex into the group of companies, the automotive supplier is also opening up new fields of application beyond mobility through a wide range of synergies.

Source: Eberspächer Group

GROVE CELEBRATES ITS 75TH ANNIVERSARY

Grove is celebrating its 75th anniversary in 2022, a significant milestone for one of the world's most renowned and prolific crane manufacturers.

Grove was launched in 1947 in a garage in Shady Grove, Pennsylvania. The Grove brothers - John and Dwight, and Wayne Nicarry – were building farm wagons when they realized they needed a more efficient way to move raw materials. John designed a rudimentary rubber-tired crane, giving birth to the first Grove mobile crane.

Hoskin Scientific Introduces the Aeroqual Ranger Portable Dust Monitor

The ultimate connected handheld monitoring solution, combining Wi-Fi capability and simultaneous real-time measurement in an ultra-portable device, the Aeroqual Ranger™ is a cloud-connected portable monitoring solution for industrial and occupational hygienists and environmental health and safety professionals. Used by innovative industrials, environmental consultants and more, it offers a cutting-edge solution to some of the most urgent pain points facing air quality monitoring today.

A "swappable" sensor head design allows users to measure

up to 28 common indoor and outdoor pollutants, removing and replacing sensors in seconds. Available sensors include:

- Particulate matter: PM1, PM2.5, PM4, PM10, TSP
- Gases: CO, CO2, NO2, VOCs, O3, SO2, H2, H2S, CI2, CH2O, CH4, NH3, C2CI4
- Environmental: Temperature, humidity

With offices in British Columbia, Ontario, and Quebec, Hoskin Scientific has provided expert consultative support to find the right product to fit any application needs for over

Source: Hoskin Scientific



Source: Renault Trucks UK

from solar panels on the club's stadium roof.

In time, he would manufacture the first mobile, hydraulic industrial cranes, and Grove would transition from a farm machine company to a crane company.

Today, Grove is one of the world's most recognized crane brands, with operations around the world. In 2002, it became part of the Manitowoc crane brand portfolio and continues to grow its line of all-terrain, rough-terrain, truck cranes, and industrial cranes. Despite changes in lifting technologies, one thing has remained constant: the trust and confidence that Grove instills in customers around the world.

"We're extremely proud to celebrate Grove's tremendous journey over the past 75 years," said Aaron Ravenscroft, president and CEO of The Manitowoc Company, Inc. "A milestone like this affords us the opportunity to look back and admire what has made Grove successful while inspiring us to drive toward our future goals.

For Grove, it's a tradition of performance, reliability, durability, innovation, and support. Our sincere gratitude goes out to our customers and the crane operators that helped promote the Grove legacy."

Throughout 2022, Grove will be sharing stories about its people, products, and history on social media and Manitowoc's Looking Up website. It will also pay special tribute to the company's legacy at bauma

Source: The Manitowoc Company, Inc.

HHCA PRESENTS YOUNG LEADER AWARD

On March 31, 2022 the Hamilton-Halton Construction Association presented Christina Sorba of Ira McDonald Construction with the Young Leader Award at their Awards Night (the awards portion of their 102nd Annual General Meeting which was held virtually on February 24, 2022).

Born and raised in Hamilton, Ontario,

while still in high school Ms. Sorba got a job at Comstock. Her experience there convinced her that construction ticked all the boxes and she enrolled in Mohawk College's Architectural Technology program. While in the program she completed 2 co-ops with PCL Contractors and worked on the Ripley's Aquarium and the Pan-Am Athletes Village.

After graduating with honors Christina accepted positions that took her across the country working with Pomerleau in Atlantic Canada and Farmer Construction in British Columbia. Highlights from this time include The Alexander, a condo project attached to the historic Keith's Brewery in Halifax and the Victoria International Marina in Victoria.

When Christina Sorba returned to Hamilton in 2018 she joined Ira McDonald Construction and got involved with the HHCA's Young Leaders Group (YLG). Since then, she has been a key contributor to the group, acting as secretary and contributing to the delivery of the YLG Talks education series and networking events. What she values most about the YLG is group support and learning, crediting the group with improving both her confidence and

Construction Association has been serving our local Industrial, Commercial and Institutional (ICI) construction firms for 100 years. It is committed to helping its members build their businesses; providing resources, keeping them up to date on legislative changes, offering educational opportunities and a chance to network with their peers. Each year the association aims to improve its program of services, continuously realigning its offering to meet the specific needs of its members.

Source: Hamilton-Halton Construction Association

CTE North America Is Launched

With an optimistic outlook on the future, CTE has partnered with Innovativ Hoisting in the U.S. to closely support the U.S. and Canadian markets. Headguartered in the



Hartford Connecticut area, this North American base of operations was created to support the product range with expert qualified service assistance.

range of CTE TRACCESS products. These compact tracked access platforms range from 15.5 to 26.8 m working height with full capacity horizontal reach ranging from 7.3 to 14 m. In the future, the CTE truck-mounted range will be added to the product offering.

"We pursued a dream and made it a reality, a fundamental step in the growth path we have started. I wish all the members of the CTE NA Corp Team a warm welcome to our family and look forward to a bright future together," said Marco Govoni, CTE sales and marketing director.

"We are very excited about this natural next step considering the growth of our TRAC-CESS brand in North America over the last 18 months. We've received terrific support from key dealers and customers who are excited about having a CTE branch in the U.S., recognizing the commitment and proximity to the market that brings, enabling CTE to support them and their businesses even better," added Tim Hunt, CTE Export Manager.

"This partnership was an organic evolution of developing the CTE product line here in the U.S. and Canada. We are proud to be a part of the CTE family and look forward to better serving our customers together with CTE," said Michael Gnazzo, CTE North America President and Innovativ Hoisting LLC director.

Source: CTE Group S.r.l.

Aquajet Highlights Ergo System at IFAT 2022

Aquajet will attend IFAT in München, Germany, for the first time to introduce its industrial cleaning solution to the water, sewage, waste and raw materials management industry. Aquajet's Ergo System, a compact Hydrodemolition robot unit, will be on display at the trade fair from May 30 to June 3rd, 2022.

Using a number of productivity-enhancing attachments, the Ergo System can be operated remotely for efficient cleaning and removal of material in boilers, tanks, pipes and other industrial containers and conduits. The Ergo System incorporates the controller unit, which powers and controls the hydraulics, the Ergo Power Head, which manipulates the high-pressure lance, and either the spine or the climber, which are unique systems used to support and maneuver the power head, based on project needs. The climber attaches to any standard scaffolding or pipes and robotically moves along it to deliver powerful Hydrodemolition forces to remove material.



The Ergo System also works with Rotolance attachments for improved capabilities in confined or hard-to-reach places. The Ergo Rotolance 130 and 130S work at pressures ranging from 1,000 to 3,000 bar and offer a variety of nozzle configurations for a spray pattern diameter from 30 mm

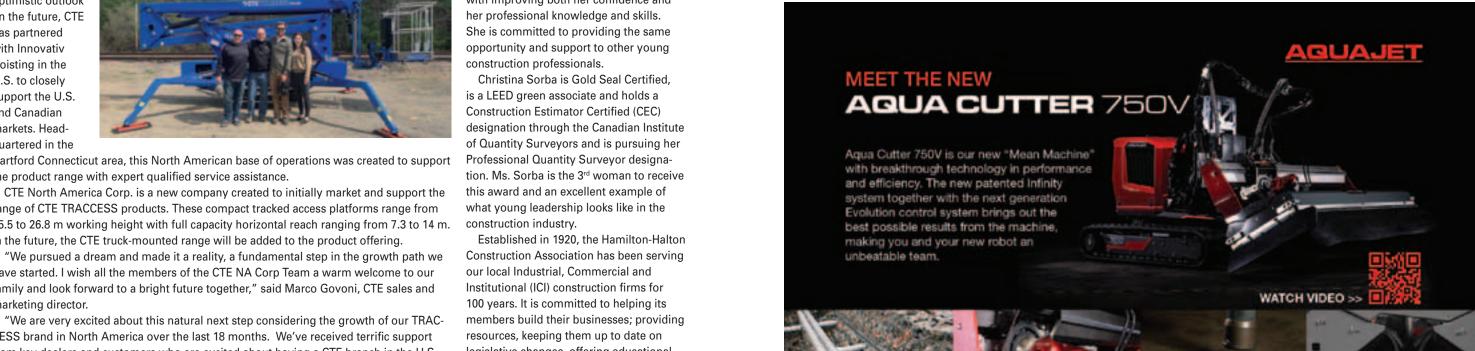
The system exerts an impressive 1,000 N of reaction force, as much as 4 times greater than a human operator with a hand lance. This means the machine can

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effectively clean and remove concrete, rubber coatings, paint, rust, plastic and other materials as well as roughen surfaces for better bonding faster than traditional methods, making it ideal for resurfacing applications in tanks, reservoirs and other containers.

Contractors can easily move the 123-kg unit around the facility or worksite and over soft or rough surfaces. The Ergo Controller transports easily on a pallet.

Source: Aquajet Systems AB



InfraStructures English Edition May 2022 – page 8 InfraStructures English Edition May 2022 - page 9

Caterpillar Launches 10 New Compactors

Caterpillar introduces 10 new compactors that deliver increased productivity, unmatched efficiency, simple operation and easy maintenance. The new line includes weight-based model nomenclature changes. These versatile rollers take on a range of soil and asphalt applications, including parking lots, driveways, urban streets, landscaping and small construction sites.

The new Cat CB2.5, CB2.7, CC2.7, CC 2.9, CB4.0, CC4.0 and CB4.4 models are built for power and production. Advanced hydraulics and exclusive power management software deliver exceptional performance on grades. Their new auto idle shutdown feature helps to conserve fuel and hours.

Designed for rental and low- to mediumduty applications, the efficient Cat GC series compactors deliver low total cost of ownership, simplified maintenance and long-term durability.

The reengineered operator controls features simple rocker switches and easy-to-

read Cat display for intuitive operation, so even inexperienced operators can quickly learn. A switch efficiently controls low/high vibration frequencies, while auto vibration control ceases vibration when the travel lever is in neutral to prevent marking of the asphalt mat. Available dual propel levers help to improve operator comfort.

Offering compaction widths from 1.0 to 1.4 m, Cat utility compactors feature large drum diameters for a smooth mat finish and thick drum shells for added durability. The rollers' 50 mm drum offset improves compaction efficiency when rolling next to curbs. A narrow frame design allows for improved visibility to the job surface and drum edge.

Both the standard and GC series models incorporate a water tank gauge for continuous monitoring from the operator's station. Better positioned nozzles on the spray bars improves water coverage on the drum to prevent material pick-up.

The new utility compactor line features



standard Cat ET (electronic technician) diagnostic software. When connected to the Electronic Control Module (ECM), Cat ET accesses diagnostic information such as status parameters display, active diagnostic codes viewing, logged diagnostic codes view, and diagnostic tests and calibration to help identify machine issues.

Standard Product Link™ technology captures critical operating data, fault codes and machine location information to boost fleet management efficiency.

Source: Caterpillar

FAE USA at the World of Asphalt

At the 2022 World of Asphalt held in Nashville, Tennessee on March 29-31, FAE was displaying models of top-notch equipment for roadbuilding and soil stabilization.

The FAE STABI/FRS - STABI/FRS/HP is FAE's newest dedicated soil stabilizer for high horsepower PTO tractors. Designed for multiple road construction applications, it is versatile enough to work projects of all sizes with outstanding precision.

The FAE MTL is the light version of the multi task line, which also includes the MTM and MTH machines. They combine the mechanisms of a soil stabilizer, rock grinder, rock crusher and asphalt shredder in one compact, easier to travel machine. The MTL is the lightest PTO unit compatible with a wide range of tractors. It is great for rock crushing and full depth reclamation up to 28 cm deep and ideal for smaller paving and asphalt recycling contractors.

The FAE STC/SSL is a compact and powerful stone crusher for high-flow

skid steers that is well known for its outstanding performance and durability. It is currently the only machine of its kind on the market, allowing customers to use their existing machines for a wide range of applications. Main

applications include stone crushing for site preparation and concrete recycling for road base construction. Because of its compact size, this unit is commonly used for creating dirt and gravel roads, bike and horse trails, driveways, parking lots, curbs, landscaping and agricultural land reclamation. It is also used for mixing soil stabilizer agents and dry additives into tight spots and angled embankments such as overpasses and levees.

The FAE RC is a rock cutter for excava-

tors that delivers excellent productivity, with low noise and vibrations. It effortlessly crushes rocks and hard surfaces such as bitumen, asphalt and concrete. Most common applications for this attachment include trenching in hard compacted material, profiling of rocky or concrete walls for

foundations and tunnels, mountainside

excavation for hilly road construction,

guarrying and underwater dredging.

Source: FAE USA

The AORS Municipal Public Works Trade Show Is Back!

WHAT? • Join us at the 2022 AORS Municipal Public Works Trade Show, the largest of its kind in Ontario. Visit almost 200 vendors, with both indoor and outdoor displays. The exhibitors showcase equip-



ment, products and services for public works infrastructure including road and bridge construction, maintenance and rehabilitation, facility management, communications, training, and more.

WHO? • Co-hosted by the Association of Ontario Road Supervisors (AORS) and the Simcoe County Road Supervisors Association. Representing over 2,000 public works professionals from across the province.

WHERE? • Centrally located in Barrie, Ontario, just 45 minutes north of Toronto. The tradeshow is being held at the Sadlon Arena, with easy access from Highway 400. Barrie is in Simcoe County, which offers a wide variety of

recreational and cultural activities you can enjoy before or after the tradeshow.

WHEN? • The tradeshow will be held on Wednesday June 1 and Thursday June 2, 2022. It will run from, 8:00 a.m. to 3:00 p.m. each day.

WHY? • See the latest in equipment, products, and services for the municipal public works sector. Learn what is new. Reconnect and network with your peers. No cost to attend! Lots of free parking onsite.

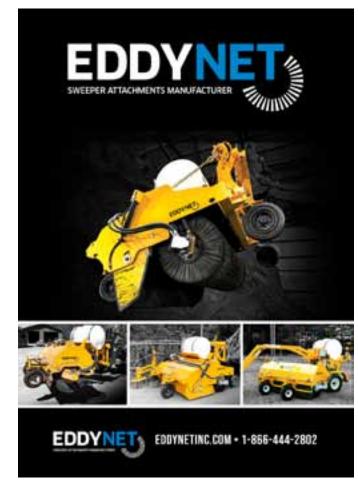


NEED MORE INFO? • Visit the AORS' website (www.aors.on.ca) for more information on exhibitors, accommodations, directions, and other activities to make the most of your visit. Pre-register for free and be entered into daily door prize draws.

LIMITED BOOTH SPACE STILL AVAILABLE!

Source: Association of Ontario Road Supervisors (AORS)





InfraStructures English Edition May 2022 – page 10

RM XSMART Telemetry & Fleet Management

A smooth operation means more profits. That is why RUBBLE MASTER has launched RM XSMART telemetry & fleet management that helps contractors get more clarity about their operation to identify blind spots and improve processes. It also assists operators with more information about the condition of their machines to become more proactive and accelerate service processes.

RM XSMART is available as an app on your phone or your desktop computer to access machine data anywhere, at any time. Operators can monitor fuel levels, reset belt scales, and track their tonnages with an optional belt scale conveniently from their cab. Traditional handwritten log books become obsolete because RM XSMART documents machine utilization such as run time, operating hours, and tonnages, which can be easily shared with your client or back-office. The operator can choose between a job report that documents the progress of a specific job or a

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INVENTORY REDUCTION

daily report that summarizes the day's achievements.

Less experienced operators often struggle with new machinery. Without confidence and quality feedback, operators are held back, delay decisions, and become frustrated. The new Performance Indicator provides instant visual feedback to the operator to help him find the sweet spot so that the machine is pushed to its maximum to increase production and profits. LED light bars underneath the feeder show the utilization of the machine based on engine load and feed speed to help operators adjust their feeding behavior.

As diesel prices soar, energy efficiency, alternative energy sources, and efficient drives become more crucial than ever. RUBBLE MASTER has been using fuel-efficient diesel-electric direct drives from day one to improve your bottom line. All products will be available either with the proven diesel-electric direct drive or hybrid

Shaft Quick-Change System

for uninterrupted operation

Shortens maintenance times, refurbish-

ment and changing of different shaft type



drive. The hybrid option gives owners the freedom of choice between the onboard diesel engine or another RUBBLE MASTER machine.

RUBBLE MASTER constantly thinks of how the construction site of the future will look. RM XSMART, the new Performance Indicator, and electrification are the building blocks for a smarter and autonomous future jobsite where anybody can achieve a high tonnage output with less hassle at optimum costs.

Source: RM Group

From Ag Machines to Road Rollers



In 1911, HAMM launched the world's first motorized road roller. The Hamm brothers had already been making motorized machinery. They built stationary traction engines, motorized plows and threshing machines.

Hamm used a 1-cylinder engine by Deutz which could be operated with petrol or benzene. The engine managed 16 hp at 280 rpm.

From the 1920s, the HAMM motorized road rollers became increasing well-established and grew to be HAMM's most successful product.



John Deere is bolstering its wheel loader lineup with the highlight of the 904 P-Tier wheel loader, showcased for the first-time at World of Asphalt and AGG1 in March. Available soon, the new 904 P-Tier is a 2-pass loader solution that provides the durability and reliability to take on processed aggregate stockpiles and more efficiently load trucks or rail cars all day long.

Based on proven components and designs, the new 904 P-Tier offers obstacle intelligence features, such as the Advanced Vision System – an industry first for loaders. This allows increased visibility to sides of the machine by integrating 2 digital cameras on the rearview mirror platform and combines views into a dedicated single display in the cab. The 904 P-Tier also offers an improved rear object detection system. This feature overlays a projected vehicle reversible path within the same dedicated monitor, enhancing the operator's experience and situational awareness. These features, coupled with premium cab



comfort options, ensure operators remain productive throughout the day.

The 904 P-Tier comes equipped with 7.5- and 7.1-m³ material-handling buckets with integrated spill guards and curved side cutters, and seat-mounted hydraulic controls for easier and more intuitive operation. High-capacity, heavy-duty axles with standard axle cooling filtration deliver durability in difficult conditions compared

to previous models. With its large tilt cylinders and impressive hydraulic pressures, engine power and torque, it provides the muscle for operators to work comfortably. With advantages, such as fuel-efficient engines, lockup torque converters and a dedicated steering pump, operators can do more while burning less fuel.

Source: Deere & Company

W 120 Fi Milling Machine Headlines Wirtgen's Booth at World of Asphalt 2022



At World of Asphalt 2022, the Wirtgen Group showcased 11 exhibits representing a cross-section of its market-oriented and holistic solutions for the entire road construction process.

The highlight of the show, the W 120 Fi, celebrated its world premiere in Nashville, Tennessee, as a representative of Wirtgen's new generation of compact milling machines. The focus was set, not only on Wirtgen Group solutions, but also on the critical issues of cost-effectiveness and sustainability.

Source: Wirtgen Group

Next Generation 3D Control for Asphalt Compactors

Trimble
Roadworks
Paving Control
Platform for
Asphalt Compactors enables
operators to accurately control
the compaction
process, while
reducing unnecessary passes
that can result



in over compaction. It is designed to improve the speed, accuracy and ease of asphalt compaction.

The system leverages the highly intuitive Android™-based Trimble Roadworks software to maximize ease of use, shortening training times and decreasing downtime for operators already familiar with the Roadworks user interface. The new system is flexible and can support a variety of jobsite needs and specifications. It helps contractors save on fuel costs and reduce both machine wear and tear and operator hours. In addition, asphalt temperature mapping allows operators to compact at the correct temperature, reducing material waste and rework.

Source: Trimble

InfraStructures English Edition May 2022 – page 12

ARJES Impaktor 250 Shredder - 235 hours

220 hp Volvo engine, new paint. Perfect condition. Can

processconstruction waste, concrete, green waste,

waste wood, tires etc.... up to 80 t/h. Price on request



NEVER IDLE

In this business, experience matters. For over 30 years, we've been building reliable workhorses by being all ears and rolling up sleeves. To innovate smart features like flexible grade control and virtual fencing to minimize mistakes and max out uptime.

And strengthen our dealer network with ironclad support to keep the tracks, and your business, moving forward.





BKT's Solutions for Port Operations

Resistance, maximum traction on dry and wet surfaces, high durability over time are all essential characteristics for tires intended for port operations. In addition to their "general" needs, it is important to say that each machine operating in these environments has very specific characteristics and consequently the tire must be meticulously designed.

BKT's range of port tires offers solutions suitable for the different machinery operating in port hubs, offering tires with specific characteristics and features for each application.

BKT tires meet the needs of logistics and port handling and can operate on irregular and treacherous areas, worksites with rough cemented surfaces, and can lift heavy loads in complete safety. In particular, BKT's PORTMAX radial range offers solutions that are suitable for these applications.

PORTMAX PM 90 is designed for reach stackers and is equipped with multilayer

steel belts which guarantee exceptional stability that is indispensable in the handling of high loads.

Particularly resistant and with a high load capacity, PORTMAX PM 93 PLUS is the perfect radial tire for intermodal transport for straddle carriers. It is able to operate even in the most difficult situations, handling the heaviest loads and maintaining good stability.

PORTMAX PT 93 has been specifically developed for terminal tractors and is perfect for operations in ports

and interports. The tread offers resistance to wear and tear even in the most demanding situations. Excellent stability, driving comfort and prolonged durability are the technical characteristics which make PORTMAX PT 93 an excellent solution for



intermodal transport.

PORTMAX joins various other BKT solutions designed for port operations and to meet the needs of professionals in the sector and to respond to every requirement.

Source: Balkrishna Industries Ltd. (BKT)

Wajax Appointed Distributor of MAFI's Terminal Tractors

Wajax is proud to announce that it is now the exclusive Canadian distribution partner of MAFI Transport-Systeme GmbH. MAFI is a leading terminal tractor and industrial trailer provider with a diverse line of equipment that offers both diesel and electric power options. Both as one of the world's leading seaport and container facility tractor providers, and as an



innovator in safety and technology, MAFI adds significantly to the comprehensive material handling offerings available through Wajax.

"I am very pleased to announce that Wajax is the exclusive MAFI dealer for all of Canada", said Brian Kolthof, vice president of Material Handling at Wajax. "We have been searching for a world-class manufacturer and this deal will significantly expand our reach into the Ports, Rail and Intermodal business. MAFI's lineup of high-quality terminal tractors and trailers fits well with our other lines of equipment and features the latest in modern technology and operator comfort."

Environmental stewardship is a priority for both companies, and MAFI's commitment to developing heavy-duty clean energy vehicles without compromising on power or durability will also help Wajax meet the increasing demand for such equipment in Canada.

"We continue to focus on reducing our carbon footprint, and MAFI's introduction of an Electric Terminal Tractor fits well with our overall strategy of improving our environmental performance and aligning ourselves with key suppliers that are investing in this area." added Mr. Kolthof.

With a low total cost of ownership and excellent safety features, MAFI terminal tractors and trailers provide owners with excellent value and ease of use.

Established in 1957, MAFI Transport-Systeme GmbH specializes in the development

and production of heavy-duty vehicles for transporting containers, semitrailers, cargo/roll trailers and special container chassis in ports and industry. MAFI places particular importance on intensive dialogue between its customers and partners. Thanks to intensive market research and close cooperation with its customers, MAFI is constantly improving and optimizing its products.

Wajax will add a comprehensive range of MAFI equipment next to an already extensive product offering from such brands as PowerBoss, Columbia, Bulmor, Hyster, and Yale. MAFI vehicles are in stock, ready to ship, and backed by Wajax's skilled support and maintenance staff.

Source: Wajax

Georgia Ports Authority Orders 22 Container Cranes

The Port of Savannah, Georgia, has the single largest and fastest-growing container terminal in the U.S. It is run by the Georgia Ports Authority (GPA) and its operations are being expanded, with investments in new container handling capacity. Projects now underway will add 1.7 million TEUs of annual capacity in a few months.

"The container cranes on order will be key to the GPA handling the increasing volumes and will support continued growth. The 7 ship-to-shore cranes (STS) can handle the world's largest container vessels, with a lifting height of 50 m and an outreach of 70 m. The rubber-tired gantry cranes (RTG) will be delivered as fully electric and carbon neutral, with a lifting capacity of 36.3 t," said Jussi Suhonen, vice president Regional Sales Americas, Port Solutions, Konecranes.

The STS cranes will be equipped with snag prevention, anti-collision systems and cameras for the operators. They will bring GPA's fleet of Konecranes STSs to a total of 42.

The 15 Konecranes RTGs on order are supplied with cable reel systems for electric operation. They are high-performance, 16-wheel RTGs with a stacking height of 1-over-6. They will be equipped with Konecranes' Active Load Control system, which prevents container sway.

Furthermore, they will have Konecranes' TRUCONNECT® remote monitoring system. When the new RTGs are in service, the GPA will operate a fleet of 225 Konecranes RTGs.

This order is part of Ecolifting, Konecranes' continuous work to decrease the carbon footprints of its customers. From eco-optimizing diesel drives to hybridization and fully electric fleets, Konecranes will continue to do more with less.



A strong focus on customers and a commitment to business growth and continuous improvement make Konecranes a lifting industry leader. This is underpinned by investments in digitalization and technology, plus its work to make material flows more efficient with solutions that decarbonize the economy and advance circularity and safety.

Source: Port Solutions, Konecranes



InfraStructures English Edition May 2022 – page 16

Full Power for Power Plant Construction

This year, the catchery in Töging will be "Water on!" and the Inn canal, partially drained for the last phase of work, will be flooded again. From the dam between Jettenbach and Aschau am Inn, the diverted Alpine river will flow 20 km to the run-of-river power plant Töging, where it will rush a good 31 m into the deep -410 m³/s, which will be converted into electricity in the powerhouse by 3 machine sets, each consisting of a Kaplan turbine and a generator. Enough to supply 200,000 households in the region.

A thundering spectacle, even though grass will have covered it soon. Nothing will be visible in the lush greenery except for 2 elegant concrete apertures marking the inflow and outflow of the new power plant. The future of hydroelectricity in Töging am Inn in Upper Bavaria will be subterranean: 9 years of hydro energy planning and construction swallowed up by the earth. But this construction site - a moulded, moraine-like, sloping piece of

land between the bank of the Inn and the historic structure – has a story to tell. Here, where complex geometric planning meets

geological caprice, where humans tame the irrepressible forces of nature a few meters above sea level. In the name of the energy revolution it will feed renewable energy into the grid. Not only has the entirety of civil engi-

neering know-how been called upon here to keep the groundwater in check, methods first had to be sought to pave the way for this bold construction dream – keyword: formwork planning.

3D formwork planning is one of Doka's key disciplines, demonstrating that also slopes of almost 30° and slab thicknesses



of 4 m can be overcome. Doka provides ideal casting moulds for the concrete even when imagination is stretched to its limits. The Doka project technicians have a lot of experience in power plant construction,

having realized some fascinating structures: be it modernizing an old power plant building to make it more efficient, building a new one or expanding an existing one; or a mixture of all three, as in the Töging project.

"But here, the geometry of the turbines and inlet slabs was so complicated in several areas that formwork planning wouldn't have been possible without a comprehensive 3D model," said senior project technician Stefan Pirkner.

The aim was to understand which negative forms were needed to ensure flawless concreting later on. Over the course of 100 extra project hours, the complex was made comprehensible and the comprehensible was made precise. And the PORR GmbH & Co. KGaA and the construction supervisor Ralph Brenner received the ideal freeform formwork to cope with the demanding geometry.

"We had a contact person from Doka here at all times, and the custom-built

modules came to us already preassembled so that we could concentrate on reinforcing and concreting," said Mr. Brenner.

Even 6-level structures such as stair towers were simple to handle and could be moved easily with a crane. All this gave the construction crew a feeling of security at work - another basis for the very high level of safety at what is currently Germany's largest hydroelectricity construction site.

Then came the coronavirus. And this was problematic not only for the Doka sales and field engineer. There were scarcely any border crossings or on-site support possible, and almost everything had to be done from home via video calls. However, digital technology such as BIM, 3D planning, real-time concrete monitoring and video conferencing were extremely helpful.

Compared to the historic power plant from the time of the Weimar Republic, built 100 years ago by up to 7,000 workers on what was then Europe's largest construction site, the new and modern construction architecturally blends modestly into its surroundings – although its performance capability, with 3 vertically anchored turbines, will stand at centre stage.

Bavarian operator VERBUND Innkraftwerke has spent €250 million (\$340 million) on their project between Jettenbach and Töging.

The Austrian company Doka is an expert in power plant construction – even when things get complex. Also, due to Austria's mountainous topography, which makes up three quarters of the land area, 70% of electricity produced in Austria comes from hydropower. That is well above the European average, and even the Kaplan turbine is an invention of the Alpine republic. Historically, Doka is deeply rooted in power plant construction. After all, the name Doka comes from the Austrian DOnauKrAftwerken (Danube Power Plants), for which the first formwork was supplied in the 1950s. Or, in Zehetmayer's own words: "We have the most experience when it comes to building power plants!"

Source: Doka

Corrosion Inhibitor Add-In for Water-Based Paint

Paint formulators have much to think about when designing water-based coatings for metal. One key decision is the choice of corrosion inhibitor. Fortunately, Cortec® makes it easy for formulators to add the power of Cortec® Micro-Corrosion Inhibiting Coatings[™] to their own paints at any stage of the production process with M-120 corrosion inhibiting additive for water-based paints.

Where many coatings rely on sacrificial metals for corrosion protection, M-120 takes a different approach. It does not contain any heavy metals or zinc. Rather, it relies on the power of Cortec® VpCI® amine-carboxylate-based technology to form a microscopic corrosion inhibiting layer to protect metals at the microcavity level. This is where traditional inhibitors leave microscopic gaps due to their large relative particle size. M-120 helps fill in the gaps and can be used alone or in conjunction with traditional corrosion inhibitors or pigments to maximize the corrosion inhibiting ability of the paint. This VpCI® Technology prevents in-can



corrosion - which is a common problem for water-based coatings – and has the ability to reduce scribe creep - a standard test method used to measure corrosion when coated panels undergo salt spray or humidity testing.

Beyond corrosion protection, one of the beauties of M-120 is its versatility and ease of use. It can be added to many types of water-based resin systems - epoxies,

urethanes, acrylics, and alkyds. It provides corrosion protection for both carbon steel and aluminum. It is also very easy for formulators to mix into their coating to boost the level of corrosion protection at any phase of manufacturing, unlike many inhibitors that cannot be post-added.

Source: Cortec® Corporation

Engcon Launches a Lightweight Pallet Fork for Small Excavators

Tiltrotator manufacturer Engcon recently launched a lightweight pallet fork for excavators in the 2-6 t weight class. As a result, the work

that can be done by these machines is further expanded, which contributes

to increased efficiency and profitability.

With a tiltrotator on the excavator the type of work that can be done increases significantly. With

the ability to tilt and rotate the bucket, as well as connecting a variety of attachments under the tiltrotator it makes an excavator a smart tool carrier. Engcon recognizes this and now has one of the market's widest range of tools for excavators 1.5 to 33 t.

The new and lightweight pallet fork comes in 2 versions, one hydraulic and one mechanical and it can handle a load of 2 t of TP500 which means that it is rated for 2 t of load 500 mm out from the back edge of the forks. The weights are calculated at 141 kg for the mechanical and 151 kg for the hydraulic pallet fork and the standard length of the

The hydraulic version is adapted for Engcon's automatic quick hitch system EC-Oil enabling the driver to connect the pallet fork and its hydraulics automatically without stepping out of the cab.

The new lightweight pallet fork will be on display at this year's fairs and events, delivery is expected by the end of the year.

Source: Engcon

InfraStructures English Edition May 2022 - page 18

Enerpac SyncHoist Used on a Paris Jobsite

Chantiers Modernes Construction, the Île-de-France Public Works Division of VINCI Construction France, used an Enerpac SyncHoist system for precision installation of concrete beams across rail tracks in the eastern part of Paris. The MV10P project on the Avenue de France in the 13th arrondissement aims to create a new 10,000 m² space above the tracks for the construction of office, residential and commercial premises, as well as hotel facilities.

Covering the railway tracks between the Paris Austerlitz station and the Boulevard de Marechaux, the project integrates reinforced concrete beams laid across the railway tracks 9 m below. Over the next 2 years, a total of 100 beams weighing up to 215 t and measuring up to 26 m long, 2.5 m wide and 3.5 m deep will be positioned by Enerpac SyncHoist lifting cylinders suspended beneath a spreader beam lifted by a Liebherr LTM 1600 crane

provided by the Mediaco Levage Group.

Benefits of using the Enerpac SyncHoist for this project include the ability to stabilize the beam by monitoring the load on each hoist, evaluate the load on the lifting rope slings and the ease of manipulating the beam to achieve an accurate, level positioning. The SyncHoists are controlled wirelessly, allowing the operator to work at a safe distance and oversee the entire hoisting job. No cables are needed, so there is no risk of entanglement or tripping hazards.

"Safety is our first consideration when planning a lift. We especially liked the way

WWW.CROPAC.COM



the SyncHoist's wireless operation allows us to evaluate and control the beam's stability, as well as achieving the precise positioning required for this project," said Jonathan Marin, project manager, Mediaco Levage Group.

"It is a very complex site where all lifting movements must be carefully planned, especially as we are working at night to minimize disruption to the rail network. The Enerpac SyncHoist has given us the degree of positioning control we were looking for when installing the concrete beams," commented Paul Vanbergue, chief engineer at Chantiers Modernes Construction.

PRECISE CONTROL

The below-the-hook Enerpac SyncHoist range includes lifting cylinders with 110 and 225-t capacities, plunger strokes of 1 and 1.5 m and are capable of high precision lifting accuracy of ±1 mm over the full stroke. For repetitive hoisting tasks, the controller can also be pre-programmed for positioning, tilting and aligning of loads.

Source: Enerpac

Cummins Completes Acquisition of Jacobs Vehicle Systems

Cummins Inc. recently announced that it has closed on its acquisition of Jacobs Vehicle Systems from Altra Industrial Motion Corp.

Jacobs is a supplier of engine braking, cylinder deactivation, start and stop and thermal management technologies. Its addition brings new technologies that will provide growth opportunities for Cummins' current and future advanced engine platforms. The acquisition also secures critical USMCA qualified engine components for current and aftermarket products and expands on Cummins' offerings to customers globally.



emissions-leading medium and heavy-duty engines.

Operations from Jacobs Vehicle Systems will report into Cummins Turbo Technologies, a business unit led by Shon Wright, vice president of Cummins Turbo Technologies, that

this acquisition allows Cummins to better integrate these important technologies into its

resides within the company's Components segment.

Source: Cummins Inc.

DD15 Gen 5 Engine Hit More than One Billion Road Miles

After beginning production at the start of the year, the updated Detroit DD15 Gen 5 engines have accumulated more than 1.6 billion cumulative road kilometers to date, a true testament to the performance of the DD15 Gen 5 engine.

"The award-winning DD15 Gen 5 engine is a key part of our ability to provide highly reliable service to our customers. The DD15 platform has been a go-to for our operations for years now and the new platform has exceeded our expectations of uptime, DPF health and overall running costs," said Max Fuller, executive chairman and former CEO of U.S. Xpress.

"Our commitment to the global community to be a green transportation solution provider is closely aligned with the efficiency gains of the DD15 Gen 5 engine. The highly efficient new engine means less hydrocarbons consumed, and an overall smaller carbon footprint for our operations," said Rob Reich, chief administration officer for Schneider National.

Available for Freightliner Cascadia and Western Star 49X trucks, the DD15 Gen 5 engine was completely updated from the previous generation with leading-edge technologies to deliver industry-leading fuel efficiency, durability and performance.

The DD15 Gen 5 was built with the same foundational excellence using Detroit's heavy-duty engine platform (HDEP), but with more than 50% new components for less complexity. Featuring ultra-high compression ratios paired with a new swirl piston design that make combustion even better, the DD15 Gen 5 can achieve more

than a 3% improvement in fuel efficiency. Additional performance-related achievements include increased downspeeding and a ball bearing simple geometry turbo that provides quicker response.

The DD15 Gen 5 is part of the compre-



hensive portfolio of Detroit solutions that are purposefully designed to complement one another to deliver the highest level of performance.

Source: Daimler Trucks North America

InfraStructures English Edition May 2022 – page 20

SHUNT TRUCKS

TELEPHANICLEIGN

GE Aviation Singapore First to Offer Metal Additive for Engine Component Repair

As metal additive technology continues to gain momentum in the design and industrial production of new aerospace components, GE Aviation's Loyang facility is the first maintenance, repair and overhaul (MRO) facility worldwide that has been approved to use metal additive manufacturing for commercial jet engine component repairs.

3D-printed parts are typically printed using STL files generated from CAD drawings. However, this works only for new-make production where the goal is to produce identical parts conforming to the blueprint. When repairing used parts, however, the repair has to be customized for each individual part because each part wears differently during service.

Additive technology in repairs also offers the possibility of embracing complexity, rather than shying away from it. Chen Keng Nam, executive manufacturing leader at GE AESS in Singapore, has also been involved in the metal additive roll-out.

"This disruptive technology can be used for lots of applications, not only in aviation.

NTEA - The Association for the Work

Truck Industry released the 15th edition

of its Truck Equipment Handbook, the

industry's most comprehensive pocket

guide for commercial vehicle components

and equipment. The new version includes

updates to U.S. and Canadian regulations,

vehicle certification process and regulatory

"Work truck industry professionals have

relied on NTEA's Truck Equipment Hand-

book as a valued resource since 1989,"

dealers, sales representatives and end

Application and installation consider-

users."

TOPICS ADDRESSED:

ations and requirements

said Steve Spata, NTEA senior technical

assistance director. "It's an indispensable

guide for distributors, manufacturers, truck

along with an expanded set of industry

definitions. This edition also covers the

standards applicable in Canada.

When I see beyond the realm of repair into new-make, it's mind-blowing to see the parts that we can design and print using additive. Now designers are making use of the ability to produce new designs that could not be imagined or manufactured before with traditional methods," he said.

Additive technology is already used to repair parts in GE Aviation's CF6 engines, the most-reliable and best-selling commercial engine on wide-body aircraft. The next goal is to include parts on the CFM56, the best-selling engine in commercial aviation

One example is the repair of highpressure compressor (HPC) blades that run at high speeds and tight clearances within aircraft engines. They face regular erosion and wear and tear that, over time, demand continuous repair and replacement. Repairing these blade tips used to require a long process of cutting, welding and grinding to create the proper shape.

GE Aviation has established an automated additive manufacturing process to repair the HPC blade tips, saving time and

NTEA Releases New Edition of Truck Equipment Handbook

· Illustrations of basic engineering calcula-

· Alternative fuels and hybrid propulsion

systems information

· Reference sections on ve-

Canadian Motor Vehicle

Standards and lighting

• Weights and measures

· Glossary of truck equip-

The new Handbook is

and US\$29 for nonmembers.

available for US\$15 for NTEA members

Association for the Work Truck Industry

represents more than 2,000 companies that

manufacture, distribute, install, sell and re-

pair commercial trucks, truck bodies, truck

equipment, trailers and accessories. Buyers

of work trucks and the major commercial

Established in 1964, NTEA – The

ment industry terms

Safety

requirements

hicle certification, Federal/



costs associated with labor and machining The team created image-analysis software that maps the shape of a used blade and creates customized instructions for the Concept Laser M2 machine to build a new tip with precise alignment and profile.

The 3D-printed part is near-net shape and can be finished with minimal additional processing.

truck chassis manufacturers also belong to

NTEA. The Association provides in-depth

technical information, education, and

HANDBOOK Reference guide to

WORK TRUCK

COMPONENTS

and equipment

member programs and services, and pro-

duces Work Truck Week® and Green Truck

Summit. The Association maintains its

Washington, DC, and Ottawa, Ontario.

Work Truck Industry

administrative headquarters in suburban

Detroit and government relations offices in

Source: NTEA - The Association for the

Source: GE Additive

2022 Kenworth Heavy Duty Body Builder Manual Offers Detailed Information for Planning and Installation Processes

The 2022 Kenworth Heavy Duty Body Builder Manual offers detailed information and guidelines useful in the truck body planning and installation processes.

The manual is specific to chassis with 2021 EPA emissions level engines and focuses on the Class 8 Kenworth T680, T880, T880S and W990 models equipped with the 2.1-m wide cab.

Early in the vehicle definition and ordering process, body builders can often contribute valuable information that reduces the ultimate cost of the body installation. This key information helps to ensure that the truck is specified correctly, and will be ready and set up appropriately for efficient turnaround by the body builder.

The comprehensive 194-page manual provides detailed sections on safety and compliance, dimensions, PTO mounting

and programming, exhaust and aftertreatment, frame layouts, body mounting, frame modifications, CAN communication electrical, and routing.

The Kenworth T680 provides an excellent fuelefficient, productive and driver-friendly

truck for over-the-road fleets and truck operators in line haul, pickup and delivery, and regional hauling applications.

The Kenworth T880 offers a durable, reliable and productive truck for vocational

Bell to Use Allison Transmission in Next-Gen Dump Trucks

fleets and truck operators in bulk haul, mixer, dump, heavy haul, oilfield, logging and refuse applications, while the T880S features a set-forward front axle and is the go-to configuration for mixer customers needing to comply with federal bridge formulas.

The long-hood Kenworth W990 conventional is designed to maximize performance in line haul, pickup and delivery and regional hauling operations, along with various vocational applications.

The 2022 Kenworth Heavy Duty Body Builder Manual is available for download from Kenworth's website.

Source: Kenworth Truck Company

a partnership with Bell Equipment Group Services to integrate and evaluate the Allison TerraTran™ in the next generation of Bell's articulated dump trucks.

Allison Transmission recently announced

A variant of Allison's 4000 Series™ on-highway transmission, the TerraTran is purpose built for off-highway applications such as articulated dump trucks, mobile crane, and wide-body mining dump trucks. TerraTran was developed based on customer input, which indicated a need for the proven reliability and durability of Allison's 4000 Series transmission, but with the increased horsepower, torque and gross vehicle weight (GVW) capability needed for off-highway applications, while also adding fast reverse capability.

capability of up to 800 hp, and torque capability up to 3,200 Nm (2,360 ft lb), de-

deployed. Terra-Tran also features 7 forward and 2 reverse speeds.

With the additional fast reverse, TerraTran delivers improved productivity and optimized vocational efficiency.

"Allison has established a successful relationship with Bell

over the past 25 years and we look forward to continuing our longstanding partnership through the integration of our latest propulsion solution for Bell's evaluation," said Kartik Ramanan, executive director, Global Off-Highway Sales, Customer Support and Service Engineering at Allison



Transmission. Source: Allison Transmission

Allison's TerraTran has maximum power pendent upon the application in which it is

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

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



InfraStructures English Edition May 2022 - page 22

InfraStructures English Edition May 2022 - page 23

Appointments

TeamSense recently welcomed Eric Welke as the director of marketing. Mr. Welke was tapped for the position based on his specific expertise in manufacturer marketing and background in supply chain and plant operations with industry majors.

Source: TeamSense Inc.

Hägele GmbH, manufacturer of Cleanfix Reversible Fans, recently announced a number of personnel promotions throughout its growing global operations.

"We are always extremely proud to be able to promote longserving and extremely loyal employees," says CEO Benjamin Hägele. "These most recent promotions reflect the tireless dedication each of these professionals has provided and will continue to provide our organization. We proudly applaud and sincerely thank each and every one."

Steffen Erhardt joined Hägele GmbH in 2009. Now as director of Engineering, he is responsible for all technical initiatives and properties of Cleanfix worldwide. These include engineering projects, R&D, special-purpose machinery and testing. He has responsibility for a team of 20 engineers and technicians in the Engineering Department and related workshops worldwide.

Long before Matthias Fischer joined Hägele GmbH, he understood fully the value of having the best components in equipment. He grew up around agriculture, helped on local farms as a boy, and then became a contractoremployed operator of highly demanding and productive machinery ranging from tractors to self-propelled forage harvesters. He later became an equipment and vehicle mechanic for 7 years at a local dealership, and then after

stints in the military and as a truck driver, completed his mechanical technician training and joined the Cleanfix Engineering department in 2006. Now, as team lead, Application Engineering, he has oversight and management over staff that is charged with the critical responsibility of applying the custom Cleanfix cooling and cleaning solution to equipment active in the market.

Starting in 2004 as a working student in the Production depart-

ment, Gideon Flor has seen his own position within Hägele GmbH evolve much as both the company and the world has. As marketing manager, he will oversee development and implementation of corporate marketing strategies, working with product development and sales teams on programs and campaigns.

Since joining Cleanfix North America as Production supervisor in 2020, Brad Reibling has embraced the double task of revamping the full service shop of the Canadian operation while at the same time having to manage vastly and rapidly increasing production demands. He arrived at Cleanfix with 25 years of experience on the quality side of manufacturing, most recently for a leading automotive sector supplier.

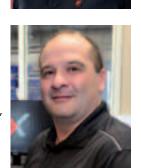
A 30-year veteran of North America's heavy equipment and farm machinery trade press and marketing industries,

Michael Anderson began working with Cleanfix North America as an outside marketing service provider and consultant in 2018. He joined the staff of Cleanfix North America

in 2019 as Marketing coordinator.

"His trade show oversight, advertising and social media efforts every day since have significantly increased our exposure and placement in the marketplace," said Jan Boettcher, general manager, Cleanfix North America. "Beyond that, Mike's a newshound at heart and he does a great job of keeping our team on top of the ever-changing developments in the

Source: Cleanfix North America Inc.







various equipment markets we serve with our reversible fans."



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Imagine a skid steer loader with the power and capabilities of world-class loaders, but with only one difference - zero environmental impact.

Clean energy, up to 6 hours of operation, 8+ hours with 400 Ah battery.

100%environmentally friendly, it remains unique to the machinery world, and it still is the only fully electric skid steer loader available to customers world wide!



SPECIFICATIONS

Rated load capacity Tipping load 3 968 lh Minimum travel speed 0.09 mp/h Maximum travel speed 7.46 mp/h

WEIGHTS

1 984 lh

Rated operating weight Total weight of the loader

ELECTRICAL SYSTEM

Battery life under load 240 Ah Battery Battery life under load 400 Ah Battery Charging time 100% Charging time 80%

HYDRAULIC SYSTEM

Hydraulic oil pressure Hydraulic oil flow Hydraulic oil reservoir

2 611 psi 17.17 gal/min 10.6 gal

SMART TECHNOLOGIES REMOTELY CONTROLLED

164^{ft} operating radius 2 Axis joystick Secondary controls **Emergency stop** Tertiary control touch screen

App-based remote 49 ft operating radius



• 2-6h of operation 💌

7 275 lb

- 8• h with extended battery 💌 💌
- charging time 100% -3,5h
- hinge pin height 3637mm
- * For SmartManagement batteries only. Standard battery 100%capacity charging time is 5.3 hrs.

8+ h

5,3 h

tilt 47°



LOADING CAPACITY

1400 kg with 400 Ah battery

• automatique bucket alignment

environmentally friendly

900 kg with 240 Ah battery pack

FINANCING AVAILABLE - *Conditions may apply. Subject to credit approval.

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Agenda

May 30 - June 3, 2022 Munich, Germany

AORS Municipal Public Works Trade Show

June 1-2, 2022 Barrie, ON Canada

Svenska Maskinmässan

June 2-4, 2022 Stockholm, Sweden

Canadian Mining Expo

June 8-9, 2022 Timmins, ON Canada

Hillhead

June 21-23, 2022 Buxton, Derbyshire, UK

M&T Expo - Trade Fair for Construction and Mining Equipment

August 30 - September 2, 2022 São Paulo, Brazil

SWIFT 2022

September 13-15, 2022 Montreal, QC Canada

APOM Technical Day

September 15, 2022 Saint-Zotique, QC Canada

InnoTrans

September 20-23, 2022 Berlin, Germany

Rescheduled to October 24-30, 2022 Munich, Germany

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World of Concrete 2023

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

Landscape Ontario CONGRESS

January 10-12, 2023 Toronto, ON Canada

Work Truck Week

March 7-10, 2023 Indianapolis, IN USA

CONEXPO-CON/AGG

March 14-18 2023 Las Vegas, NV USA



SMOPYC 2023 - International Show of Public Works, Construction and Mining Machinery

April 26-29, 2023 Zaragoza, Spain

The Utility Expo

September 26-28, 2023 Louisville, KY USA

International Rental Exhibition (IRE) / APEX access show

Rescheduled to 2023 Maastricht, the Netherlands

Rescheduled to Summer 2023 Homberg/Nieder-Ofleiden, Germany

TECHNI-MAT (Trade show for infrastructure and structural building)

March 6-7, 2024 Kortrijk, Belgium

INTERMAT Paris

Rescheduled to April 2024 Paris, France







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compacts, les véhicules utilitaires et autres, bénéficieront de ces technologies



Compact Size

The most innovative of its kind

The latest innovation from Hatz is the Flywheel-Integrated Permanent Magnet Generator (fiPMG). This efficient hybrid solution is engineered for minimal size and weight compared to conventional generators. Whether you require AC or DC the fiPMG ensures consistent high-power, in a compact, quiet, and fuel-efficient package for a low total cost of ownership. The E1 technology, which is at the core of the fiPMG, provides all necessary electronics for maximum efficiency. Numerous applications such as mini-excavators, light towers, skid steers, utility vehicles and more, will benefit from these technologies.

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