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NEET BROKK 70 THE NEW MINI SUPER HERO



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Construction Star" Lifts Spirits of Weary Commuters

Fighting traffic on a daily commute is rarely enjoyable, particularly when construction constricts and slows an already congested highway. But for a couple of this past summer, "Steve" provided a welcome respite to the daily grind on I-66 in Northern Virginia. Each morning, he silently greeted the legions of bleary-eyed, coffee-sipping drivers making their way eastward toward the Nation's Capital. He was there in the evening as well, offering a salute as if to say, "The day is over! Now go home and relax. See you tomorrow."

Few knew where "Steve" came from, or even if was his name. Had you stopped to ask, you probably wouldn't have gotten of a response.

"Steve," you see, was a crane—a Liebherr LTM 1500 brought in by Maryland-based Digging and Rigging, Inc., to help erect some new bridges as part of the I-66 Express Lanes project. With most of the bridge work taking place at night, the crane was locked down during the day, its distinctive Y-shaped boom guying system giving the appearance of upraised arms. Pleasantly distracted from their conversations, talk radio, or e-books, drivers took notice and, naturally, took to social media to talk about it.

Before long, the crane gained a name (the origin is unknown, I'm guessing it's a play on Stephen Crane, author of "Red Badge of Courage") and a personality. Some clever photoshoppers soon had "Steve" emulating Rocky Balboa's triumph atop the Philadelphia Art Museum steps and promoting fast food. There was even a short-lived movement to get "Steve" to run for office, given his ability to unify an otherwise fractious populous.

With his bridge work complete, "Steve" left the scene as quickly and

silently as he arrived. But he's hardly forgotten. A local author has worked with Digging and Rigging to create a children's book called, "A Crane Named Steve," in which the Liebherr comes to life to help a young boy adjust to the uncertainties and fears of relocating. Proceeds from the book will go to a local charity that serves area residents in need. (The book is available on amazon.com.)

> At a time when even the slightest difference in opinion can be a flashpoint for an outright feud, the unlikely ascent of "Steve" from jobsite anonymity to local celebrity offers a pleasant reminder of our ability to find humor and imagination in the most unusual places. It also speaks well of Digging and Rigging's willingness to play along with their celebrity crane's star turn, particularly when so many other contractors resist or ignore public and media inquiries about what they're doing, passing up a valuable opportunity to share their skills that make new roads or buildings happen, or change the prevalent perception of construction as a nuisance rather than a benefit.

Now it may be a stretch to bestow names on your equipment inventory (e.g., "Buster" the breaker, "Sandy" the grinder, "Ralph" the robot), but there's nothing wrong with instilling a bit of creativity and even whimsy in construction and demolition work either, as long as you stay safe, efficient, and productive. After all, "Steve" wouldn't want it any other way.

> Jim Parsons, Senior Editor jim.parsons@pdamericas.com



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PDa Magazine is pleased to present regular updates from the US National Demolition Association.

NDA Update: Your Pre-Guide to Demolition Austin

The National Demolition Association's annual convention and expo, is just around the corner. On Feb. 22-25, 2020, in the Austin Convention Center, Demolition Austin is taking demolition to the next generation. The convention schedule is packed with education sessions, Fast and Furious presentations, networking, and fun, including a local brews beer reception and an evening party complete with chicken bingo. There's no way you want to miss chicken bingo. As always, the event is capped off with the annual NDA Awards Banquet, where attendees can celebrate the success of our industry and help us recognize current and future leaders in the field. Trailblazers and rising professionals in the demolition industry will be recognized through the presentation of the NDA Lifetime Achievement Award, Excellence in Demolition Awards, Scholarship Awards, Hall of Fame Awards, and the new Mike Casbon Safety Award.

Register by Jan. 10 for savings. For details, visit www.demolitionassociation.com/convention.

Live DEMOlition Event

At Demolition Rockies in March 2019, over 650 people attended the Live DEMOlition event. In Austin, the Live DEMOlition event is back, sponsored by Liebherr. You'll be able to test and operate demolition equipment and get a true understanding of each product's capabilities. Use this full-day event to ask questions, make purchases, and connect with your suppliers on the latest equipment advancements. There will be hands-on demonstrations of demolition equipment, excavators, concrete saws, cutting tools, drones, and robotics equipment.



Keynote Spotlight

Seth Mattison is a workforce strategist and management trendspotter, as well as an internationally renowned expert, author, and futurist. As founder and chief movement officer of Luminate Labs, Mattison advises many of the world's leading brand and organizations on the key shifts happening around talent management, change and innovation, leadership, and the future of work. His ideas have been featured in such publications as The Wall Street Journal and Forbes. He was recently named to the editors' picks for favorite speakers of the year by MeetingsNet. Over the past



decade, Mattison has shared his insight with thousands of business leaders around the world and has received accolades from many of the world's best brands, including MasterCard, Johnson and Johnson, IBM, The Dallas Cowboys, AT&T, PepsiCo, GE Energy, E&Y, Caterpillar, and The Walt Disney Company.

Allu Announces 4th Injury-Free Year

As construction equipment manufacturers strive to minimize factory and operational health and safety issues, Allu is pleased to announced that for the 4th year in a row, there have been no accidents at Allu's Pennala, Finland, manufacturing plant. This tremendous achievement is due to the Allu team embracing the concept of total health and safety in the factory, with the well-being of the Allu staff being paramount to the production process.

"Our people are the most important thing to Allu, and we value their health and safety," says Allu president Ola Ulmala.

Health and safety are key concepts to all at Allu. This is reflected not only in the manufacturing process, but also in the way the company's transformer and processor products are used in the field, with operator training and proactive customer support being fundamental to all Allu operations.

www.allu.net



New Human Resources Director for Allu

Following impressive expansion over the last two years, Allu, the manufacturer of the Transformer and Processor ranges of attachments, has appointed Pia Pyykkinen as HR Director. She will be responsible for all human resources issues for the Allu Group, including subsidiaries, and serve on the management team. Pia brings extensive experience to the role, which follows in the footsteps of other high-profile appointments. Pia has more than 25 years' experience in a variety of HR roles in the Kone Group, Finnish manufacturer of elevators, moving staircases/escalators, and doors.

"We are all delighted to welcome Pia into the Allu team," says Allu president Ola Ulmala. "In order to further capitalize on our recent impressive growth, human resources and development will both be key to our success. Our people are the cornerstone of our business, and the appointment of such an experienced and professional human resources professional as Pia will be sure to help drive the business onwards."

www.allu.net



AEM-CECE Joint Statement on Free Trade and Against Tariffs

The free flow of trade and investment is the lifeblood of modern manufacturing. Equipment manufacturers in the United States and European Union depend on global supply chains to source parts and components, and access foreign markets to export their machinery. According to the PEII Industrial overview, "80 percent of world trade is driven by supply chains with trade in intermediate goods now nearly twice as large as trade in final goods. This is especially important in advanced manufacturing" like construction equipment manufacturing.

As both the United States and European Union are centers of technological development, transatlantic trade is helping create a strong path to sustained manufacturing competitiveness. However, recent government decisions are threatening to undermine continual economic growth and development. The United States has recently announced its plans to place tariffs on \$7.5 billion of European Union goods, including certain types of construction machinery, following the World Trade Organization [WTO] ruling on Airbus. The EU may follow suit if the WTO Boeing case is decided against the US. Notoriously, the use of tariffs will inevitably lead to counter-tariffs, lost markets for producers, higher consumer prices, shaky investor confidence, and the potential to undermine long established transatlantic supply chains our workers and industry depend on. The United States and the European Union need to focus on removing barriers to trade while working together to counter unfair trade practices by third countries. Strengthening the rule of law and reforming the WTO to effectively respond to the challenges of global commerce in the 21st century is in the shared interests of the United States and the European Union.With this joint statement, [our organizations] call on the European Union and the United States to work diligently together to defuse the tensions, abandon all plans by the United States of imposing these tariffs and avoid escalations leading to the imposition of additional tariffs by the European Union.

Doosan Bobcat Expands Litchfield, Minn., Facility

Doosan Bobcat has announced plans for a \$26 million expansion of its Litchfield, Minn., manufacturing facility. The investment will enable meeting increased demand for Bobcat's growing and expanded line of compact equipment and attachments. The Litchfield announcement coincides with the official opening this week of Doosan Bobcat's nearly \$2 million investment in a new Global Collaboration Center in downtown Minneapolis at 150 South Fifth Street. The center serves as an easily accessible, centralized location for elements of the company's global functions, host meetings, and accelerate innovation.

Brock Rentals Upgrades Fleet with New Line of Brokk SmartConcept Machines

Brokk recently finalized a deal with Brock Rentals Inc., to upgrade the rental company's fleet of remote-controlled demolition units with 12 next-generation models, including Brokk 110s, 170s, 200s, and 300s. The new models feature Brokk's signature SmartConcept[™] technology, which revolutionizes power management, design and ergonomics to maximize productivity over previous models. With the new models, Brock Rentals' fleet now features more than 50 Brokk remote-controlled machines — from the compact Brokk 60 to the heavy-duty Brokk 400 - ready for deployment to jobsites across North America.

Brock Rentals opened in 1994. Today, the company provides rental machines to contractors and government agencies in the U.S., Canada, and Mexico. Brock Rentals coordinates with certified Brokk operators across North America to ensure the safety and efficiency of its machines on every jobsite, as well as offer training and technical support to customers.

Equipped with Brokk's revolutionary SmartConcept technology, the new machines provide a number of safety and efficiency enhancing benefits for Brock Rentals' customers. The intelligent electrical system, SmartPower™, protects the machine from the damage that can be caused by poor power supplies while optimizing power and hydraulic performance in extreme temperatures. SmartDesign™ extends machine life and provides unprecedented ease of maintenance due to 70% fewer cables as well as hardened components, LED headlights and easily accessible grease points and hydraulic hoses. An ergonomic remote-control box, the SmartRemote[™], incorporates adjustable straps, intuitive controls and professional-grade radio technology with a 984-ft (300m) working range.

As with all Brokk machines, the four new rental units feature Brokk's three-part arm for exceptional reach and movement, as well as industry-leading power-toweight ratios. The compact B110 features a 10-ft (3m) reach and weighs 2,183 lbs (990kg). Equipped with a BHB 155 breaker, it delivers 187 lbf (254J) with each blow. The B170 can reach 16 ft (4.8m) vertically and 14 ft (4.4m) horizontally. Paired with a 452-pound (205kg) BHB 205 Hydraulic breaker it delivers 299 lbf (406 J) of power.

The B200 represents a new weight class for remote-controlled demolition machines and features a 15% longer vertical and horizontal reach than the B170. It delivers 450 lbf (610 J) with each blow of the 650-lb (295kg) hydraulic breaker. The B300 is only 47.2 in (1.2m) wide, but offers a reach of 21 ft (6m) vertically and 20 ft (6m) horizontally and can handle larger attachments weighing as much as 1,102 lbs (500kg).

www.brockrental.com





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FOR SURFACE PREPARATION www.airtec.ch - info@airtec.ch

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Event Calendar

World of Concrete 2020 Feb 4-7, 2020 Las Vegas Convention Center, Las Vegas, USA www.worldofconcrete.com

Demolition Austin 2020 National Demolition Association Convention Feb 22-25, 2020 Fairmont Hotel, Austin, Texas demolitionassociation.com

Conexpo-Con/Aga 2020

March 10-14, 2020 Las Vegas Convention Center, Las Vegas, USA *www.conexpoconagg.com*

ISRI 2020

April 25-30, 2020 Mandalay Bay, Las Vegas, USA *www.isri2020.com*

CSDA 2020 Convention & Tech Fair March 10-14, 2020

Carlsbad, Ca, USA www.csda.org

Samoter 2020 March 21-25, 2020 Verona, Italy www.samoter.it

Concrete Show Brazil 20 Aug 14-16, 2020 São Paulo Expo, São Paul, Brazil *www.concreteshow.com.br*

Bauma China 2020 Nov 24-26, 2020 Shanghai, China www.baumachina.com

Allu's New US Dealer

Lyle Machinery Co., of Richland, Miss., is its newest dealer for the full line of Allu Transformer material processing attachments. The company not only provides sales and rental of ALLU's unique screener crusher attachments, but also complete aftermarket service and spare parts for customers from its 11 locations in Mississippi, the Florida panhandle, and sections of Alabama, Louisiana, and Texas. The company says the appointment of Lyle Machinery as its distributor in the Southern U.S. reinforces its commitment to providing strong customer focus, combining local expertise and support with the benefits of dealing with a truly global company. The Lyle family entered the equipment business in Mississippi in 1958, later expanding in 1995. Throughout its history, Lyle Machinery has focused on meeting its customers' needs through a wide range of equipment, parts, and service. The company offers new equipment, pre-owned equipment, and equipment rentals, as well as financing and extensive support —including a fleet of service vehicles to assist customers 24 hours a day, seven days a week.

"We have always taken a customer-first approach," says Marc Dowell, Lyle Machinery's vice president of sales. "We believe in offering better products, better service, and true partnerships. That's why ALLU provides such a good fit for us. They offer a unique product that we feel can truly increase our customers' efficiency and productivity."

Aquajet Welcomes North American Business

Development Manager Aquajet Systems welcomes Keith Armishaw as a its first North American business development manager. Armishaw works closely with Aquajet's regional sales teams to grow awareness of Aquajet's Hydrodemolition solutions in key markets across North America. Additionally, Armishaw is focused on enhancing support for current customers through industry-wide educational initiatives that increase understanding of the benefits of Hydrodemolition. Armishaw joins the Aquajet team with 24 years of experience in the construction sales and service market. He was previously employed at Pompaction Inc. — a Quebec-based distributor of Aquajet, Liebherr, Putzmeister, Gorman-Rupp, Chemgrout, and other brands — where he worked his way from service technician to service manager and finally to sales. In 2009, Armishaw's focus shifted to the sale of Aquajet products in the provinces of Quebec, Maritimes, and Ontario. At the time,



the only Aquajet Hydrodemolition robot in the province of Quebec was a single HVD machine and its accompanying PP700 power pack. Today, there are more than 30 Aquajet machines operating in Eastern Canada.

"I believe Hydrodemolition applications will continue to expand as the technology advances," Armishw says. "I'm excited to help support Aquajet customers across North America with technical and application advice as they continue to grow and adapt with the changing industry."

www.aquajet.se

World-Leading in Two Brands

OilQuick and Engcon are two well-known players. OilQuick is a world leader in fully automatic quick coupler systems, while Engcon is a world leader in tiltrotators and accessories for excavators. During the summer and autumn, the companies deepened their collaboration. OilQuick will be able to offer tiltrotators with OQ couplers together with Engcon's tiltrotator. The series will be branded in OilQuick's grey paint and sold under OilQuick's trademark and name. The products will be marked "Engcon Inside" to clarify their origin. Both OilQuick and Engcon will greatly benefit from the collaboration. Primarily they will help each other to grow in different geographic markets. Engcon is

in different geographic markets. Engcon is extremely strong in the Nordic area and OilQuick naturally sees an opportunity to sell large volumes of tiltrotators with OilQuick technology. The market has long requested this combination, and both dealers and end customers will be very grateful.

www.oilquick.com

Husqvarna Acquires Wacker Neuson product line of glazers

Husqvarna Construction Equipment recently announced the purchase of Wacker Neuson Group's concrete glazers product line. The move further strengthens Husqvarna's position in the concrete floor treatment sector. The new range of glazers is an excellent complement to Husqvarna's current range, covering the entire process from soil compaction to polished concrete floors. The addition of the Wacker Neuson ride-on glazers enables Husqvarna to offer a complete package for concrete coating and polishing, while also gaining a market-leading position for hand-guided glazers. Husqvarna will also continue development of its recently launched Hipertrowel concept by optimizing the machine, diamond tools, and chemicals to be at the forefront of the increased demand for concrete polishing glosses.

Production of the glazers will be moved to Husqvarna's factory in Olathe, Kan., during the fourth quarter of 2019. At World of Concrete 2020, Husqvarna will launch its branded glazer product range, with all models ready for immediate delivery.

Customers will benefit by having Husqvarna as a partner with a complete supplier for concrete coating and polishing. Husqvarna reputation for creating innovative, integrated, and customer-focused solutions that focus on productivity will also be applied to further improving its new line of glazers. As part of the agreement, Husqvarna will manufacture glazers on behalf of Wacker Neuson in 2020, and provide follow-up support these to those products in the future.

www.husqvarnacp.com

Allu Expands into Rental Machinery

Allu Finland, manufacturer of Allu construction products for more than 30 years, recently expanded its operations in the rental machinery market in its home market of Finland. This has been done in order to provide Finnish customers with the opportunity to rent a Transformer on a short-term basis, thereby benefitting from the unique attributes of the Allu attachments. Allu has previous experience in the rental equipment business in Germany, where the company has a directly owned subsidiary. In Germany, the rental business has been in operation for many years and has proven to be a viable concept among German contractors, where rental, prior to purchase, is often regularly pursued. "We wanted to provide our customers with a flexible and risk free way to get an Allu product for a short period of time," explains Marjut Lindroos, Allu's global marketing manager, concerning the move into equipment rental. Rental operations allow users to familiarize themsevles with the equipment before making a purchase decision. This also gives them an opportunity to redeem the product at the end of the rental period, thereby enabling the customer to take a risk-free test of the product and its various functions. Lindroos adds Allu can adapt its rental equipment to a variety of user needs. "We can change the sharpening according to the customer's wishes and the mounts are also fitted according to the basic machine," he says. "We can also make demonstrations for rental attachments on the customer's site, transforming their specific material."





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New Investors to Help Accelerate Conjet's Growth



From the left: Johan Fahlström, Patrik Ankerst, Lars-Göran Nilsson, Kjell Nilsson, Tomas Wängberg, David Hallbäck, and Carl Strömdahl.

Gulfstream Nordic Holdings AB (GNH) has entered into an agreement to acquire a majority shareholding in Conjet AB, the world's leading specialist in design, development, and manufacture of remotely operated, computer-controlled hydrodemolition machines.Over the past few years, the Conjet team has combined high growth with continuous introduction of highly advanced new robots to the market. The effort has paid off, with hydrodemolition now the most efficient method for the repair and restoration of deteriorated concrete structures such as bridges, parking decks, dams and other infrastructure. The addition GNH as joint owner strengthens management expertise in developing global business, and adds the financial muscle to invest in a combination of organization and product development to support Conjet's longterm growth. GNH will also bring further access to the US market, and facilitate the expansion in North America through its existing network and presence. The existing management team and owners, with their extensive domain competence, will remain in the company and play an important role in the future. Conjet will remain an independent company.

"We have more than doubled revenue in Conjet over the course of the last three to four years, and we have simultaneously been able to expand our business and improve our product offering to the highest level ever," says Conjet executive vice president Lars Nilsson. "We see great opportunities ahead in our markets based on our competent employees as well as our technology edge, ensuring the perfect match between our immediate customers and the projects they work on. We have had a constructive and positive dialogue with GNH and are looking forward to sharing their experience from similar situations in a partnership. Together we can realize Conjet's potential in the coming years."

Tomas Wängberg, a partner with GNH, says the new ownership group, "will do our part to support the growth and generate an even stronger business by leveraging our experiences and strategic know-how from other growth companies with global presence, focusing on investing in and systematizing sales and strengthening processes and systems."

www.conjet.com



A promising future lays ahead for the hydrodemolition manufacturer, Conjet.



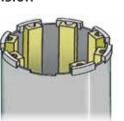
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"To Build Stron Attachments is

Designing and manufacturing excavator attachments is a complex engineering task fraught with technological challenges. Excavator operators like their work tools to be robust, high performing, low maintenance, and durable. These qualities take on even greater importance in such harsh environs as demolition sites and recycling yards, which leaves suppliers little room for mistakes. PDa presents the latest news from the attachment industry.

New attachments from Epiroc

Epiroc has expanded its offerings with additions increasing user productivity and maximising investment, including pulveriser jaws for combi cutters with the introduction





of pulveriser jaws for the CC 3100 combi cutter being unveiled at Bauma, with more models to follow this year. Fitted with Epiroc's coupling and positioning system (CAPS), which makes it easy to switch between jaw types on site to suit the work at hand, the full jaw range consists of universal (U), steel cutting (S), and pulveriser (P) jaws.

A new CC 1600 combi cutter model designed for carriers in the 13t-23t class features two powerful hydraulic cylinders with integrated speed valves for minimum cycle times and low fuel consumption. Fully protected by piston rod guards, the cylinders deliver virtually constant closing force which remains high even when the jaws are almost closed.

The MG multi grapple range has been redesigned to make it even more robust. The MG 1000 was displayed at Bauma, with the entire range being replaced during 2019.

As a new option, to allow even better customization of the grapples, they can now be ordered with or without rotation device to enable operation of the base units in combination with tiltrotators.

A new cutting wheel option is available for the ER/ ERC 50-ER/ERC 3000 transverse drum cutters. As precision is key when it comes to cutting narrow trenches for cables or pipe trenches with a width of 2-10 in (55-250 mm, and a depth of 6-27.5 in (150-700 mm) can be cut in one go. www.epiroc.com

Furukawa Rock Drill extends FXJ hydraulic breaker series

Furukawa Rock Drill has introduced two new models in its FXJ series, the FXJ 225 and FXJ1070. One of eight FXJ models, the FXJ1070 replaces the F100XP, adding an extra .5t in weight and with more impact energy, as well as durability and the lowest lifetime ownership cost in the range. Thanks to improvements of its in-line systems, and various other patented solutions, the new FXJ breakers offer an increased power to weight ratio. A weight reduced breaker with higher impact energy results in larger



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g and Efficient Our Business"

breaking power, with less maintenance with minimum downtime and easy handling. A wider range of oil flow allows the breaker to be used with various excavator sizes. A new mono block design eliminates the need for through bolts, resulting in higher performance and more stability.

The FXJ series is ideal for use on demolition sites, or as a production breaker at a quarry, with the slim design increasing the efficiency in trench and channel works. Both noise and vibrations are also reduced by the newly designed dampening system.

www.frd.eu

The FS145 - the biggest pillar in the ShearCore Fortress US-based ShearCore, a division within attachment special-



ist Exodus Machines Inc., has added a new mobile shear to its Fortress line of excavator attachments. The largest in the range so far, the FS145

has been designed with fewer welds and pieces to make it structurally stronger. "The FS145 shear is the culmination

of the company's design policy, which dictates 'begin every design with a foundation in experience and a desire to improve," explains Bruce Bacon, presi-

dent of Exodus Machines. "This shear exemplifies that policy with a new tip design to handle the massive force this model delivers."

An innovative "shark fin" rear lug design transfers stress using a new and improved method over any previous design in the mobile shear world, which allows higher forces to be distributed over greater mass. The end result, says Bacon, is a model that "punches above its weight class which is a serious advantage in the steel processing game."

Weighing in at 12.7t, the rotating FS145R has a jaw opening of 4 ft (1.2 m) and a reach of 14.75 ft (4.5 m). The minimum excavator boom mount is 65.7t while a minimum stick mount is 113t. The FS145 is also available in a non-rotating version. With the FS145 on board, the Fortress line now counts eight mobile shears and the concrete processor cracker series.

www.shearcore.com

Genesis launches 'Razer' multiprocessor

Another North American player, Genesis Attachments, has expanded its product range with the addition of the new 'Razer' X Multi-Jaw Demolition Tool (GRX) enabling





operators to change jaw sets in less than two minutes without leaving the cab. The attachment body contains hydraulically actuated pins, controlled from the cab, that connect to the cylinder and jaw set.

The Razer X is available with cracker and shear jaws to process a variety of materials, and each GRX jaw set comes with its own stand specifically designed for correct positioning and efficient handling. In addition, the GRX features bolt on and reversible wear parts to simplify maintenance while a flat top head with bolt on bracket makes it easy to change lugs for different carriers.

www.genesisattachments.com

Caterpillar is having a busy year

This year has been busy for Caterpillar, which added a number of new products to its already extensive portfolio. First off is the new TRS23 Tiltrotator system fitting 23t to 30t wheeled and tracked excavators. The TRS23, featuring a fully integrated control system to enhance carrier versatility and attachment control, rotates 360 degrees and tilts up to 40 degrees left and right, allowing more reach from one position. Cat's scrap shear range has also been expanded with the addition of three new models. Designed for 8t to 40t excavators, the S3015, S3025, and S3035 rotating shears feature optimum force to weight ratios for faster cycle times when compared with predecessor models.

Cat's new top-mount silenced hydraulic hammers the H115 GC S, H120 GC S, H130 GC S and H140 GC S models - are designed for 13t to 40t excavators. The hammers combine optimum power to weight ratios with design simplicity for reliable performance, versatility, ease of use and maintenance as well as providing cost effectiveness in construction, demolition and mining applications. As a package solution, hydraulic kits are available to provide an exact hammer to machine fit, ensuring optimum



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performance. Also new from Caterpillar is the PL161 attachment locator. Developed for attachment tracking, it allows users to locate the position and condition of attachments on all worksites and plan for maintenance and replacement in a timely manner.

www.cat.com

Arden gives its demolition shears a boost(er)

France's Arden Equipment has extended its range of demolition shears with the launch of the CU008 model. Available with a choice of four jaw types - CB (concrete shear), BF (scrap concrete), BB (concrete shredder) and CF (shear scrap) - the new CU008, fitting 11t to 13t excavators, comes equipped with either a speed valve or a booster. Arden's booster technology is built around compact sized cylinders that reduce cycle times and increase the attachment's performance. The booster technology helped cut the attachment's weight by 220 lb (100 kg) while maintaining the same crushing force.

Another new development from Arden is the CU042 demolition shear, fitting 38t to 50t carriers that has been designed to replace the outgoing CU3500 model. With the same operating weight, the CU042 boasts a larger jaw opening and is 17% more powerful thanks to the new cylinders and kinematics.

www.arden-equipment.com

New pulverizers and grapples from Green Attachments



product offering with a new "Yellow R" line of rotating pulverizers suitable for both primary and secondary demolition work. Featuring a robust yet lightweight design, the attachments come with blades to cut steel rebar. The attachment geometry ensures that maximum power is reached when jaws are almost fully open, enabling cutting even thin steel plates. A built-in speed valve helps increase tool performance, and the cylinder is reversed in order to protect the cylinder rod. The pulverizers come with a pressure relief valve as standard, and the orbital motors have gears for higher reliability. Currently the range consists of 10 models fitting 7t to 120t excavators.





Another innovation from GA is the "Yellow line" of demolition and sorting grapples available with or without rotation. Without the rotation option, the grapples are suitable for tilt rotating installation. The grapple line counts nine models (with various jaw options available) fitting 2.5t to 65t carriers.

www.greenattachments.com

Ramtec diversifies into plate compactors

Finland based Ramtec, best known for its 'Robi' range of demolition and recycling attachments, has been concentrating on plate compactors lately. The newest addition to its "Kenguru" series of compactors is the C200R rotating model designed for challenging applications in limited access areas. Weighing in at nearly 1t, the C200R fits 14t to 24t excavators and has its integrated hydraulic rotation unit positioned eccentrically. This solution enables the unit to be used in difficult to access places, for example, under asphalt edges when undertaking compacting for a

pipeline. Kenguru compacts up to 90% of cohesive soil at a depth of 29.5 in (750 mm). Other benefits include the ability to change the vibration altitude thanks to a high frequency compact unit and a "next to no" maintenance requirement.

www.ramtec.fi

Idrobenne: a grapple expert from Italy

Headquartered in Brescia, Northern Italy, Idrobenne has been manufacturing demolition and sorting grapples since 1994. Featuring the heavy duty "Quadra-Box" frame with extra-large bearings at pivotal points, the grapples come

www.pdamericas.com • 2019 • Issue 5

with jaws made from the Hardox 450 wear-resistant steel with replaceable and reversible blades. Other trademark features include a single hydraulically cushioned cylinder with two compensation bars on the sides, long levers to increase the closing force, a safety valve flanged directly on the cylinder, and oversized tips to transfer the shocks experienced to the main frame which also protects the cylinder and junctions from wear and tear. Wide inspection openings ensure easy maintenance. All models feature a continuous hydraulic rotation option as standard.

www.idrobenne.com

ARVI showcases Echidna rocksaw capabilities

ARVI is a Netherlands based supplier of demolition, recycling and earthmoving solutions for professional contractors. The company represents a number of well recognized global and European brands in the Benelux, but perhaps it is most known for its long-term cooperation





feature

with Australian based manufacturer Echidna. Established in 1990, Echidna specializes in making rocksaws that allow cutting a wide range of construction and rock materials. The case studies below are a testament to the broad applicability of Echidna equipment.

The Echidna rocksaw was used to dismantle a reinforced concrete building in Bremen. Powered by a Husqvarna DXR300 demolition robot, the rocksaw cut the concrete structure to sections that were being held up by a telescopic crane. The thickness of the concrete structures being cut varied between 7.75 in and 11 in (200 mm and 280 mm) with .4-in (10-mm) rebar inside.

On a job in Terneuzen, Netherlands, Echidna rock saw fitted to a 22t Kobelco excavator, was used to dismantle a heat exchanger. The main task involved separating the copper pipes inside the heat exchanger (worth much more than other parts) from the remaining structure.

> The Echidna saw proved just the solution for the task. An Omnicut rock saw installed on a Hitachi ZX350 excavator was successfully employed to cut sandstone blocks in a quarry in Australia. This Omnicut model came equipped with three 5.25-ft (1.6-m) wheels brandishing the custom designed Echidna teeth. The wheels have a lower rotation speed than a diamond blade, which results in a wider trench. Although not mandatory for this type of saw, the use of cooling water is still highly advisable as it extends the teeth's life and enhances productivity.

arvi-demolitiontools.com

News from Indeco

Indeco's new IMP multiprocessor has a more robust body and has been redesigned to increase its maximum jaw opening, while its demolition, pulverizing and cutting geometries on the various jaws have also been improved. The jaws have also undergone another

key improvement, with Indeco IMP's crusher and pulverizer configurations now having interchangeable teeth. Welded onto a bolt-on plate anchored to the jaw, all Indeco jaw teeth can be removed as a unit. This significantly speeds up replacement and improves grip, giving the attachment greater durability. The shear version has also undergone substantial innovation with the blades

> now being fully reversible and interchangeable so that they can be used for cutting at any angle. They have a dual-profile piercing tip system with differentiated upper and lower tips, for a clean gradual cut.

New HP 100 micro hammer

The Indeco range of small hammers has been expanded with the HP 100, designed for mini excavators from 0.7t to 0.8t for working in restricted working areas. Despite weighing less than 132 lb (60 kg), the HP 100 has a larger steel diameter than hammers in the same class, and delivers good impact energy per blow. The new hammer also maintains maximum hydraulic efficiency from start to finish, reducing demolition times and ensuring high productivity levels.

Anti-dust system updated

Indeco's IDA dust abatement system has been updated in line with the latest OSHA guidelines in order to protect workers even more against exposure to crystalline silica micro particles. Indeco has launched an optional low-pressure dust abatement system for its smaller range of hammers and pulverizers, which can be mounted on carriers of up to 16t.

The technology involves moving the the four-nozzle vaporizing plate away from its previous position in the lower part of the casing. It is now located where the mounting bracket is attached, which enables it to cover the entire working area regardless of the tool's position. This reduces the amount of dust produced, even on windy days. The new system requires a low-pressure water supply, as the sprayers activate automatically only when the attachment is in action, thereby reducing water consumption.

www.indeco.it

Trevi Benne's new MA Series of processors

Trevi Benne of Italy introduced at Bauma a new generation of universal processors, the MA Series. The expression

of perfect productivity and efficiency, the MA Series is a perfect match of power in demolition, fast opening/closing cycles, and reliability. Five models are available, from the 4,189-lb (1,900kg MA 18 up to the 24,251-lb (11,000-kg) MA 65. Available with Combi and Swiss Kit, the MA Series is the perfect equipment for any demolition process, from the demolition and crushing of concrete structures to cutting reinforcing rods and metals.

Trevi Benne also showcased the model MA 25 model with Combi Kit, for a total weight of 5,953 lb (2,700 kg).

www.trevibenne.it

VTN crushers get magnetic separation option

Italy based attachment expert VTN Europe has upgraded its VF series of fixed crushers by adding an electromagnetic separation option. Designed for secondary demolition applications, the VF crushers have already proved popular with end-users thanks to such features as a wide jaw opening, high clamping force, and short working cycle. Now, the attachments are available with an integrated electromagnet to facilitate material separation immediately on







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the job site. The magnet is powered by an integrated hydraulic unit, with no external power unit required. www.vtneurope.com

Promove strengthens position in secondary demolition

Another Italian company is Promove, which has redesigned its CF range of fixed pulverizers as part of a quest to strengthen its position in the secondary demolition segment, with all attachments now manufactured from wear-resistant Hardox 400 steel. A single weldless block located between the body and the fixed jaw lends extra strength.

The mobile jaw features three rows of two interchangeable teeth. The central row is staggered and



slightly lowered compared with the other two, allowing better penetration of any material being demolished. The lower interchangeable plate on the body is designed to ensure a safe and stable grip on the ground and to facilitate handling of debris and non-crushable materials. Thanks to their compact design, the new CF pulverizers are more productive and easier to maneuver than their forerunners. From the CF200 model on, all pulverizers are equipped with a speed valve to shorten the working cycle by as many as 3 seconds. The oversized pins are protected by a system of bushings to ensure long service life even in the most challenging environments.

www.promovedemolition.com

Wreko, a new player from Italy joins the fray

This year, the attachment industry was abuzz with the news of takeovers and acquisitions. Takeovers might be good for business, but they do tend to consolidate the market thereby reducing competition. Therefore, the appearance of a new player is a welcome change from the trend. Wreko was founded by three partners, each having a track record of more than 20 years in excavator attachments. They set themselves an ambitious goal to become a "Ferrari" of the attachments industry by providing clients with customized solutions of the very highest quality. Wreko comes to the market well prepared, offering an extensive range of products, including crushers, pulverizers, scrap shears, orange peel grabs, crusher buckets, and forestry shears. But this however is an incomplete list of work tools available from the



Italian manufacturer. All attachments are produced at the company's manufacturing facility in the town of Este, Italy. www.wreko.com

UEDA Industries: small company with big R&D capabilities

Based in Osaka, Japan, UEDA Industries is one of the pioneers of bucket crushing and screening technology. The company is small, with a staff of about 30 employees, but its R&D capabilities easily rival those of its much bigger counterparts. Being a signature product, UEDA crusher buckets are well-crafted, and boast many useful features. For example, the upper and lower jaw plates can be exchanged as well as the rear and front sections. The buckets are built in a way that allows simultaneous direct and reverse rotation, with any clogged material released by just reversing the rotation. UEDA says the direct drive system's maintenance is "easier" when compared with most competing brands. The optimized design of the jaws results in high performance crushing. The buckets are available with a 24V magnet and/or a dust suppression system as an option. Thanks to the large inlet and discharge openings the bucket crushers are suitable for processing big chunks of concrete.





Skancraft: demolition craftsmanship

Skancraft GmbH & Co. KG is a mid-sized German company with an ample choice of attachments to offer to demolition, mining and forestry professionals. On the demolition side, a range of rotating pulverizers is one of the company's most popular product groups. The range consists of six models fitting 15t to 80t carriers. Thanks to the 360° continuous rotator, the pulverizer can be positioned at any angle during operation. Other



highlights include high-quality replaceable teeth, an extra-long piercing tip, optimized jaw construction and a robust swivel head. With magnetic separation becoming a staple feature on demolition sites, Skancraft has designed an eight-model line of hydraulic magnets ranging in weight from 1,102 lb to 3,968 lb (500 kg to 1,800 kg). The magnets come with a three-strand chain suspension as standard. On request, a quick-change adapter can also be fitted to the mounting plate. The range's largest model - SCHMAG 1300 FIX - is equipped with "fangs" to facilitate the exposure and removal of ferrous metals. This makes the magnet a sort of "combi tool" for digging and picking up metal parts.

www.skancraft.com

Innovations galore at Demarec

Demarec, a Netherlands based trailblazer in demolition attachments, used Bauma to present a veritable slew of innovations. The DXS scrap shear, featuring the DemaPower 2.0 cylinder with four pressure chambers and a double acting speed valve, boasts up to 25% more power than its predecessors. The shear comes in two versions available for mounting on 18t to 50t excavators-the DXS A rotating shear with a head plate and the DXS-FQC version with integrated "Fuchs Quick Connect System." The DemaPower 2.0 technology also leads to considerable reduction in fuel consumption.

Other highlights include the shear arm guiding system (SGS), robust jaw design with large opening for scrap, exchangeable and reweldable piercing tip, an upside-down cylinder to fully protect the cylinder rod in the housing, filters in the rotation circuit, and 360-degree rotation.

Another innovation is the DDCC two cylinder concrete crusher that has been specifically developed for demolishing the thickest concrete structures such as viaducts, quays, and heavy foundations. The crusher has two pivot points to ensure that the jaws generate increased torque for maximum closing force. The hydraulic system



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is completely built into the frame, with the cylinders protected by robust guards so the hydraulics cannot be damaged during operation. The DCC also has an extra wide and deep jaw mouth.

Also new from Demarec are the DSB and DFX series of hydraulic hammers. The DSB series are so-called "monoblock hammers" with a simpler, easy-to-service design with fewer parts. They are suitable for mini excavators, loaders, and demolition robots, while the DFX series fits medium to large carriers.

Finally, the KDC line of drum cutters consists of nine models fitting 2t to 60t carriers. They have a heavy-duty sealing system making it possible to operate the cutter underwater at a depth of up to 82 ft (25 m).

www.demarec.com

Breaking force to be reckoned with

China's Beilite Machinery Co. has been growing exponentially over the past 15 years. The company's flagship BLTB line of hydraulic hammers now includes 20 models that fit excavators ranging in operating weight from 0.5t to 160t. Beilite supplies its products to every continent under its own registered brand name.

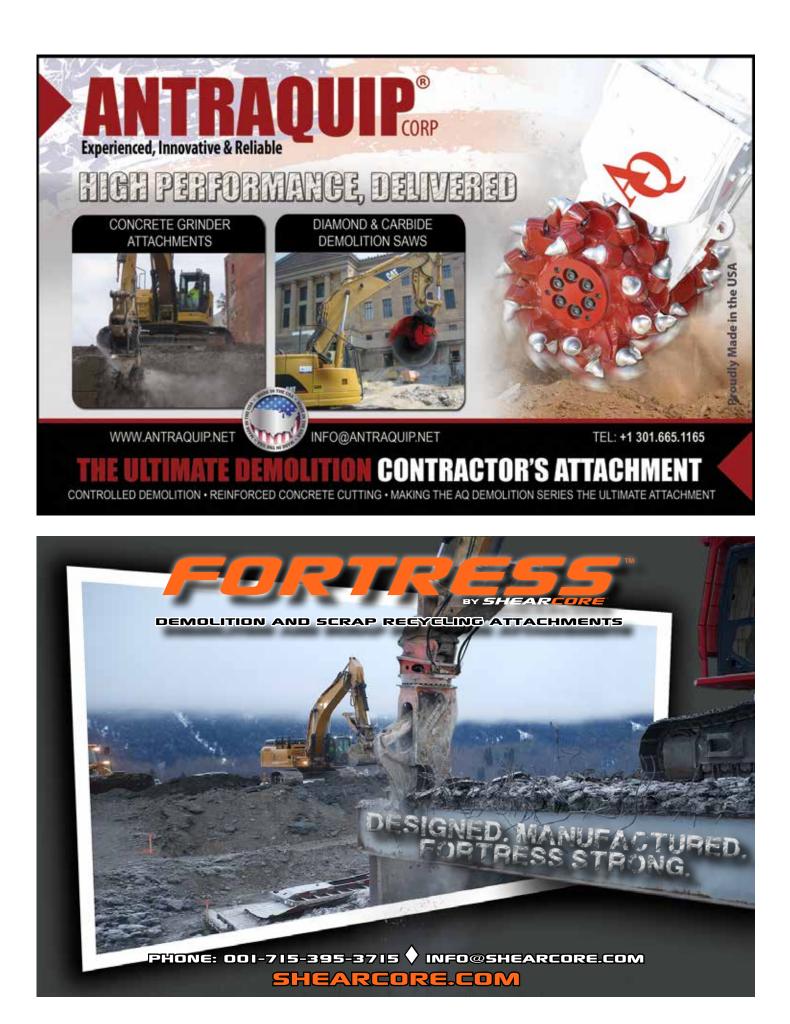
www.beilite.com

New concrete crushers from Darda

Darda has released the new concrete crushers CC440 and CC580. Two perfect attachments for use with Brokk demolition robots or other demolition carriers. CC440 is developed for carriers weighing 2.5t to 4.5t, and CC580 for carriers weighing 5.5t to 9t.

www.darda.de





site report

Urban Demolition Proje Mist to Comply With D

Colorado Cleanup Corporation (CCC) used two BossTek atomized misting cannons to control dust created by the takedown of the University of Colorado's 8-story Biomedical Research building and the University of Colorado Health Sciences Center, both located in the middle of a well-populated Denver neighborhood with zero air quality complaints. Out of the 2.5 million ft2 (232,000 m2) of land containing 13 structures, only one had steel construction, and the rest were poured-in-place concrete. Thus, CCC employed several different types of machinery, from standard excavators to high reach excavators with hydraulic attachments. The entire system required CCC to remain compliant with the strict regulations of allowable particulate emissions and control wastewater runoff as mandated by the State of Colorado and further restrictions specified by the municipal permit.

Impact create dust

"The two areas in the process that create the most dust are where the concrete breaks at the point of impact with the ground," explains CCC sr. project manager Chris Formanek. "Large and small chunks of debris would fall into the safety zone, which kicked up a lot of dust. Also, every time the processor uses hydraulic pressure to break the concrete, it creates a plume of dust. This usually happens high up, so the particles can travel pretty far. We needed a method that effectively controlled dust in both of these areas."

Formanek cited the BossTek DB-60 misting cannons as a key to the project's success. Either mounted on a roadworthy mobile carriage or a heavy-duty metal skid, the DB-60 has a specialized open-ended barrel design with a powerful 25-hp (18.6-kW) industrial fan on one side and a misting ring on the other. A 10-hp (7.5-kW) booster pump sends pressurized water through a circular manifold fitted with atomizing nozzles. The nozzles fracture the water into an engineered mist that throws millions of tiny droplets in a 200-ft long (60-m) cone.

Debris and reusable materials are separated and set into piles for either landfill or recycling.





An excavator with a hydraulic demolition attachment quickly takes the building apart.

The mist can be directed at a specific activity or fanned out over a large area using the 359° oscillator, which allows the machine to cover approximately 125,000 ft2 (11,613 m2) in calm conditions. Powered by a 44.7-hp (60-kW) diesel generator set, the machine's functions are controlled either via digital touch screen display mounted on the unit, by remote hand-held device or by PLC. This makes it easy to be adjusted by workers on the ground or even by excavator operators.

Low water consumption

The DB-60 uses as little as 12 gallons/min (45.4 liters/min), depending on the water source, however, CCC had access to municipal hydrants, which provided more volume and pressure. Using a 1.5-in (38.1-mm) cam-and-groove quick disconnect female coupling for the hose, the unit only needs 10 PSI (0.69 bar) delivered to the booster pump. The low PSI requirement allows the machine to be far away from the source, while still providing effective airborne dust control and surface suppression.

With multiple buildings being demolished at once, the two units were shared across the site and placed at critical areas using only a pickup truck or small ground vehicle to move them. During the demolition project, the company received no complaints about fugitive dust caused by standard demolition operations. No dust migration was observed outside of the site boundary, and readings from both the perimeter monitoring machines and the workers' personal dust monitors registered below required thresholds throughout the project.

"We were impressed by how effectively the DustBoss worked, even high up," Formanek said. "The versatility is key to our operation, so with a few minutes of set up and adjustment, we essentially just turn it on and walk away."

www.bosstek.com

site report

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A high reach excavator dismantles a building as a DustBoss directs engineered mist high into the area.

site report

Empire Landmark Hotel Demolition Assignment



Vancouver's Empire Landmark Hotel held the title of the city's largest free-standing hotel for more than 40 years. Opened in 1973, the building towered 420 ft (128 m) over Robson Street and extended a further three levels underground, occupying an entire city block in the heart of downtown. But when developers set their sights on revitalizing downtown Vancouver's bustling West End, it was clear the landmark's time had come.

Demolishing 44 stories in 21 months

Demolishing a building on one of the city's busiest thoroughfares — without bringing local traffic to a standstill or risking residents'

health and safety ---- would require creative engineering, though. JMX Contracting Inc., Canada's premier environmental and demolition company, was ready with an innovative solution worthy of Canada's largest building deconstruction. Using robotic demolition, JMX systematically removed 44 stories ----approximately 430,000 ft2 (40,000 m2) of floor space — in 21 months. JMX identified several key factors that would make the demolition of the old hotel challenging. The high-traffic location and the potential for substantial safety risks required unique solutions to avoid impacting the daily lives of the city below. The company commissioned two Brokk 400 Diesel machines with CC700 crushers and SB552 hammers from Brokk's US-based service fleet to work in conjunction with a Brokk 160 electric unit and a crusher they already owned.

"People assume demolition will be loud and dusty," says JMX project manager Shane Macpherson. "Historically, they're right. But with creative engineering and today's technology, it doesn't have to be. We developed a plan that virtually eliminated dust and only registered 85 decibels inside the demolition zone and 70 decibels outside the hoarding. That's six decibels quieter than ambient street traffic."

In addition to reducing noise, the Brokk machines' power-to-weight ratio addressed the building's robust construction and floor load limits. The 6t Brokk 400D handled SB552 attachment's 1,400 lbf (1,898 J) and the CC700 with 278,000 lbf (376,917 J), allowing JMX to limit the need for additional equipment.

Empire's end

Phase one of the demolition started in November 2017 with JMX crews stripping the entire building to bare concrete and installing mast climbers around the tower's perimeter. After transporting equipment, materials and personnel to the top of the building, JMX converted the mast climbers into a hoarding system that safely enclosed the entire work area to trap dust, debris and noise. With initial preparations in place, JMX faced the most challenging aspect of the Landmark demolition - the two-story Cloud 9 revolving restaurant extending 12 ft (3.7 m) from the top of the tower. JMX engineered crash decks and a scaffolding system with a double layer of plywood and net hoarding to support the restaurant's floor and roof and contain material, dust and water.

Finally, it was time to start the demolition. Systematically crushing concrete and cutting reinforcement steel, the Brokk operators maneuvered the machines through the restaurant, systematically crushing concrete and cutting steel. Standing 18 ft (5 m) away, safe from debris and dust, operators were able to use the Brokk robots' extended range of motion — reaching 22 ft (6.7 m) vertically and 24 ft (7.3 m) horizontally — to crush concrete slabs, beams, walls and columns safely and efficiently.

Crews then dropped the concrete down the decommissioned elevator shaft. Misters installed at various points in the elevator shaft dampened concrete debris on its way down, minimizing dust at lobby level. From there, the material was collected and transported to a staging area for further crushing before being recycled.

The Brokk method

The project picked up steam once the Cloud 9 restaurant was removed. The Brokk machines continued the demolition, completing one floor every three to four days. With each new floor, the mast climbers were lowered and tied into the tower to continue the demolition process. The Brokk machines and skid steers moved down the stairwell using a specially engineered ramp. JMX installed five floors of shores under the active demo floor — 160 shores per floor — to carry the load, ensuring the stability and safety of the building during demolition. Using this demolition method, JMX removed 38 stories of the Empire Landmark's tower in just nine months. Crews used a high-reach excavator and three support excavators to remove the remaining traces of Vancouver's Landmark, finishing up in August 2019.

Demolition of a Building: Is it Just a Pile of Rubble and Waste?

"Nothing gets thrown out!" That's a lesson we have learned from our grandparents. Any scrap, can be reused, changed, or repurposed to become something different. Otherwise, you're wasting money.

These concepts can be applied to demolition processes when we demolish to requalify, redevelop, or rebuild. Nothing gets wasted. Material is selected, processed as necessary and then reused, directly on-site or somewhere else. Demolition is a process made up of various steps- time and cost— that represent the basis of a change. Performed correctly with the right machinery, demolition can become a great advantage for the company carrying it out. Sustainable demolition saves about 80% of the waste from the landfill. Selective demolitionareen demolition or deconstruction-might seem more expensive, time- consuming, and more demanding, but the reality is that it saves time and money.

A company in Spain explains its ap-

proach to demolishing its old shed, then building another one in its place. What the company demolished was mostly reused to redo the building. A representative characterized the process as, "destroying a building made with Legos and then using the same bricks to build a new one."

The bulk of the work was done by the MB Crusher's crusher bucket. The job was carried out with a single heavy machine, and with a single operator, at the same yard, quickly and with a minimum investment.

Other examples of this approach can be found around the world. A French company managed to recycle almost all the demolition debris of an old house and reuse it to build the new one directly on the same spot, forgetting all the logistics and disposal problems. In Turkey, one excavator and one operator recovered and recycled the road demolition material – a mixture of basalt and asphalt— directly on-site and at a very low cost. A BF90.3 crusher bucket attached to the excavator collected the excavated material, then crushed it and made it available on site for immediate re-use. Selective demolition, therefore, is the first step towards a circular economy in which construction will give value to waste. The quality of the result depends on the type of demolition process and the machinery used for the separation and processing of the debris.

The MB Crusher product range is designed and built around these needs. For different sizes material, simply adjust the jaws of the crusher bucket or change the panels of the screening bucket directly onsite Similarly, installing the right accessory on the MB-G clamps allows users to handle different types of material onsite.

Anyone who uses MB machinery can gain value from the construction site waste, turning waste into quality material, converting the raw material into profit. Users can maximize the recovery of the waste material, thereby reducing transportation and landfill transfers costs. They also eliminate material repurchase costs. Moreover, if well managed, a sustainable demolition project has a significant impact on the state of abandonment of many urban and industrial areas. Where a dilapidated house or warehouse is demolished and replaced with a new one, everyone benefits—the site owner, adjacent properties, and the community as a whole.









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No matter the size or the height of the structure, MB Spezialabbruch GmbH & Co has the right equipment for the demolition job. Just give them some time to design it.

MB Spezialabbruch GmbH & Co. KG (MBS) is an extremely specialized demolition business, situated in the tiny municipality of Breitungen, Germany. This family-run demolition and recycling company is known for the clean and safe demolition and dismantling of industrial power plants, and cooling and exhaust air systems. MBS also develops and builds its own demolition machines and tools for many demolition projects.

A Cutting Edge Machine

A good example is the RDB 100 remote controlled demolition robot, based on the chassis of a CAT 308 D excavator. The 10t RDB 100 has dimensions of 16.4×5 ft (5×1.5 m) without the platform extending and outriggers, and a wheelbase of 10.8 ft (3.3 m). The machine has a 98-ft2 (9-m2) working area is 3x3m with the 1t Konverma HCM 600-M shear.

To demolish a 531.5 ft (162 m) tall natural draft cooling tower at the Mülheim-Kärlich nuclear power plant, MBS used the MAMA method, its in-house demolition method. (Translated from German, MAMA stands for



MBS's RDB 100 remote controlled demolition robot, has been entirely developed and built in-house using the chassis of a CAT 308 D with standard components on the market.

machine, automated, unmanned, demolition process.) MAMA was needed given the project's proximity to active plant operations and active railroad tracks, heightening the need for safety.

"For this very special challenge we spent 14 months developing RDB 100 robot from scratch, starting with a handmade design," says Andreas Kashadt, technical manager at MBS. "With the CAT 308 as the base machine, we developed and assembled all hydraulics, electronics, powertrain, and electrics here in our own factory. We also have a long-time partner company that make all the steel work for us."

Other partners have been engaged to develop and design, for example, the radio remote control, TOPCON



MBS has 42 employees of highly qualified workers, mechanics, and design and mechanical engineers.

In total, nearly 5,000 yd3 (3,790m3) of material was dismantled during six

nonths.

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Contraction of the local division of the loc

The drivebreaker, that is currently used for dismantling of the 738-ft (225-m) high reinforced concrete chimney of the CHP nuclear plant in Jena.

MB





From left: Andreas Kaschadt, Anne, Peter, and Birgit Mittelsdorf who run the MBS family business.



It took about 14 hours to lift the robot and equipment to the top of the chimney.



Working with the 1t Konverma HCM 600-M shear.

GPS system for altitude monitoring and camera system. When the demolition robot was tested and ready, it was also a big challenge to lift it to the top of the cooling tower. For this purpose, an extensive height access technology was first mounted on the outer shell of the cooling tower to ensure safe access for the operating personnel.

Subsequently, the special demolition equipment was positioned on the edge member of the cooling tower with

a specially developed lifting structure. After six months, the robot had dismantled the cooling tower in half, to approximately 262 ft (80 m).

Equipment for special projects all over the world

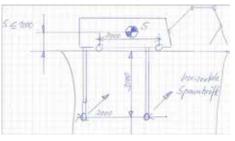
MBS has also developed various special machines and sawing and lifting techniques for demolition for large special demolition projects across Europe, as well as Russia and Dubai.

"This is due to the fact that standard machines often cannot be used in our special demolition of very complex industrial building," says Peter Mittledorf, owner and manager of MBS. "Therefore, in-house development of special demolition machines has become a part of our company tradition."

The first machine invention many years ago was the "spinnenbagger," a spider-like demolition robot also used to demolish industrial chimneys. This first machine formed the basis for the next invention of the drivebreaker, that is currently used for dismantling of the 738-ft (225-m) high reinforced concrete chimney of the CHP nuclear plant in Jena.

MBS is also active in recycling, earthmoving, site logistics, and other industries, which means that they also handle all recycling on the demolition sites. Together with the family, Peter, Birgit, and Anne Mitteldorf, the company has 42 highly qualified workers, mechanics, and design and mechanical engineers.

www.mb-spezialabbruch.com



The first hand-drawn sketch of the RDB 100 robot.



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feature

New Concrete Floor Grinding and Polishing Equipment

This year has seen the launch of many new products for floor grinding and polishing. PDa Magazine's special feature presents the latest arrivals on the market.

Throughout this year, PDa Magazine has reported on several new floor grinding and polishing equipment developments. For instance, HTC's new "Start & Grind" series of smaller floor grinders and dust extractors; Scan-





maskin's new "World Series" floor grinder model 32; Samson 2618, Warrior Equipment's new 26-in (665mm) four head grinder; Expander 1000, Klindex's floor grinder with autopilot; and PG 510, Husqvarna's planetary floor grinder. In addition, there is no shortage of even newer products arriving in the same field, which are now covered in our special feature.

New "Scoots" from Au Tour du Beton

Au Tour du Beton's bush hammering Scoot makes it possible to transform a variable speed grinder into a bush hammering machine through installing the system on the grinder and screwing in the bush plate. Easy to install on a 7-in (180mm) variable speed grinder, the system is equipped with a front and back handle, wheels to provide stability, and a shroud outlet for connecting to a vacuum cleaner. The Scoot enables the use of 4.7-in (120mm) or 6.1-in (155mm) bush hammer plates, depending on the desired finish. Au Tour du Beton offering several models of handheld bush hammer plates with a lifetime guarantee.

Similarly, the stand-up Scoot enables the user to turn a variable speed grinder into a bush hammering machine by installing the system on the grinder and screwing in the





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feature





plate. Lastly, the Scoot can turn a standard angle grinder or polisher into a planer, coming in three formats that fit most grinders. The user sets two screws provided onto the grinder, then clips them into the two ball joints located at the front of the Scoot.

www.autourdubeton.com

New technology from Ashine

Ashine's R&D team has been working on new technology in both metal and resin bonds in the past year as well as new production facilities. Ashine's 'W-Metals' diamond technology cuts well on hard to extra hard floors, while its new resin bond technology has seen Ashine develop "V8" pads which meet the industry's requirements for gloss and clarity. With the newly designed "Quick-Start" segments, V8 pads are able to make the diamonds work faster and avoid deep irregular scratches at the start. With strong growth in the past five years, Ashine has also built its own 107,639 ft2 (10,000m2) production facility located close to its existing operation.

www.ashinediamondtools.com

Several new Products from Blastrac

At Bauma, Blastrac launched many new products including a new large-scale ride on floor grinder, BMG-2200, which is designed for large hori-





zontal surfaces. With two drive wheels fitted to the front and a swivel castor to the back, this makes the machine maneuverable both on and off jobsites. The operator sits on a seat with armrests on both sides, along with joysticks, push buttons and a touch screen. The three powerful BMG-780PRO grinding heads

> produces maximum coverage and effective distribution of grinding pressure on each individual head, enabling each to be operated individually. The machine comes as standard with variable grinding speed, rotation direction and an independent suspension system. The BMG-2200 also has variable grinding pressure, being designed with an integrated

powerful dust collecting system with HEPA 14 filters, making the BMG-2200 virtually dust-free according to OSHA regulations. This heavy-duty dust collection system is equipped with an automatic pulse filter cleaning system, Longopac system, and is provided as standard with a pre-separator. The new multitask vehicle BMR-75D features an enhanced trouble-free hydraulic drive system, offering better productivity when clean-

ing and preparing concrete or steel surfaces. The BMR-75D can fit several attachments, providing greater flexibility to satisfy the needs of the job in hand, whether it is shot blasting or scarifying. The BMR-75D is also ideal for ship decks, parking garages, bridges, roads, and warehouse

floors. All Blastrac cyclone

technology surface clean-

ing machines are en-



gineered to deep clean outdoor surfaces efficiently and in an environmentally friendly way. A multi-patented cleaning and recovery head cleans and removes build up with no damage to the surface. The cyclone cleaning head provides high velocity air movement for recovery of waste and water, with no runoff or spillage and no need for an external vacuum system. Blastrac has also developed a new range of single-phase dust collectors. With this new line Blastrac aims to meet customer expectations from an industrial dust collector, professional user perspective. Equipped with an M-class or H-class certified Longopac bagging system for small or big jobsites, the dust collector is designed to meet all needs. The new line aims to offer a complete range of small, powerful and high-guality dust collectors, all coming equipped with a safe bagging system that protects the health of the operators and saves time on jobsites.

www.blastrac.com

"Start & Grind" extended with HTC 510

In January 2019, HTC launched an entirely new line of floor grinders and dust extractors with a focus on user



friendliness and ergonomics. This line is now being complemented with a new grinder - the HTC 510 - bringing the total line up to four grinders and four dust extractors. The new HTC 510 is a powerful planetary grinder with three counter rotating grinding heads, making this a versatile grinder suitable for many different applicationsfrom stripping floors to grinding and polishing concrete, natural stone, and wood. The grinder is available both in a single phase and three phase model, from 3 hp (2.2kW) up to 5.3 hp (4 kW), featuring a grinding width of 20.2 in (515mm). A major advantage of the HTC 510 is the machine's hermetically sealed grinding head, making it entirely dustproof. This provides unparalleled protection from dust and moisture, and significantly increases the service life of the enclosed components. As with other grinders in the line, the HTC 510 chassis can be easily



detached from the motor prior to transport. It is effectively a robust, strong, versatile, and ergonomic entry level machine for professional users who want to quickly and efficiently grind small to medium-sized areas.

www.htc.com

Floor stripper from Janser

Janser's new "Junior" ride-on model weighs 926 lb (420kg) and uses an in-house developed drive design that allows the front plate and tools to be manually positioned during operation. Thanks to its adjustable angle, the blade can be set to a flatter or steeper angle under the floor covering. The forward leaning construction puts the center of gravity under the plate itself. At the core of the Junior is the construction of the motor and hydraulic drive with which the front tool can also be controlled. Lowering the base plate to its lowest setting allows the blade to reach further under floor covering—an ideal way to remove elastic coverings. The Junior's base angle and inclination angle, as well as the positioning of the front plate, can

be adjusted via a lever near the seat during operation.

The compact Junior can be transported in smaller vehicles. Operation is facilitated via a power cable which is kept at a safe distance to the wheels, or kept above the machine in narrow spaces with the help of a guide rail. The machine features a reverse warning system and a seat switch which turns the machine off automatically as soon as the operator leaves the seat. Hearing protection is not necessary when using the machine as the motor and the hydraulic system operate silently.

www.janser.com

Machines for grooving and grinding from Lissmac

Lissmac has released the "Pavement Groover & Grinder," a machine that can be used for surface grinding and acoustic grinding, grooving, and bump cutting. It has a saw blade diameter of 19/13.7 in (485/350mm) including modification kit and a grinding width of 50 in (1,270mm).





The Stage Tier 4 final machine features mechanical gearshift with hydraulic friction clutch, drive type via two pairs of gears, a feed rate of max 72 m/min (idle) and a hydraulic drive turbine. The diesel-driven machine weighs 21t with a maximum capacity of 23t, and is operated with a joystick.

Lissmac's "Grooving Unit" has a sawblade diameter of 9-11.8 in (230-300mm) and a cutting depth of 1-2.3 in (25-60mm). The machine weighs 837 lbs (380kg). The Grooving Unit can be used with Lissmac's "Unicut" 600, a fully hydraulic precision floor saw which features multifunctional joystick, electrohydraulic steering system and an all-wheel drive which distributes power to all four wheels during operation, among other features.

www.lissmac.com

Samedia's cup wheel series

Samedia has a launched a cup wheel series of 11 products for its three concrete grinders (4.9 in/125mm or 7 in/180mm diameter), with four belonging to the "Shoxx" range, and seven to the "Master" range. The company has also released a new concrete grinder, CGR 530, which runs at 2.5 hp (1.9kW) at 8,200 rpm and weighs only 9 lb (4.1kg). It uses 4.9-in (125mm) cup wheels, can grind to edges in small places, and features both height adjustment and an adapter for dust extraction.

www.samedia.com

Schwamborn's new grinding machines

Schwamborn's new DSM 250 edge grinding machine features a swiveling grinding head. With variable speed control and water tank, the new DSM 250S enables polishing of design concrete or terrazzo floors by wet grinding. In addition, with the DSM 250P, Schwamborn has launched a gasoline-powered version optimized for the removal of lane markings and parking marks, as well as for smaller outdoor grinding jobs independent of any local power supply. Also new from Schwamborn is the DSM 450, a grinding machine for medium sized areas up to (approx.) 5,400 ft2 (500m2). The completely revised model family is now available with or without a water tank, and in 230V or 400V versions. The machine is equipped with a stepless speed regulator, making it possible to grind and design down to the finished design floor. The DSM 450 allows

grinding and polishing of concrete, natural stone, terrazzo, screed, and asphalt, and the removal of adhesives, coatings, and putties. It also regulates bumps efficiently and ergonomically. New abrasionresistant wheels leave no traces and the ergonomic guide handle makes the machine easier to control and maneuver. It can also be quickly dismantled for ease of transport.

www.schwamborn.com



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Two new grinders from Superabrasive

Superabrasive has developed two new remote-controlled grinders, L25REU (26-in/655mm, 10-hp/7.5kW, 3 phase, 380-400V, 15 Amp) and L32REU (32-in /814mm, 20-hp/15kW, 3 phase, 380-400V, 32 Amp), both part of the "Lavina Elite" series. All feature a digital control panel or HMI that provides operating

information on power load and voltage supply, machine hours, hours per day, and tool holder speed

/ RPM. As an option, users may choose setting with tool input, speed feed rate, water supply and lights activation, maintenance reminders, password activation, and shut off, as well as a menu in different languages. The remote control is light, precise and easy to use, with integrated mapping on the offset and various functions.

The grinders can be used manually and in self-propelled mode, and are equipped with all

the new Lavina Elite features. These comprise of dustproof grinding head, integrated weights, misting system, heavy-duty water pump, floating skirt with a flexible brush, adjustable LED lights, a phone charging station, and cup holder. The remote-controlled grinders also have built in electrical protection against excessive voltage, large non-marking tires, and a third wheel for easy transportation. 3,000 beats/min, with a blade width of 13.8 in (350mm). Easy to dismantle, the machine weighs approximately 573 lb (260kg) and has an hourly work rate of approximately up to 1,615 ft2 (150m2).

GVD

www.wolff-tools.com

"Rox metal bond" diamond series from Worx+

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The new diamond series is designed with integrated Con-

sistent Grinding Technology (CGT) that delivers high output for heavy-duty surface preparation and stock removal through high end polishing. Three bonds are available for specific purposes. One features Worx+ Zig Zag technology, aggressive shape, multiple leading edges for high speed, and enhanced heat dispersion and reduced glazing. It is available in soft, medium, hard, very hard, or super hard bonds (16,720 and 30/40 grit segments). The second bond features a curved design which delivers a smoother surface profile, and is available in soft, medium and hard (50/60 and 60/80 grit). The third bond features an industry-first integrated power grouting segment design, and a segment geometry that maximizes surface profile and refinement. The proprietary diamond grit formulation develops dense grout while creating optimal dust particle sizes for packing. The third bond is available in soft and medium

(shapes available in 120/140 and 160/180 grit). All bonds are field tested and performance validated, providing a solution for surface preparation, concrete polishing, terrazzo, and natural stone and for wet/dry use.

www.totallyworks.com

www.superabrasive.com

Wolff Tools' "BiTurbo" stripper for floor coverings

The new "BiTurbo" stripper is designed for removing all types of elastic floor coverings, including parquet. It features high operating comfort, a variable speed of 0-88.5 ft/min (0-27 m/min), blade adjustment for different floorings and working conditions, and easy transport management as additional weights can be removed. The machine can be divided in the middle, has a handle height that can be adjusted in three steps, and easily accessible controls. The stripper has a supply voltage of 230V, 50Hz, and a power input drive of 2 hp (1.5kW). The number of strokes reaches





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Aquajet Systems Introduces Aqua Centralizer For Tunnel and Pipe Applications

Aquajet Systems introduces the Aqua Centralizer, designed for effective cleaning and removal of concrete, paint, rust and coatings along an entire section of horizontal, vertical or inclined tunnels and pipes. The Aqua Centralizer works in conjunction with Aquajet's Aqua Cutter Hydrodemolition robots and high-pressure Agua Power Packs to provide strategic concrete removal in roadbuilding, wastewater, and industrial plant applications. The Agua Centralizer uses elements of the Agua Spine as the base for the unit while incorporating technology from the Circular Power Head attachment for concrete removal and cleaning applications. This includes a 360-degree ring and robotic power

Aquajet Systems AB introduces

section of horizontal, vertical or inclined tunnels and pipes.

the Aqua Centralizer for effective

removal of concrete along an entire

head with a 25-degree adjustable lance angle and variable stroke oscillation. The power head offers adjustable working angles from 0 to 360 degrees and automatic indexing along the spine rail, minimizing downtime from repositioning and optimizing productivity. Combined with one of Aquajet's Power Packs, which provide a pressure up to 40,000 psi (2,758 bar), this flexibility offers contractors the power and precision to effectively clean steel pipes and remove concrete inside tunnels and pipes.

The modified Aqua Spine that makes up the base of the Aqua Centralizer can span up to 19.7 ft (6 m) between a pair of triple support wheels. Supports feature adjustable caster wheels that are designed for

4.9- to 9.8-ft (1.5- to 3-m) diameter tunnels. For additional reach, the ring and circular power head can be mounted in front of the support wheels.

Centralizer rings are available in three sizes—3.2 ft (1 m) for 4.9- to 6.5-ft (1.5to 2-m) diameter tunnels; 4.9 ft (1.5 m) for 6.5- to 8.2-ft (2.0- to 2.5-m) tunnels; and 6.5 ft (2 m) for 8.2- to 9.8-ft (2.5- to 3-m) tunnels. The powerhead adjusts up to 10 in (25 cm) to facilitate the diameter ranges.

The Aqua Centralizer is easily assembled, allowing for maximum productivity. A single bolt attaches the power head to the circular rail, with the spine roller attaching to the central spine rail the same way. Additionally, the attachment's power head can be reversed for effectively removing concrete on the outside of pillars and pipes. The Aqua Centralizer is one of several efficiency-enhancing attachments available for use with Aquajet's Aqua Cutter robots. It can be operated using Aquajet's Power Pack and stored, along with the robot, in the Power Pack

container for easy transportation to and from the jobsite. It also provides a secure location for the duration of the job.

www.aquajet.se

GSSI Announces GS Series GPR Product Line for Geophysical and Environmental Surveys

GSSI introduces the new 200 HS antenna, the first of the next-generation high-performance GS Series, designed for applications that require deeper depth penetration. Designed to operate on 200 MHz, the antenna serves as the foundation for the GS Series, which is ideal for geophysical, geotechnical, or environmental applications that require high reliability under challenging survey conditions. The newly designed 200 HS antenna is paired with the HS Module and wirelessly connects to a Panasonic Toughpad G1 or SIR 4000 control unit. The wireless HS Module incorporates system electronics, an internal GPS, and connectivity ports in an IP65-rated housing. The 200 HS uses GSSI's patented HyperStacking technology, which improves signal to noise performance and increases the antenna depth penetration, nearly double the conventional GPR antenna designs, under all soil conditions.

The 200 HS is FCC, RSS-220, and CE certified. The GS Series features a modular design that allows the user to select which controller best suits their needs; the rugged SIR 4000, combined with our new WiFi Module, or the Panasonic G1. Both controller options provide different advantages to the customer. The SIR 4000 builds on the same user interface and menu options that customers are familiar with to accommodate the 200 HS. The Panasonic G1 features a GIS map mode that will display GPR data collected on the left side of the screen, and a location map on the right side of the screen.

www.geophysical.com



Kinshofer Offers Versatile KFX-Series Breakers for Optimized Safety and Efficiency

Kinshofer has added the new KFX-Series hydraulic breaker excavator attachments to its already extensive product line. The manufacturer announced the breaker series with the acquisition of Hammer, an Italy-based manufacturer of demolition, excavation, recycling, and material handling attachments. The new series offers features that improve operator comfort and safety, reduce wear, and improve productivity and longevity.

The 14 models in the KFX-Series offer operators a wide range of weight and power options. This makes it easy to find a breaker that fits individual needs in road work, demolition, recycling, tunneling, and underwater applications. The smallest model in the series, the KFX 14 — designed for excavators weighing 8-15 tons — produces 1,475 lbf (2,000 J) and 600-900 blows per minute. At the upper end of the series, the KFX 200 — for 100- to 200-ton machines produces 25,815 lbf (35,000 J) and 150-250 blows per minute.

The KFX 20 to 200 also feature two adjusting valves, allowing operators to adjust the number of blows per minute and select operating pressures 2,320-2,900 psi (160-200 bar). Choosing a longer piston stroke will result in slower operation and more energy per single blow. This is for when the material is very hard and capacity isn't the main concern. A shorter piston stroke results in less single-blow energy but faster operation, making it ideal for softer material and greater capacity per hour.

www.kinshofer.com



Dustcontrol Launches Tromb Edition 2019

Dustcontrol has launched the Tromb Edition 2019, extending the series with the Tromb pre-separator and DC Tromb Twin. DC Tromb Edition 2019 has a more robust chassis, simplified filter change, storage box with a lid, improved cable suspension, and a motor package that can be switched easily in service. The filter systems used in Dustcontrol's dust separators are built to meet H classification, meeting modern safety demands and an ergonomic and flexible design. All units can be equipped with a plastic sack (C), longopac (L), or drum (A). It is also possible to easily separate the DC Tromb Twin from the dust separator (DC Tromb) and the pre-separator (DCF Tromb) for easy transport or separate use.



20 Years of Erkat: A Success Story



Founded in 2000 as a two-person, operation, the Erkat brand is now respected all over the world. The brand, whose know-how is still based at its Hämbach, Germany, plant, provides a product range including high-quality transverse and longitudinal drum cutters for demolition, trenching, tunneling and rock excavation. Small wonder, then, that Epiroc's January 2017 of Erkat brought two great lines of tools together.

Epiroc's acquisition has also had positive impacts for Erkat. There is now increased awareness on developing innovative products, while new customer groups have been added. There are also ideal combination options, such as carrying out the main removal with an Epiroc breaker, followed by polishing with the Erkat cutter unit during tunneling work.

Erkat extreme – robust to sensitive, individual to specialist

The unbeatable versatility of the ER cutter unit series is readily apparent. For excavator classes from 0.6 to 125 tons, Erkat offers a wide selection of different cutter unit sizes (ER 40X to ER 5500). Different cutting heads are also available for the relevant base unit depending on the usage area (rock milling, profiling, cutting wheel, mixing, wood milling, brush). Features built in to every product include robust design, high resilience, low maintenance, easy handling, the QuickSnap lock, and—above all—impressive efficiency.

The ER series is equally suited for trenching and tunneling work, special civil engineering, demolition work, milling ditches, and mixing soil formations. But it can also be used in particularly sensitive areas where extremely low-vibration and low-noise work is required. The cutter units can even be used in water depths of 100 ft (30 m) with no modifications. Erkat guarantees ideal working conditions at all times in even the most difficult of environments. The advantages are readily apparent at the Berlin central station, where the ER 1500 L and ER 2000 X cutter units are currently demonstrating their flexibility in constrained spaces. The cutters are creating space for the hydraulic Epiroc breaker, which is the only way for the breaker to find the right point for breaking the concrete ground—an ideal division of work.

Elsewhere in Germany, the transverse drum cutters are delivering an impressive performance high up on the bunker ceiling during the selective reverse construction of the high-rise bunker in Hamburg. The focus here is on low-vibration work, efficient demolition performance, and quick tool replacement as quality features.

Quality and innovation for the future In the future, Erkat's focus will be on constant further developments for the increasing requirements of markets, companies and people. Epiroc aims to expand the leading position of the Erkat products even further, to minimize fine dust pollution at construction sites with more efficient water spraying, and to significantly increase the product range. Reinforced cutter units for demolition and tunnel construction, specially developed rotator systems, cutting wheels for mounting on existing transverse drum cutters, brush heads with and without dry aspiration, and much more are already available. The focus is mainly on sustainable work areas such as the renovation market, explosive-free reverse construction in inner city areas, or the removal of contaminated surfaces.

www.epiroc.com



Dynaset Magnet Power in Demolition and Recycling

Dynaset provides hydraulic powered equipment for demolition and recycling such as hydraulic magnet generators and hydraulic magnets. The HMG PRO Hydraulic Magnet Generator converts the hydraulic power of a mobile machine into magnet power for a lifting magnet. The magnet generator has the best demagnetizing time of 0.8 seconds. Its lightning fast release of collected materials enables easier and more predictable use of the magnet which also means better work efficiency. Dynaset selection has models up to 53.6 hp (40kW).

Dynaset has a selection of high-quality

lifting magnets to pair with HMG PRO Hydraulic Magnet Generators. The HMAG PRO Hydraulic Magnet is a complete all-in-one unit with world's fastest demagnetizing time of 0.8 seconds. The plug-and-play type of connection guarantees easy installation on mobile machines such as demolition machinery, excavators, and trucks with crane.

The HMG PRO Hydraulic Magnet Generator is powered by hydraulics and therefore it allows flexibility for installation. With no drive belt, the hydraulic magnet generator can be installed anywhere on the machine.

www.dynaset.com



news

ASV Offers New Base and

Premium Machine Packages ASV Holdings Inc., introduces base- and premium-level configurations for its mid-sized Posi-Track® loaders. The options will make ASV's innovative, productivity-boosting compact track loaders more accessible to rental centers, homeowners and all sizes of businesses in landscaping, construction, rental, and snow removal. Both configurations will allow operators to use ASV's trademark power and performance to do more work in more places. Customers will choose between base and premium versions of the RT-65, VT-70 High Output, RT-75, and RT-75 Heavy-Duty Posi-Track loaders. The premium configurations include additional productivity and comfort features to allow operators to get more done during long work days. The base models offer all the ASV DNA, including the industry-leading power, performance, and reliability customers have come to expect from these machines, for an excellent value and price point. Both configurations feature ASV's patented Posi-Track undercarriage. All Posi-Track loaders are backed up with ASV's new, industry-leading 2-year/2,000-hour warranty. The warranty covers tracks for the entire period and includes the industry's first and only no-derailment guarantee.

www.asvi.com



Crescent Adds APEX Power Tool Accessories to Family of Brands

Crescent Tools' two-year old overhaul continues with the addition of the APEX Industrial Fastening brand. The new Crescent APEX brand will offer innovative power tool accessories used by industrial and construction tradesmen, including their professional line of u-GUARD® non-marring covered tools.

"The fastening innovation we've spearheaded in the assembly manufacturing space is carrying into the construction market," says Griffin Biering, global marketing director at Apex Tool Group. "With Crescent's deep connection to professional tradespeople, we are combining our efforts and delivering superior power tool accessories from a brand they trust."

Crescent APEX becomes the sixth brand under the Crescent name, joining Crescent Wiss®, Crescent Lufkin®, Crescent Nicholson®, Crescent H.K. Porter®, and Crescent JOBOX®. The move bolsters Crescent's ability to provide professionals in construction, carpentry, HVAC, plumbing, electrical, and general contracting with best-in-class tools. www.crescenttool.com

Doosan Infracore Demonstrates the Unmanned and Automated Construction Site Solutions

Doosan Infracore recently unveiled "Concept-X," a comprehensive control solution that can be used to survey worksite topography via 3D drone scanning, establish operational plans based on the topographical data, and operate construction equipment such as excavators and wheel loaders without human intervention. In short, Concept-X realizes the construction site of the future by having difficult construction work performed solely by equipment, leaving human personnel free to concentrate on more sophisticated analysis and management tasks.

Although certain individual unmanned technologies have already been introduced in the field of construction machinery, Doosan Infracore's introduction of unmanned automation technologies to the entire construction site operation process – ranging from surveying to the operations of construction equipment such as excavators and wheel loaders – is a world first.

Concept-X comprises a wide range of cutting-edge Fourth Industrial Revolution technologies such as image recognition. cognitive/control technologies, autonomous driving technologies, 5G remote control, 3D drone surveys, and accurate workload estimation and assignment, and failure-prediction technologies. The new technologies include a technology designed to create 3D worksite maps with drone-surveyed data; a technology enabling construction equipment such as excavators and wheel loaders to perform optimized unmanned operations according to any site situation; and a technology that makes real-time monitoring of work progress possible through the X-Center's comprehensive control solution.

Doosan Infracore asserts that the solution will boost productivity and economic feasibility significantly by reducing the time and costs required for construction equipment operations, while continuing to make worksites safer. Doosan Infracore plans to commercialize Concept-X by 2025.

www.doosanequipment.com



"My Epiroc" Fleet Management Solution

Epiroc has introduced My Epiroc, a new digital fleet management solution. The platform is available on web and mobile devices with attractive features for increasing fleet efficiency and safety. My Epiroc enables mining and infrastructure operations to optimize fleet performance — any device, any job role, any time. My Epiroc is a platform that provides workflow optimization assistance, helping users keep track of productivity with relevant alerts and status updates. By design, My Epiroc assists by highlighting essential items that need immediate attention. It allows for more time to be spent on the task at hand and cuts time searching and processing excessive information that gets in the way. By using the app proactively, unwanted downtime can easily be avoided.

Whenever support is needed, My Epiroc users are just a click or a swipe away from remote guided support, finding contacts or to a transparent overview of all previously reported inquiries. It is easy to manage tasks and actions related to the fleet in an efficient way and get the input needed in order to prepare for reporting. Data is securely stored in an encrypted cloud environment, which customers can also utilize to upload their own relevant content to create a safe digital fleet library over time. My Epiroc is truly mobile and works equally well on the road, in the office or in a vehicle. It is not limited to only people in an office or users with good connectivity. This makes it possible to empower operators and service technicians in the field with tools to manage their daily flows related to logging events, reporting faults, managing service scheduling, and parts ordering.

www.my.epiroc.com

Stihl Building Dedication Reinforces Commitment to Manufacturing in America

Expansion includes new administration building, campus improvements and high-tech training facility. Stihl, Inc., formally dedicated a new administration building and improvements to its Virginia Beach, Va., campus during a ribbon-cutting ceremony on Oct. 10. The \$30 million project is part of the company's continual investment in infrastructure in support of growing U.S. operations. The new 80,000-ft2 (7,432 m2) building brings the company's sales and marketing, finance and controlling, legal, and customer and technical service teams under one roof.

"This new building will improve administrative and operational efficiency allowing us to better serve our network of more than 9,000 authorized Stihl dealers and their customers," said Bjoern Fischer, president of Stihl, Inc. "As we mark 45 years of growth and expansion in Virginia Beach, we look ahead to a continued positive economic environment for successful modern manufacturing."

The project includes a state-of-theart training center for authorized Stihl dealers featuring an auditorium, training lab and outdoor demonstration area for hands-on product testing and training; a chain saw "Helix" art installation, crafted out of more than 30 Stihl chain saws dating back to 1936, representing how chain saw innovation is part of the company's DNA; a Stihl concept store showcasing an ideal retail space; and an enhanced entryway at the main gate for improved traffic flow and security

Since its inception in 1974, the Stihl Inc. campus has grown from a single 20,000-square-foot (1858m2) rented warehouse to well over one million square feet of manufacturing and administrative space.

www.stihlusa.com





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