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PDi contents



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Words from the IACDS President

THE FOCUS NOW IS TO KEEP MOVING FORWARD!

Well, here we go. I would like to say how honoured and humbled I am at being elected as the president of the IACDS. With the help of our executive office, Jose Blanco and Ester Santos, along with past president Michael Findeis, I expect to make a successful term as president.

So where do we go from here? During the last three years, we have all had our struggles with the 'new normal', with some still having struggles to deal with from the pandemic. More often than not, we are getting back to what we used to know as normal. When I attended bauma this year, I saw that normal. People getting together, talking to people, looking at new equipment, sharing ideas on jobs, methods to use: things' we all considered our usual normal.

I was especially honoured to be invited to visit some local establishments to see how they run their companies. What I saw was that we all have the same issues with hiring, training, and retaining new employees, truck issues, environmental issues, and all of the other issues that come with each different government we deal with worldwide. We all deal with these issues in a lot of the same ways, and some different as one would expect.

Out of this, I saw the strength of the IACDS and our member associations, contractor members and manufacturers. Being open to exchange information and ideas is really what is important to the success of all of our companies and associations. Personally, I got to bring home (from bauma) some new ideas on how to make my company better and some ideas I would have never thought would work in our part of the world, but since it works well for the Munich companies, it can work well in my market. What I also saw, and would like to see this happen more often, is more and better training for our field operators. How the European companies train and certify their

operators is more than impressive, something I would like to see here in the United States. Certification of the US operators and companies should be required and not just an implied requirement.

So, back to where do we go from here? In my opinion, we all need to put the pandemic in our past, to keep moving forward and continue to improve our associations and companies. I look forward to seeing all this to happen in the next two years, and look forward to see where our industry goes in the future.



Douglas Walker, president of IACDS



First full CSDA convention in three years

The US concrete sawing and drilling association, CSDA, will organise its first full convention in three years which will also mark the organisations 50th anniversary. The event will take place 29-31 March, 2023 at the Hamilton Princess Resort & Beach Club in Hamilton, Bermuda. A lot of exiting things

will happen during the three convention days, with members being happy to finally come together again after three years of no full conventions due to the pandemic. More information will come in the next issue of PDi.

www.csda.org



Fachtagung Abbruch 2023 to be held 3 March 2023 in Berlin

On 3March 2023, Deutscher Abbruchverband e. V. – DA (German Demolition Association) is organising Fachtagung Abbruch again at the Station-Berlin, Luckenwalder Strasse. With its rustic charm, this industrial monument, an old post station, is particularly suited to the demolition industry. Following the last edition in 2020, with over 1,100 participants and 127 exhibitors attending the annual meeting of European players in demolition and dismantling, there was a pause due to unforeseen circumstances making expectations high for next year.

Lecture programme

Dr. Hajo Schumacher, the well-known journalist and publicist, will give the keynote speech on the topic: 'Demolition, change, awakening — govern in uncertain times'. Afterwards, there will be 12 further lectures on the programme on current and interesting topics focused around demolition. In the lectures, the expert speakers will provide a great deal of practice oriented information on interesting construction site reports as well as on the handling of pollutants, recycled construction materials and legal requirements.

This year, among other things, the subjects covered include, 'Sustainable solutions in NRW – use of recycled building materials and reuse of building components', as well as on 'Demolition of KSC Stadium'. Other interesting lectures include, 'Complex use of different demolition methods for 250,000t of reinforced concrete' and 'Selected best practices of controlled blasting of buildings'. There

will also be other specialist lectures, including 'Technical rules (TV) demolition works 2023 – new edition of a successful rulebook', and so forth. As the number of international visitors continues to grow, simultaneous translation into English will be offered once again.

Accompanying professional exhibition

By the beginning of December, the professional exhibition with its wide range of products has already attracted over 90 exhibitors who have booked over 850m² of space. The current list of exhibitors can be viewed on the event website and registration was possible until the 19 December 2022.

Dialogue evening

As with previous editions, a dialogue evening will also take place at the Station Berlin, with the exhibition running parallel. This improves the exchange and information opportunities for both sides - participants and exhibitors - and provides a variety of networking opportunities.

Programme and registration

On the event website www.fachtagungabbruch.de/en interested parties can view the programme for Fachtagung Abbruch 2023 including information and details about the event. There it is possible to register online as an attendee. Ideally registrations should be complete by 10 February 2023. The German Demolition Association is looking forward to welcoming new and returning participants.







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ARE YOU RIDING IN THE PASSENGER SEAT?

When we once again are on the brink of a new year, the experience can vary quite a lot from person to person. Some people spend a lot of time thinking about how the future will affect them, and they may experience a great deal of anguish, especially in times like these with impending recession, continued pandemic and war. Others see changes as challenges and are rather triggered to find solutions to take on new challenges. Some others choose to 'go with the flow' and to take action along the way, so to speak.

Where do you fit it with your attitude to the New Year? For my own part, and with increasing age, I have probably become a bit of all three personality types. With retirement age approaching, one tends to be a little more cautious. Over the years, people have learned what adversity means and how the school of life affects them. It is often said that when you get older you become wiser because you learn from adversity. That may be true to some extent, but caution can also be a limitation that one should be aware of and how much one gets drawn into it. I think I still have some of the ability to be triggered by challenges, even though I may be lacking a bit of the energy I possessed when I was 30 years younger.

I also like the expression, 'go with the flow'. In that I don't mean that you should ignore how things go, but instead to 'dare'. Dare to throw myself out there and trust that the choices made will carry through successfully. Sure, it's risk taking, but what is life if not risk taking all the time. Without taking risks, life quickly becomes quite pointless. We are put here to live life in the best possible way for ourselves and for others. Sitting in the 'passenger seat' all your life and, so to speak, 'watching', becomes devastating for self-esteem and self-confidence.

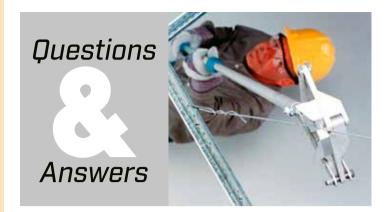
In 2023, we will face several challenges in many ways. For a number of years now, many countries in Europe, and in particular Sweden, have generally had it good. We have had a booming construction market with plenty of work. We should not complain too much. Maybe that fact has made us a little too comfortable. Now we may once again have to start rolling up our shirt sleeves due to changing conditions. Besides that, the pandemic years hit many people hard on a personal level, as many lost loved ones due to the disease. Many players in national economies managed very well apart from those who worked in hospitality, entertainment and the large meeting sector. Through, amongst other things, the numerous large government aid packages, many companies showed positive figures during the pandemic and business flourished. Now the situation is the opposite: no support packages, tight market conditions, energy crisis and war. Very rough throws, so to speak. But don't lose heart, there is life after New Year too, rest assured.

In my column in PDi issue 5, I introduced IACDS new president Douglas Walker and his regular column in the magazine. Unfortunately his column did not make it in time for issue 5, but now I am happy to introduce him again. His column can be found on page 6. Douglas Walker is the founder and owner of the American contractor Walker Cutting Services. Walker and his company have

> for decades been very active in the US concrete cutting association CSDA and still are. Douglas Walker has amongst other roles played, served as president of the CSDA.

> On that note, I am ending my last column for the year; I wish you a really happy and prosperous New Year.

> > Jan Hermansson Editor-in-Chief jan.hermansson@pdworld.com



What method is used to hang suspended ceilings in your area?

"I am asking because we sell a demolition tool that can cut down suspended ceilings from the floor safer and faster. It can easily cut 12 to nine gauge support wires that run directly from the ceiling grid to the deck," says Phillip Guerin, president Professional Engineering Co. Inc. The company manufactures and sells a heavy duty 'Wire Wolf' with free shipping. The Wire Wolf weighs less than 2kg and it can cut down 500m² /h, reach up to six meters and costs €728 (approx.). The replacement blades are €56 (approx.) per set and can cut down on average over 10.000m2. The company has been in business for over 30 years and welcomes questions regarding its products.

New global brand and new products

Doosan will introduce the company's new global brand and logo, as well as several new products at ConExpo-Con/Agg 2023 from 14-18 March 2023 in Las Vegas, Nevada, USA. The company will also host live demonstrations of its latest autonomous construction equipment in an outdoor operating worksite.

The company's new name and logo will integrate new brand values and its commitment to creating the smart construction solutions of tomorrow. Visitors to the Las Vegas exhibition will be able to see the new brand in action. hear the story of why the new name was chosen and see what's next for the company. "Fans of our current offerings will be delighted that the equipment will remain unchanged and continue to deliver the powerful, reliable solutions admired worldwide," says Alice Banach, senior marketing manager, Doosan Infracore North America.

Exhibit highlights

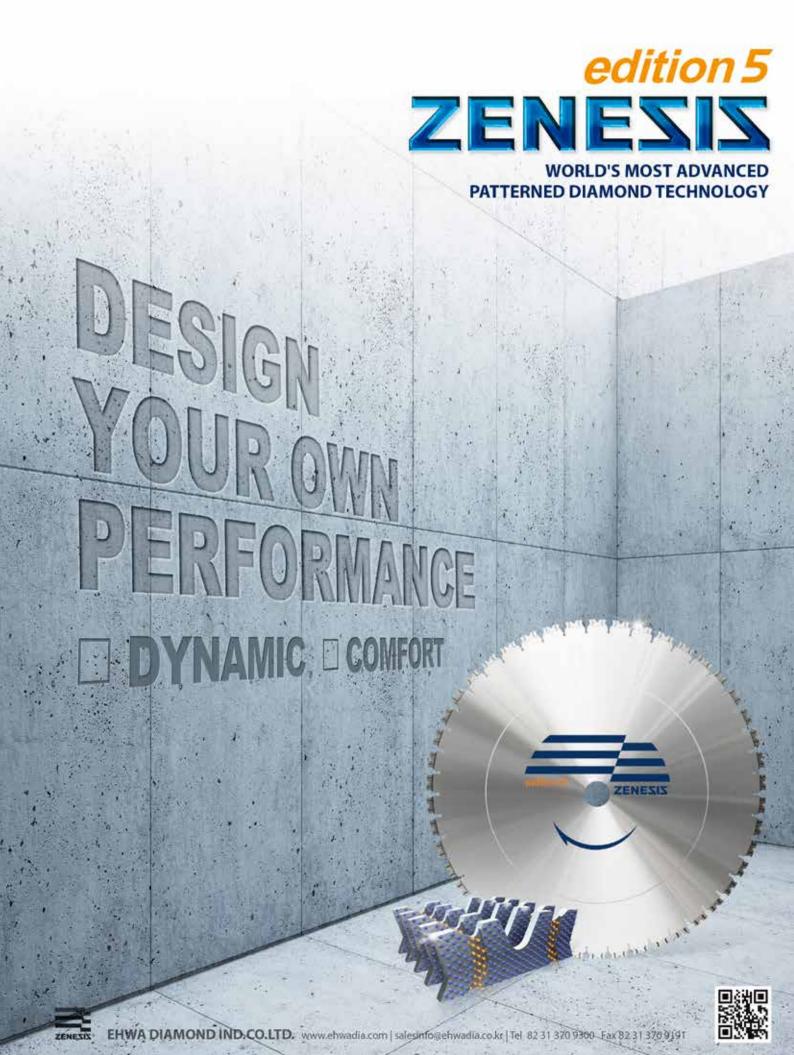
The Doosan exhibition area (F9153) in the outdoor Festival Grounds area will showcase a sample of the company's full line of construction equipment. This will include the 'unique' transparent bucket for Doosan wheel loaders, a battery powered engine and several new machines, including the company's dozer line. Attendees are encouraged to stop by to see how Doosan continues to evolve as a single source provider of the latest construction equipment. Cutting edge technologies such as

'Concept-X' demonstrations, safety features and electrification will be featured. Doosan will showcase autonomous equipment, such as the new 'Smart X-Care' fleet management service and the topography scanning drone Concept-X 'XiteCloud'.

The Concept-X autonomous worksite will feature three live demonstrations each day, along with other new products. First exhibited in 2019 with an autonomous Doosan wheel loader and excavator. Concept-X has been developed to be a smart control solution for tomorrow's worksites. It can survey worksite topography via 3D drone scanning, establish operational plans based on that data, and operate heavy construction equipment such as excavators, wheel loaders and articulated dump trucks without human intervention.

Concept-X technology has been developed to pave the way to the worksite of the future with equipment driven construction sites, freeing human personnel to tackle complex data analytics and management tasks. Continuous Concept-X demonstration pit footage will be played simultaneously on a large screen and a three screen brand tower at the booth.







Happy Holidays from European Demolition Association

The European Demolition Association, EDA, would like to congratulate all members, colleagues and all the related professionals of the industry, and wish them a 2023 full of success and good things.

As 2022 is almost over, we would like to take this opportunity to thank everyone involved actively with the industry for the cooperation and support received through the year.

Special thanks to our team, our members, the EDA Board of Directors and the Technical Committee, for making 2022 worthwhile.

Thanks also to our partners, institutional colleagues, and media for helping us to improve every day.

EDA sends you the warmest thoughts and wishes you wonderful holidays and a Happy New Year!







Sustainability starts with the tool

German company Kern-Deudiam believes that tool components in order to be sustainable must evolve.

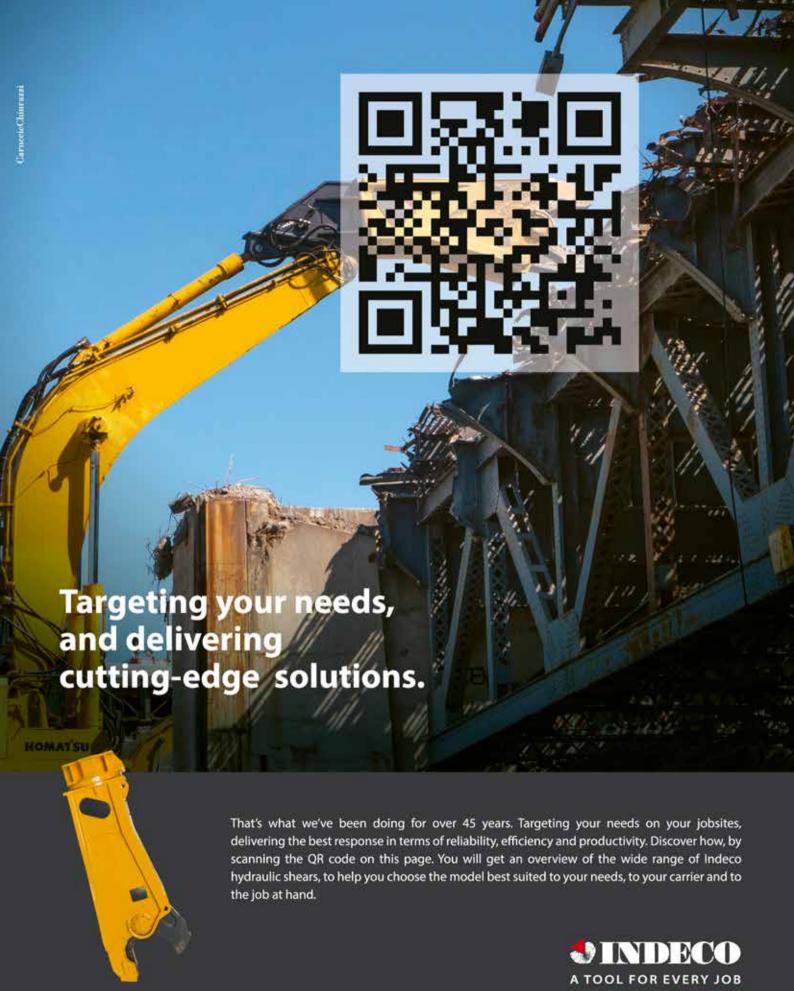
The building industry is facing the issues of sustainability, environmental protection, and efficiency. The challenges are being faced are complicated by other issues such as the global pandemic, war in the Ukraine and the global supply chain crisis. When it comes to construction projects such as infrastructure, flats, single family homes and company buildings, it is not only a question of how to do get the job done, but more and more also of with what. This is why the future will belong to tools and machines that not only fit the application best but offer long durability, smart features and the smallest possible ecological footprint.

When it comes to sustainability, it is not only short supply chains, shipping routes and delivery times that play a significant role, as these can more than likely be met through local production. Furthermore, the numerous components and parts of construction machinery and tools, and especially their origin, are of interest. From this perspective, another important factor is 'innovation'.

Mid-sized company Kern-Deudiam is close to its customers and has been researching, developing, and producing diamond tools and machines in Germany for over 45years. At bauma 2022, the manufacturer was able to present 'DTOX', a new product line that is entirely made in Germany and 100% cobalt free. Today, this cobalt free portfolio consists of wall saw and floor saw blades such as the SWF131 or SWF141, but also of wet core drills such as the DB121. In addition, the company offers free sintered ring segment modules and ring segmented core drills such as the DB111.

However, the company believes that there is even greater potential and has the ambition to achieve this. In the medium term, Kern-Deudiam plans to dispense with further heavy metals that were previously necessary. Avoiding them will make diamond tools and production processes more sustainable and eco friendlier, which then also applies to working with them on construction sites. At present, these heavy metals can still be found in almost every diamond tool and thus also on most of the world's construction sites.

www.kern-deudiam.de www.instagram.com/kerndeudiam





EVENTS

WORLD OF CONCRETE

17-19 January, 2023 Las Vegas Convention Center. Las Vegas, USA

www.worldofconcrete.com

BAUMA CONEXPO INDIA

31 Jan - <u>3 Feb, 20</u>23 India Expo Centre, Greater Noida, New Delhi, India

www.bcindia.com

FACHTAGUNG ABBRUCH 2023

German Demolition Association Convention 2023 3 March. 2023 Berlin, Germany

www.deutscher-abbruchverband.de

CONEXPO-CON/AGG 2023

14-18 March, 2023 Las Vegas Convention Center. Las Vegas, USA

www.conexpoconagg.com

BEBOSA 2023German sawing and drilling association convention 23-25 March, 2023 Willingen, Hochsauerland, Germany

www.bebosa.com

SAMOTER 2023

Verona Exhibition Centre Verona, Italy

www.samoter.it

IDA CONVENTION AND

28-29 september, 2023 Bangalore, India

www.indiandemolition.org

INTERMAT 2024 April, 2024

Villepinte, Paris Nord,

www.intermat.fr

DEMCON 2024

Septemb<u>er 19-20, 2024</u> InfraCity, Stockholm,

www.demcon.se

BAUMA CHINA 2022

26-29 Nov, 2024 Shanghai Exhibition Center, Shanghai, China

www.bauma-china.com



World premiere of new battery pack from Gölz at bauma 2022

The new 'BattPak 5048' offers self-sufficient and autonomous power supply up to 5kW in continuous operation.

Gölz GmbH presented the newly developed BattPak 5048 for the first time at bauma 2022. The innovative battery pack has been designed to provide an efficient and autonomous power supply for corded power tools and machines as well as for any other machine that requires electric power to function. The continuous output of 5kW with a battery capacity of 4.8kWh can be accessed via two 230v Schuko sockets each with a 16A fuse. The battery pack has protection class IP 67 and in addition, the BattPak 5048 also has a USB-A and USB-C port for charging electronic devices.

Flexible usage

"With the BattPak 5048, our customers will have a mobile and powerful autonomous power supply available directly where it is needed. So for any wired device a traditional power mains connection is no longer necessary," explains Bernd Schmitz, managing director of Gölz GmbH. "Further advantages are emission free use, quick set up times and short recharging times." In comparison to conventional power generators, noise pollution and exhaust gases are said to have been totally eliminated. The fact that there is no need to run electric cables to a mains power supply reduces set up times on the construction site. The conventional power supply with a 230v connection (three hours), a charging station for e-vehicles or mobile solar panels (depending on the performance profile) ensure fast recharging.

Various possibilities

Due to the high storage capacity and ease of use, the BattPak has been designed for unlimited usage for multiple applications. "Wherever an autonomous and powerful energy source is required, BattPak offers the right solution," says Bernd Schmitz. "The wide spectrum of uses range from the use for construction applications such as drilling, cutting, vacuuming and concrete mixing to name a few. Uses in the metal construction field include plasma cutting and welding to illuminating construction sites. Other uses include use for emergency services to power any

electric device. The BattPak is also a great option for powering refrigeration and other electric appliances and devices (without the noise and pollution) in food trucks at festivals, as well as for camping, just to name two of hundreds of possible examples."

About Gölz GmbH

Founded in 1946, Gölz GmbH is a specialist in diamond tools and equipment aiming to be an efficient partner offering professional solutions in the concrete drilling and sawing industry. For over 75 years, the company, based in Hellenthal (North Rhine-Westphalia) has consistently focused on quality, service and innovation and, together with its customers, is constantly developing new concepts and solutions for professionals using its own diamond tools and devices. Its products are now available in more than 40 countries through dedicated sales and service centres as well as through its own team of trained sales partners. The company has a total of 250 employees worldwide.



The BattPak 5048 offers a self-sufficient power supply with up to 5kW in continuous operation.

MEISTERWERK.













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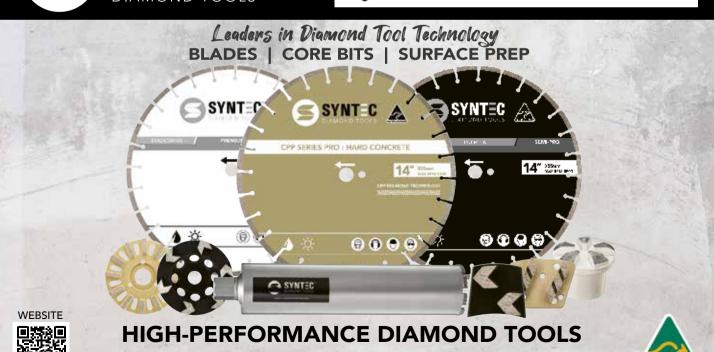
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The new My Brokk portal combines fleet management capabilities, a document library plus parts and accessory ordering into a single resource.

The Brokk Surface Grinder 530 (BSG 530).





he new My Brokk portal combines fleet management capabilities, a document library plus parts and accessory ordering into a single resource. Through the portal, users can access Brokk Connect to monitor and manage their machines. It also includes a library of equipment manuals, technical data, CE markings and diagrams along with a web shop that allows online access for users to view and order a full range of Brokk original spare parts and attachments, such as rubber caterpillar tracks and hydraulic breakers. The new portal streamlines customers' processes for managing and maintaining their Brokk robots and results in increased uptime.

Surface Grinder 530

The Brokk Surface Grinder 530 (BSG 530) offers a remote controlled method to safely and efficiently strip plaster, contaminated material, tile adhesive and paint off walls, ceilings and floors. Suitable for the Brokk 170, Brokk 200 and Brokk 300, the BSG 530 removes material through constant contact and high pressure on the surface, resulting in a more even, consistent removal

over large areas that isn't possible with handheld grinding tools. The Brokk surface grinder is particularly useful when it comes to handling hazardous materials, such as asbestos, where operator safety is key. The attachment



The Brokk Grapple Saw 15 (BGS 15) is two attachments in one – a grapple and cold cutting saw. Here demonstrated at Demcon earlier this year.

can also be used for surface preparation and polishing through the addition of different tools.

Grapple Saw 15

The Brokk Grapple Saw 15 (BGS 15) is two attachments in one – a grapple and cold cutting saw. It can cut metal pipes with a diameter of up to approximately 200mm and grab and sort material without changing the attachment. Compatible with the Brokk 110, Brokk 170 and Brokk 200, the BGS 15 cuts both fixed material and loose scrap without creating sparks that could pose a fire risk. A Brokk robot, paired with this attachment, brings compact power to large cutting tasks in tight spaces.

Dust suppression system

Brokk has also demonstrated its 'unique' dust suppression system, the atomised water mist. The system has been developed to provide superior dust suppression for combatting harmful silica dust. The water mist is said to require less water than other methods with just 0.2 l/m. This means not only less water consumption, but also a cleaner worksite and less waste.

PDi special feature



Whether you've read about the latest introductions at bauma, or look forward to what Conexpo has to offer, it's never too early for those in the market for compact loaders and skid steers to start making notes.

New 'Next generation' from Cat

Building on the success of the Cat 'M-Series' compact wheel loaders, the new Cat 906, 907, and 908 boast a reengineered operator's station that leverages exclusive Cat technologies to improve operator experience and provide larger wheel loader model comfort on a smaller platform. Featuring the new Cat C2.8 engine, the upgraded drive and powertrain deliver faster road speeds and drive train performance. The hydraulics and structures have been overhauled for versatility. The new sealed and pressurised cab improves operator experience while keeping previous design functional aspects to make cab cleaning easier. Optimum visibility is achieved with larger standard side mirrors, optional parabolic lens, electric and heated mirrors, and front and rear camera options. New single piece front and rear windshields are designed to offer 60% better wiper coverage.

Specifically designed for Cat products, the new Cat C2.8 engine delivers the same 55.7kW power as the previous engine with 13% more torque, resulting in performance and tractive effort improvements. The Cat C2.8 meets EU Stage V and U.S. EPA Tier 4 Final

emission standards with alternative emissions packages available. Its 'shift on the go' transmission offers increased road speeds of 40kph and larger fuel tank capacities of 30% for the 906 and 12% for the 907 and 908 for extended work cycles.

When working in dusty environments, the new reversing fan option is designed to assists cooling cores for more efficient temperature control. Through an in cab soft touch button, the system can be turned off, set to operate in an automatic mode or momentarily activated by the operator. Automatic mode uses the factory setting to reverse direction for 10sec every 10min. Frequency and duration of automatic reversing can be changed easily by the operator via the new control monitor.

To meet demand for increased multi-functionality with lift and tilt while powering hydro mechanical tools, the wheel loaders feature a new standard pressure compensated valve. Increased working auxiliary pressures make work easier and improve steering to reduce operator fatigue. Modifications to the optional skid steer coupler improve visibility through the coupler when setting fork tines. In conjunction, realignment of the compact wheel loader fork carriage improves forward visibility. Bucket capacities have been increased across the range.

Battery powered loader prototype

Caterpillar states that it is focused on delivering purpose built solutions to help customers achieve their sustainability goals by geography. Among the latest innovations is the 906 compact wheel loader, the prototype of which debuted at bauma 2022. The machine is powered by a Cat 300V, 64kWh battery, with an estimated run time of up to six hours on a single charge. The company also plans to offer an off board DC fast charging option. The Caterpillar designed batteries in these machines will also be available to power other industrial applications. Built on proven Caterpillar technology, the lithium ion battery range features a modular design that offers flexible configurations across multiple applications. The batteries are engineered to be scalable to industry and customer performance needs and are designed to maximise sustainability throughout their lifecycle, including recycling and reuse at the end of life.





Volvo upgrades L20 and L25 electric compact wheel loaders

Upgrades to the zero emissions, low noise L20 and L25 electric compact wheel loaders have been introduced. The updates include increasing the maximum speed to 20kph, an option to fit a parallel linkage that delivers high breakout torque in various applications, additional operator friendly features and improved charging. The L25 electric compact wheel loader was unveiled in 2019 and customer shipments began in Europe in the spring of 2020 and in North America this past summer. Both models offer zero exhaust emissions, lower noise and comparable performance to diesel equivalents.

The upgrades include lower noise levels inside and outside the cab due to a new hydraulic pump and the relocation of the main control valve from the cab to the front frame. Additionally, operators in colder climates will appreciate the new programmable cab heater option, which allows them to easily choose the times and days of the week when they would like to arrive in a pre-warmed and defrosted cab. Operator comfort is said to have been enhanced due to a more ergonomic joystick. A new electric parking brake improves uptime with hill-hold functionality: a convenient automatic feature for opera-

tors working on inclines or rough terrain. Furthermore, as the disc brake in the former model is now replaced by a spring applied and hydraulic released wet disc brake, related maintenance requirements are removed, helping to cut costs and machine downtime.

The time it takes to achieve a full charge from zero is said to be only six hours with the 6kW on board charger if used with a 240v socket or level two public charging station. Speedier charging is available with optional off board DC fast chargers at 11.5kW or 17.3kW. When this is combined with the newly launched electric machine management application, customers can further boost uptime by keeping track of charging status, battery level and location to help manage the charging process more efficiently.

Volvo CE recently launched an online tool that allows customers to configure an electric machine to their liking and see the suggested retail price.

www.volvoce.com



Wacker Neuson's 3rd generation electric wheel loader

The WL20e is the first exclusively electric powered wheel loader by Wacker Neuson. Its performance characteristics correspond to those of a conventional diesel powered machine. The installed 48v lithium ion battery is optionally available in three power levels, so that running and charging times can be optimally matched to the work requirements. The WL20e works fully emissions free on site with significantly lower noise pollution providing greater flexibility in application, environmental protection and significant savings on operating costs.

Depending on the application and purpose, the appropriate battery size can be selected. A total of three maintenance free lithium ion batteries are available, with the standard being 14.1kWh. Options comprise of 18.7kWh or 23.4kWh and a 3kW on board charger is installed as standard. Optionally, a second 3kW on board charger can be selected to increase the charging power to a total of 6kW, which is suitable for the medium and large battery to achieve a fast charging time. The lithium ion battery comes with a standard warranty of 36 months or 900 charging cycles, with a minimum 80% remaining battery capacity.

The central loading flap is easily accessible from the outside on the right side of the machine. Behind it are the power socket, activation switch and charge level indicator. Flexibly selectable charging plugs are designed to enable fast and coordinated charging of the selected battery size.

The cabin of the WL20e has been developed to comfortably enable year round use of the machine. It has been optimised to meet the needs of the operator with many new features, enables safe and comfortable working and provides sufficient space for the operator despite its compact design. An innovative heating system ensures that the driver can work at a comfortable interior temperature even when cold outside. In summer, good ventilation is ensured even without air conditioning. The door can be locked on the right and left for gap

PDi special feature



ventilation, the door can be opened 180° on the right and left and the rear window can be opened. Low slung windows and a shortened rear of the machine provide all round visibility, the electrically heated front and rear windows optimise visibility in all weather conditions, and the emergency stop switch under the joystick offers high safety.

www.wackerneuson.com

Bobcat's S86 and T86 'R-Series

The new S86 skid steer and T86 R compact track loader replace the previous 700 and 800 'M-Series' loaders and complete the current R-Series loader line up. Delivering a higher engine and hydraulic output, they are said to be the most powerful compact loaders the company has ever built. Both machines use a proven Stage V compliant 3.4l Bobcat engine, producing 78kW at 2,600rpm. Both machines have three different auxiliary flow outputs, with a standard flow configuration providing 871/pm for applications such as load and carry, or where low hydraulic flow attachments are used. Bobcat also offers two additional hydraulic performance functions using the new 'Electronic Displacement Control' (EDC) pump which is a high flow function giving 138lpm and a new 'super flow' function taking auxiliary flow up to 159l/pm. The super flow function is said to typically increase productivity with like for like attachments by 15% to 20%. It has a new five coupler connection block allowing the use of larger 19mm quick coupler connectors and attachment hoses. This change has been designed to increase auxiliary hydraulic efficiency and performance.

Mecalac introduces new 'MCL' range

The new Mecalac MCL range includes six models from 1.74t to 2.85t. The MCL2's small size and wheel motor transmission allow it to move with agility with its ergonomic operator's station protected by a canopy also being available in a cabbed version. The MCL4 provides a compromise between compactness and lifting performance, and its

18.4kW engine has been designed especially for rental fleets that require a durable and high performance machine. Its low transport weight also allows the machine to be transported on a road trailer. The MCL6's 36kW motor allows it to reach and maintain high speeds on the road. Its high hydraulic flow and its speed of execution have been designed to increase the productivity on worksites. Design of the MCL8 was guided by power, high dumping height, and lifting capacity being developed to be at ease in all circumstances whether it is for loading, handling or driving hydraulic attachments. Short arm versions of two machines – MCL4+ and MCL6+ – offer an increased tipping load to suit specific construction applications.

All the machines will be available in three versions: canopy, canopy with foldable top or cab version, and all come with a wide selection of attachments. The loaders can be equipped with Mecalac's latest comfort and driver assistance technologies. A keypad with start-up digi-code provides better control of the machine's use while 'M-Drive' turns the machine into a speed controlled tool carrier. 'MyMecalac' connected services maximises the use of machines thanks to optimised and accessible machine data, reduced downtimes and better fleet management



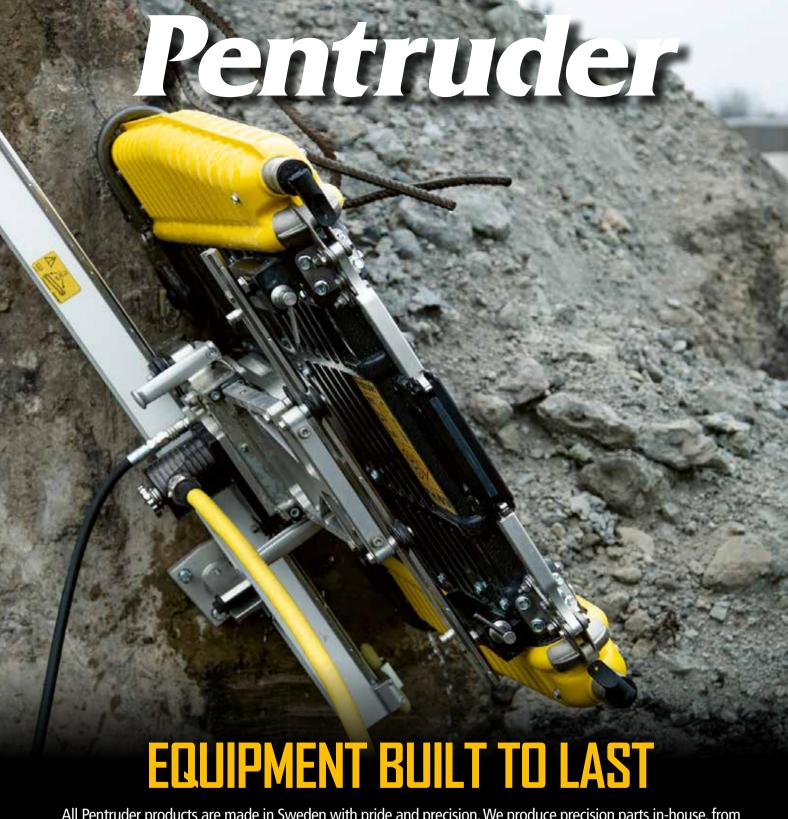
New loader models from Manitou

Specifically designed for urban construction urban sites, the MLA 3-25 H-C and MLA 4-50 H-C also enables pallets of materials to be handled where there are space constraints. Both models are equipped with hydrostatic transmission for added performance. Manitou has worked on the design of the new machines to create models that are more ergonomic and even more slim line than previous ones, while still offering a very high level of performance. The engine hoods have been shortened and the engine is positioned lengthwise to the chassis to reduce the models' size. The minimum width is 1m with the chassis also being revised to reduce the length providing manoeuvrability in tight spaces. A joystick has been developed for easier mastering by new and experienced users alike. In addition, optimal 360° visibility around the cab ensures a very high level of safety for users.

To facilitate movement between different work sites or farms, certain models are transportable on a 3,500kg trailer. The loaders are also equipped to send information directly on the 'My Gehl' and 'My Manitou' smartphone applications, enabling users to monitor their activity and anticipate maintenance operations. Thanks to the 'EasyManager' web portal and mobile app, fleet managers can remotely monitor the activity of every machine and thereby optimise fleet management. Simplified maintenance enables users to reduce total cost of ownership.

Kubota's new SVL97-2

The newest member of Kubota's compact track loader line, the SVL97-2, offers increased productivity and dependable power. The new SVL97-2 boasts a 71.5kW engine with a rated operating capacity of 1,450kg at 35% tipping load, 35.41kN of breakout force, and a 1m reach at max height. In addition, the new SVL97-2 comes standard with the ability to monitor the machine's health and location. The standard rear view camera can be set to display constantly or



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only when the machine is moving in reverse, allowing for better rear visibility and increased operator comfort. Optional front LED work lights are available for more efficient and safer work during the night and in any low light condition. The machine's 'DEF' system has been reengineered to ensure long term reliability and productivity. Kubota states that it has also improved the sealing of the cab, reducing the amount of dust, water and debris entering the operating space.

www.kubota.com

John Deere 'G-tier' compact wheel loaders

John Deere has introduced three new models of compact wheel loaders, the new G-tier models. The new 184 G-tier, and the 204 G-tier and 304 G-tier machines, have been designed to include proven capabilities and are ideal for customers in need of a dependable machine to complete everyday tasks, offering optimal performance with lower maintenance costs. Designed with convenience and productivity in mind, they have been developed to be easy to operate, coming as standard with limited slip differential. This automatically engages if one wheel loses traction, providing enhanced safety for the operator and the machine. The optional ride control reduces spillage from the bucket when traveling over rough terrain, reducing job site clean-up and improves ride quality for the operator who is also able to engage and disengage at certain speeds.

Featured on all G-tier models, the cab design is offered in both a canopy or enclosed cab configuration, giving operators flexibility when working in a variety of different geographies. Built with operator visibility in mind, the redesigned enclosed cab features a frameless, fully glass door, floor to ceiling front windshield and

remounted machine display providing a clear line of sight to machine surroundings. The right side full glass window also swings out 180° to further enhance overall visibility. Additional features include an adjustable steering column, slip resistant steps and an optional LED lighting package. The cab includes amenities such as improved air conditioning systems and ergonomic low effort controls to keep operators comfortable. All the models offer serviceability features such as ground level service and increased capacity fuel tanks to help simplify daily maintenance. This allows operators to spend more time completing the tasks at hand, rather than performing on site repairs or maintenance. The strategically placed cooling package minimises contamination from debris build up for improved efficiency and reduced cleanout time.

The smaller G-tier models, including the 184 and 204, were designed to provide customers with a rugged, compact design helping the operator manoeuvre within the tightest areas while maintaining complete control of the machine. The machines also are nimble enough to fit through smaller door openings or other smaller areas, making them an ideal solution for job sites of all sizes. The new 0.7m³ bucket is optimally sized and can be attached to either a 'Quik-Tatch' or hook style coupler.

The largest of the three new models, the 304, delivers productivity enhancements while also retaining many of its previous features that are designed to deliver higher productivity, especially in applications such as site development, roadbuilding, and snow removal. In response to customer feedback, the travel speed of the 304 has increased to 30kph, allowing the machine to accomplish tasks and move around job sites in less time. It has been designed to provide improved operator visibility and overall machine stability with the increased machine size, which is now measured at 2.6m tall, with cab, and 1.9m wide. The model also comes equipped with an optional 'Attachment Assist Package', including proportional mini joystick 3rd function control with detent, combined creep control and throttle lock as well as three pin integrated electrical attachment controls.





The Italian located exhibition Ecomondo is dedicated to the circular economy. PDi Magazine attended this year's edition to meet with manufacturers working in demolition that highlighted products aimed at increased sustainability.

very year, the doors open to Ecomondo, an international exhibition held at the Rimini Fair. The exhibition brings together all sectors of the circular economy in one space, from the recovery of materials and energy to sustainable development. Within that, naturally, are companies working in the field of demolition, all showcasing products that in one way or another are aimed at contributing to a more sustainable workflow. This year's edition, which was held from 8 to 11 November, was actually the 25th since its inauguration and had as many as 1,400 exhibitor brands filling the exhibition space of 130,000m2. This year, Ecomondo also saw an increase in attendance by 41% compared to 2021 and 15% compared to the record edition of 2019. Ecomondo also doubled its foreign attendance, with visitors from up to 90 countries, thanks to its internationalisation policy launched by organisers, the Italian Exhibition Group. A second show, the Key Energy Show, was held concurrently with Ecomondo.

'Eagle III' from Mantovanibenne

One of the exhibitors at Ecomondo was Mantovanibenne, which introduced the third generation of its 'Eagle' shear line, which is mainly aimed at the recycling sector. It received its premiere at Ifat and its construction sector premiere at bauma. It is available in the 2.5t to 22t class, and was developed with the goal of reducing maintenance and downtime, with the heavy duty pivot components contributing to durability and long life through the addition of an easily removable central pin on the shear. The new line offers a smaller frame, and the centre of gravity has been moved to the rear which enhances stability, according to Mantovanibenne. It features a redesigned bolt on piercing tip made of alloy steel, and the guide system is integrated inside the



frame. The new design of the jaws provides up to a 9% larger opening. The lower and upper jaw are cut with a high pressure water jet from 160mm thick Hardox steel plates and then milled, to avoid possible weakening due to high temperatures. The upper jaw is made from a single element without welding and is equipped with a new type of exchangeable piercing tip and a single integrated guide puck allows the upper jaw to use 100% of the cutting capacity, even at difficult angles, according to Mantovanibenne. The most heavily used parts are armoured with interchangeable Hardox 500 steel plates installed on the jaw profiles to avoid frequent maintenance operations, with the armouring allowing the shear to resist impact without altering the structure. Mantovanibenne states that the cylinder is inverted to protect the rod inside, and the enlarged bore develops more power by accelerating the cycles (opening and closing speed), with the shear also being equipped with seals that can last up to 3,000h.

Simex releases the 'Art 1000'

Simex has now introduced its Art 1000, a patented technology development for the onsite regeneration of damaged asphalt ('Art' standing for 'Asphalt Repair Technology'). It is designed to be used for the restoration of road surfaces to a depth varying between 30mm and 10mm. The technology does not require milled material to be removed or virgin hot mix asphalt to be added, instead it is able to use existing material available on site. According to Simex, it also ensures that the asphalt will last for a reasonable amount of time to allow local authorities to plan road maintenance. During the milling stage, Simex uses an environmentally friendly chemical admixture for the cold regeneration of the mix produced. By drawing on the self-levelling milling technique of 'PL' cold planers, the new equipment consists of two drums; the first for milling and mixing, the second for crushing and desegregation. It also features an integrated 85l tank containing the rejuvenator, an electric pump and nebulizers, and a detection wheel that ensures the correct dosage of additive, proportional to the speed of the carrier and the set working depth. The rehabilitation work consists of three steps: milling and regeneration, mixing, and compaction. The Art takes care of the first two steps, while the third is determined by the compaction tool supplied to the operator. Art 1000 is Simex' most important product shown at Ecomondo and this was the first time it was shown in Italy. It had its premiere at bauma. Simex' stand also featured the 'CBA' asphalt granulator bucket, designed for the volumetric reduction of asphalt slabs to a certifiable grain size, thanks to the configurable rear grid, as well as the 'VSE' screening buckets, designed for separating different sized materials on the worksite.

Hammel's VB 750 DK 'long version' now standard

At the previous Ecomondo, Hammel introduced their VB 750 DK long version prototype primary shredder, with a discharge height of 4,600mm and belt width of 1,400mm and dimensions of 12m x 2.5m x 4.6m. This year, Hammel announced that the long version has

become the standard version, and that it has undergone shaft improvements as well as a higher magnetic position for improved metal separation. Through the lightweight construction of the neodymium magnet, the machine's overall weight remains the same as the previous shredder model. The newly designed conveyor achieves a discharge height of approximately 4,600mm. Hammel states that this enables both the formation of large volume material heaps with the end product transferring directly to containers or trucks. The shaft length is 2,000mm and the shaft diameter is 650mm, with the model weighing approximately 23t and requires no special permits. It is suitable for domestic waste, bulky waste and metal, to name but a few applications, and features a Cat C9.3 Stage V 380hp diesel engine. It has recently been used in projects in Eastern Europe, and just four weeks before Ecomondo, it was installed in a project in Bulgaria.

Other products at Ecomondo

Arjes' 'Impaktor' 250 E-PU, a stationary electric version of its double shaft shredder, was also exhibited at the show. The two shredder components, the shredding unit and the control unit, can be integrated into existing recycling plants or used as an individual machine. Construction and demolition waste can be processed for the extraction of secondary raw materials, with the shredder creating the basis for these recycled materials.

Zato also exhibited at Ecomondo, highlighting one of the company's latest developments, the new head-quarters for Zato North America, located in Atlanta, Georgia. Zato has also implemented remote assistance





















PDi shows





for the twin shaft industrial pre-shredder 'Blue Storm GF1000', and offers service worldwide. The model is designed to handle light ferrous and non-ferrous scrap, and features shafts with differentiated speeds.

At Idrobase's booth it was possible to see the mobile fog maker cannon 'Elefante 90', developed for dust and odour suppression. It is the largest machine from the company and it is characterised by its 90m fan jet and 50l/min maximum flow rate. The model nebulizes droplets of 18/20 microns, agglomerating fine dust such as PM10 and PM2.5 thanks to 135 nozzles with

a pressure of 90bar. It also features pneumatic wheels for easy movement.

Avant Tecno showed its multifunctional wheel loader Avant 860i with a Stage V engine, 1,900kg lift capacity, 57hp diesel engine, 3.5m lift height and 30km/h speed. Brokk and Aquajet were also present, with Brokk highlighting a Brokk 110 with a 'Flashcut' rock saw from Austramac. The latest news from Aquajet include the 'Aqua Cutter' 750V, which was presented at bauma, as well as the Aqua Cutter 710V 'Evolution' 2.0, a robot featuring a new hoist and 3D positioning,

tower system and quick connection at the front. VTN Europe highlighted its mobile scrap shear series 'CI_R' which features interchangeable and reversible cutting blades and hydraulics that are easily accessible through bolted hatches. It comes with a reinforced body with there being 13 sizes available in the series.

Ecomondo will be back in Rimini from 7 to 10 November 2023. It is preceded by the first edition of K.EY The Renewable Energy Expo. This is a Key Energy spin off that will become autonomous with double the space and is set to occur from 22 to 24 March 2023.







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Five Doosan mini excavators part of aid package for Ukraine

Five Doosan DX17Z mini excavators are part of a package of equipment being sent by South Korea to support Ukraine. The mini excavators and 20 generators from the Korean government are being supplied alongside contributions from aid agencies in France and the United States, together totalling almost 200 generators to help Ukraine after attacks on critical infrastructure in the country. The equipment is expected to be delivered this month on a chartered flight.

The Verkhovna Rada, Ukraine's parliament, reported on 25 November 2022 that South Korea would provide the equipment for Ukraine. "An agreement was reached with the Korean side on the transfer of 20 generators with a capacity of 450kW-500 kW, as well as five Doosan DX17Z mini excavators to Ukraine as humanitarian aid," Ukraine's ambassador to South Korea, Dmytro Ponomarenko, said. France is ready to send 100 high power generators to Ukraine. The United States Agency for International Development (USAID) in



Ukraine will provide 80 generators to help keep the power on. These announcements follow on from earlier this year when Doosan made a donation at the company's European Dealer Meeting to support Médecins Sans Frontières/Doctors Without Borders (MSF), the international medical humanitarian organisation. Ukraine is crying out for help from the rest of the world and teams from MSF are working hard to deliver emergency medical aid to people in Ukraine as well as those seeking safety in neighbouring countries.



Doosan has extended the company's new generation mini excavator family with the launch of the 2t class DX20Z-7 model. Said to provide a unique combination of high performance and compactness, the new DX20Z-7 is designed to be an ideal solution for confined space and indoor job sites, offering a zero tail swing design and a detachable canopy for low height entrance. The DX20Z-7 has been developed to provide increased productivity, excellent operator comfort in an easily accessed operator.

Increased productivity

The optimised hydraulic system in the DX20Z-7 mini excavator has been developed to make the best possible use of the engine power available from the Yanmar 3TNV70 three cylinder Stage V diesel engine providing an output of 10.3kW at 2,200rpm. This results in fast cycle times combined with smooth control of breakout forces, which include a digging force over the bucket (ISO) of 1.55t. In its standard configuration, the DX20Z-7 has an operating weight of 1,995kg. With the optional 1.1m long arm, the maximum digging depth of the DX20Z-7 is 2,345mm, the maximum dump height is 2,750mm and the maximum reach at ground level is 3,975mm. This working range provides performance and versatility in operating a wide range of attachments.

The high lifting capacity and dumping height offered by the DX20Z-7 ensure that loading a trucks is an easy process, while the reach at ground level reduces the need to keep repositioning when digging. When at its fully retracted width of 950mm, the retractable undercarriage on the DX20Z-7 allows the machine to go through narrow spaces. When fully expanded to a width of 1,360mm, it provides stability for the excavator, especially when working over the side. Expansion and retraction are simple and easy via a switch on the control panel.

Comfort and robust performance

The DX20Z-7 is built around the operator and provides optimal ergonomics. There is ample space for the feet with a flat floor for easy cleaning, ergonomic pedals and easy access to all controls. Visibility to the front is optimised by the high luminescent LED lamp on the boom. The use of highly durable materials ensures that the Doosan DX20Z-7 model offers hard wearing and robust performance. All components and design features are tested under extreme conditions and the heavy steel gauge tailgate ensures extra durability and peace of mind while working. The cylinder guards and battery cover provide extra protection. The tailgate can be quickly opened to provide immediate access to conveniently located components such as easily cleaned coolers and other daily maintenance and service points thereby reducing downtime.

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The decommissioning of the former Enel plant in Piombino is one of the largest and most complex construction sites of this type in Europe.

ver 70,000t of steel needs to be demolished, reduced in volume and sent to the foundry. Indeco ISS 20/30 and ISS 30/50 shears have been hard at work helping with the process from the start.

At the former Enel plant in Piombino, Italy, Perino Piero Srl, a company with specialism in reclamation and demolition, has been working for about a year. The site is the location of the largest thermoelectric power plant in Italy. The construction site is very complex both from an environmental and operational point of view, and aims to return the area when cleared and reclaimed for the subsequent construction of a large tourist facility. The plant deconstruction works began at the end of 2021 and are proceeding to schedule according to a plan for functional and complementary operations where demolition and reclamation go hand in hand.

Environmental obligations

The former Enel plant is located within the Orti Bottagone wetland managed by the WWF. It is a wildlife oasis where many bird species find refuge, including flamingos. The area has been expanded by another 12hectares and is part of an overall framework of environmental enhancement. It is located by the sea where tankers that brought the fuel oil for the boiler's operation used to dock at the port opposite. At the edge of the port area stands the Torre del Sale, an ancient fortress erected in the late Middle Ages. Due to the location of the aforementioned, there are very stringent obligations in place that present various technical difficulties. This means that both boilers and chimneys from the site will be demolished with techniques that require machines and equipment appropriate to the task at hand. The chimneys will require the use of specific mobile bridges to carry out a gradual and controlled lowering through demolition and the disposal of the material inside the chimney. From here, it will then be possible to remove all the resulting material and send it for disposal or recycling through access to the base.

The demolition process will see the removal of 70,000t of steel which will have to be reduced in volume

and then sent to the steel mill for complete recovery. Before the demolition began, it has been necessary to remove and dispose of any liquids still present in the plant. In addition to this, almost all of the plant elements are covered with insulating layers of stone wool. This material must be encapsulated, removed and disposed of with great care. The total figure exceeds 300,000m² of material to be treated, bagged and sent for disposal.

The protagonist is steel

The operational phases of the construction site are conceptually simple. To date, the five tanks that contained the fuel oil for the operation of the boilers have been completely demolished. Four have a capacity of 50,000m3 and one 100,000m3. The Indeco shears used were among the first equipment to enter the site. The ISS 20/30 is almost permanently installed on a Doosan DX340LCN-5 hydraulic excavator, while a Kiesel KMC600 demolition excavator uses the larger ISS 30/50. Both are constantly engaged in the demolition and in the subsequent cutting of the material for volume reduction. This operation facilitates the loading of the material to be sent to the foundry.

A hard job with no let up

The two Indeco shears are subjected to very tight operations where, especially in the demolition phases, they are subject to very hard use. To safely demolish the plant, it is often necessary to remove large elements, an operation that can heavily stress the two shears. In particular, the ISS 30/50 is the shear subject to the most stress, yet since its arrival at the construction site, it is still operating with the original blades. The ISS 20/30 is mainly engaged in cutting the demolished steel and dismantling the plant that conveyed the fuel oil to the boilers. "They are two pieces of equipment that we bought after a field test," explain Fabrizio and Giuliano Perino, the two brothers and owners of the Turin company.

We had in fact rented the ISS 20/30 for a job to be carried out inside a plant in Turin. The machine was a real and positive surprise, and so we decided to buy it together with the ISS 30/50. The latter was even

more surprising and is tackling gruelling work in the Piombino shipyard. It's shape facilitates the demolition and displacement of large metal elements. We have very professional operators who, also thanks to our advice, try different types of equipment without having prejudices of any kind. We seek a continuous dialogue with them, asking for everyone's opinions in order to increase the efficiency of the construction site. Well, the two Indeco shears were a success right from the start, and the fact that our collaborators use them so assiduously is a clear sign of appreciation. To date, we have not had the slightest problem, and the productivity is very high."

A construction site organised with rationality and method

The Piombino shipyard site is managed in a very rational and methodical way. The huge dimensions of the area and the plants require meticulous organisation to keep the complex decommissioning works running to schedule. To date, about 50 people are engaged on site, including technicians, operators and reclamation workers. There are currently five hydraulic excavators in action with operating weights between 25t and 90t. Two of these are equipped with demolition arms capable of reaching maximum heights of 28m and 36m. In support, there are two industrial handlers that deal with both the loading of scrap metal onto transport vehicles, and to assist in the handling of materials during the reclamation and demolition works. All machines are equipped with demolition equipment, including the two Indeco ISS 20/30 and ISS 30/50 shears.

"These are two pieces of equipment that are proving to be fundamental for the construction site," underline Fabrizio and Giuliano Perino "They are constantly at the forefront and contribute in a fundamental way to the progress of the work. We are two people open to field experimentation.

And both the ISS 20/30 and the ISS 30/50 brilliantly passed the test of the construction site.

The demolition of this plant is a formidable battlefield for shears and the Indeco have fully demonstrated a value that we had heard about but had never used ourselves."

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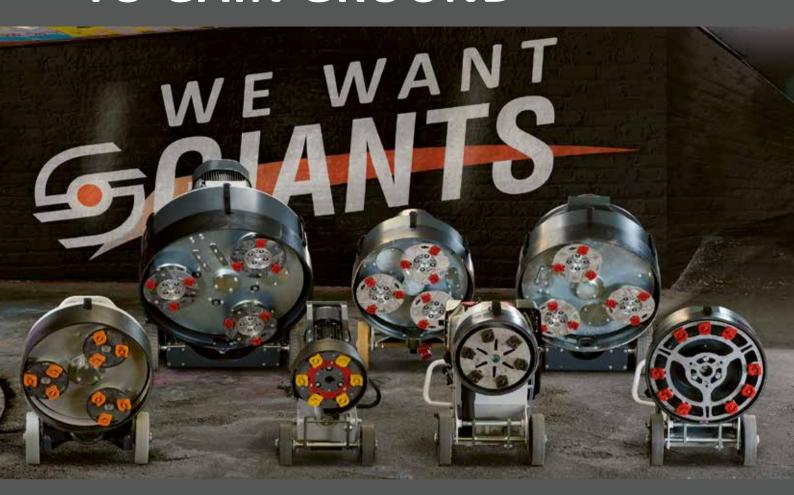


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THE SWEDISH DEMOLITION AWARDS 2022

In connection with the Demcon show on 24 to 25 November this year, the Swedish Demolition Awards were also presented. The awards were instituted in 2012 by the Swedish trade magazine Professionell Demolering, with the various prize categories being awarded in collaboration with the industry organisation Byggnadsberedning. The Demolition Honorary Awards are, however, decided by the magazine's editors.

13 Crystal awards

There are a total of 12 different award categories that are self-nominated. These consist of: Demolition Contractor of the Year, Concrete Cutting Contractor of the Year, Demolition Project of the Year, Concrete Cutting Project of the Year, Remediation Contractor of the Year, Remediation Project of the Year, Safety & Work Environment Award, Recycling & Environment Award, Hydrodemolition Award, Manufacturer/Supplier of the Year, The Big Innovation Award for manufacturers/ suppliers and finally the Swedish Demolition Honorary

Awards. Sometimes certain awards are not presented for a variety of reasons and this year the Recycling & Environment Award and Remediation Project of the Year were not awarded. Any nominations received in these categories will be held back to 2024 but can be read about later in this article.

The announcement of the winners and the award ceremony took place at Demcon's dinner on 24 November which was attended by around 300 people. The awards' jury includes contractors and suppliers who have been previously active in the industry. The awards were

announced by Jan Hermansson, editor in chief PDi magazine, and Roger Blomqvist from the Byggnadsberedning. The awards were presented by the current president of Byggnadsberedning, Linda Dahlin. Here follows a list of the nominees and winners of the awards.

Demolition Contractor of the Year 2022

This year's nominees were NKR Demolition Sweden, AF Härnösands Byggreturer, Destroy RC AB and Haga ROT. Haga Rot was named the winner with the award which was presented to the company's founder and



PDi reports



Jan Hermansson, editor in chief of the magazine Professionell Demolering.



John Thorsell from Haga Rot.



Johan Nilsson from OLB Entreprenad.



Igor Kecskés Maconkai from Remediation Specialists.



Bill Dahlin receives the award for Concrete Cutting Project of the Year.



Bill Dahlin from Betonghåltagning in Gothenburg.



The trade association Byggnadsbereding's head of office Roger Blomqvist.

owner John Thorsell. The company was chosen as since the 1990s it has invested in developing its own methodologies in demolition, drilling, cleaning and recycling, both in terms of services and an optimal machine park. The company has shown a clear sense of purpose yet maintained a strong customer focus.

Concrete Cutting Contractor of the year 2022

This year's nominees were OLB Entreprenad and Betonghåltagning in Gothenburg. Betonghåltagning in Gothenburg was named the winner and the award was received by the company's founder and co-owner Bill Dahlin. The company is a true family business specialising in hole drilling and demolition, and for 40years has contributed to lifting the entire industry's professional status in concrete hole drilling.

Demolition Project of the year 2022

This year's nominees were OLB Entreprenad, Destroy Rebuilding Company and Jansson Entreprenad, with the award going to OLB Entreprenad, which was received by the company's vice president Johan Nilsson. The company was commended for its expertise, showing the highest levels of precision in very advanced and demanding work in a sensitive environment.

Concrete Cutting Project of the year

The nominees were OLB Entreprenad and Göteborgs Betonghåltagning with award going to Gothenburgs Betonghåltagning. The award was received by Bill Dahlin who was commended for providing advanced boring services in a complex building project in Västlänken and for delivering a smart and never tried before hole punching solution.

Remediation Contractor of the year

The Remediation Contractor of the Year award was awarded after deliberation by the jury to the company Saneringsspecialisterna Sverige AB. The award was received by the company's founder and owner Igor Kecskés Maconkai. The company is one of the cleanest and most determined remediation companies in Sweden and active in industry associations and committees, both nationally and internationally. The award was presented as the company has worked hard to develop remediation methods that meet increased societal demands regarding the recycling and reuse of construction and demolition materials, as well as to putting the safety and health of employees at the forefront.

The Safety & Work Environment Award

The nominees were Husqvarna Construction Products and Linda Dahlin from Göteborgs Betonghåltagning. The winner of the award was Linda Dahlin for her work in raising awareness of work environment risks in her own company and within the industry organisation Byggnadsberedning, BFB. She was also commended for her involvement in the association's education committee as well as being BFB's first female chair.

The Swedish Hydrodemolition Award

Here, Conjet AB and Aquajet Systems had been nominated, both manufacturers of water jetting equipment, with the award won by Aquajet Systems. It was chosen ahead of its rival due to taking water technology to a new level with a high rate of development in products and equipment, especially its new Aqua Cutter 750V robot with patented Infinity Oscillation.



PDi reports



Linda Dahlin, chair of the Construction Committee and co-owner of Betonghåltagning in Gothenburg.



Roger Simonsson CEO of Aquajet Systems.



Hampus Jonsson from Rototilt received the prize for Open-S together with Steelwrist's Toni Ylitalo.



Erik Håkansson from SDC received the honorary award that was awarded posthumously to his father Sture Håkansson.



Peter Logan, former CEO of Jack Midhage AB, was awarded an honorary award as well as receiving the award that was presented to Jack Midhage posthumously.



Karl Ågren, sales manager Contractor Direct, from **Husqvarna Construction Products.**

Manufacturer/Supplier of the Year

Brokk AB and Husqvarna Construction Products were the nominees with Husqvarna the winner. The company was commended on providing a unique and ground breaking focus on increasing the user's safety in terms of accident risks, health risks and external environmental impact.

The Big Innovation Award for manufacturers/suppliers

Husqvarna, Brokk and Steelwrist/Rototilt were the nominees with Steelwrist/Rototilt being the winner for their Open-S quick attachment. This was chosen as the development has radically improved contractors' work and freedom of operation.

The Swedish Demolition Prize's Honorary Awards

This year, four honorary prizes were awarded. The first one went to Bill Dahlin of Betonghåltagning in Gothenburg for being a true concrete cutting professional who has dedicated his working life to concrete cutting in all its forms since the mid-1970s. The second prize was awarded posthumously to Hagby Bruk's founder Sture Håkansson, with his son Erik Håkansson accepting the award for his father. Hagby was involved in laying the foundations for professional diamond tools in the modern Swedish drilling and hole making market as early as 1960. From then on he instilled hope and determination in future family generations.

The third prize was also awarded posthumously to Jack Midhage who, among other things, founded Jack Midhage AB. The award was received by the company's former CEO Peter Logan. Jack was selected for being a great innovator since the 1950s, developing tools and products for cutting metal, concrete and other materials, as well as developing a smart method for the turnover of drill bits and blades that were sold all over the world.



The final honorary award was presented to Peter Logan for being a major player in the Swedish construction machinery and tool market, running successfully for many years one of Sweden's best known companies in its product area.

Contribution for the Recycling & Environment Award

A single nomination came in at a very late stage and could not be processed by the jury, which meant that it was decided to move this nomination to 2024. The contribution came from the company Nano Control AB and its owner Adrian Iosé Cabezas Morales. The nomination referred to new technology for more efficient separation of micro and nanoparticles from gas flows without filters. This is achieved using its patented particle separator. The particle separators are used for air purification or cleaning of various environments from dust, soot or the like.

Unlike existing products on the market, Nano Control's products do not contain filters that need to be replaced or cleaned, therefore enabling a cleaner environment in a much more user friendly and cost effective way. Nano Control's particle separator also takes care of all particles, everything from coarse particles to the very smallest so called nanoparticles, which are very difficult to handle with existing technology. Although there are filters available that take care of nanoparticles, they however clog very quickly and the performance specified for these filters only apply initially.



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Mantovanibenne releases 'Eagle 3' scrap shears

Established in 1963 in Italy, attachment specialist Mantovanibenne has launched this year the Eagle 3 - a brand new generation of scrap shears. "Since the early 1990s when the first 'SH' shear was manufactured in Italy, we have worked to produce efficient and reliable attachments for any operating conditions. Our shears are used on crawler and wheeled excavators, in scrap recycling yards and in offshore and subsea applications," says Paolo Mantovani, CEO of Mantovanibenne. According to the Italian manufacturer, it has taken 20 specialists, 3,000h of research and development work and over 10,000h of

testing to prepare the Eagle 3 shears for commercial release. The new series is designed to maximise the tools' service life without any extra maintenance. The shear's central pin, made out of sturdy components, can be easily removed directly onsite. The redesigned jaws allows up to a 9% larger opening. The jaws are cut using a high pressure water jet to avoid any possible weakening due to high temperatures. The cylinder is inverted to protect the rod inside and the enlarged bore offers more power by accelerating the work cycle. The attachments come equipped with premium quality seals that can last up to 3,000h. The most heavily used parts are reinforced with interchangeable Hardox 500 steel plates. Currently

the range includes five models, with another two scheduled for release shortly.

www.eagleshears.com

Demarec features 'DXS' range

The DXS range of 360° rotatable scrap shears from Netherlands based Demarec is engineered to deliver high cutting force and speed and an optimal weight to performance ratio. These robust attachments can be used for a wide variety of applications including demolition, scrap processing and tyre recycling. With three different mounting options, the DXS line is available in six different sizes for 14t to 100t excavators. The DXS shears offer up to 25% more

PDi special feature







power and faster cycle times thanks to the patented 'DemaPower' 2.0 cylinder. The offset apex of the shear blades ensures an increased cutting force. Heavy duty bearings in the pivotal points allow for a long lifetime. Other features include the robust shear arm guiding system ('SGS'), a replaceable and reweldable piercing tip and the blade locking system ('BLS'). All blades are 4 or 8 times indexable.

www.demarec.com

'CRE' series from CMB - a solution for any steel processing task

Based in Asigliano Veneto, in the province of Vicenza, Italy, CMB has been manufacturing excavator attachments for demolition, recycling and forestry applications for over 12 years now. The company markets its series of rotatable scrap shears under the brand names 'CR' and 'CRE'. Available in a wide range of operating weights, which goes from 550kg to 10.5t, the attachments are

equipped with reversible and interchangeable blades. All the hydraulic components are easily accessible in order to simplify setting up and maintenance operations. From the CR25OE model up, the shears come complete as standard with a high flow speed valve to speed up working cycles. CMB shears are designed to process a wide



range of steel structures such as profiles, pipes, tanks, railway cars and aircraft.

www.cmbattachments.com

New scrap shears and rail breakers from Indeco

Italian manufacturer Indeco has released its new 'IRC' series rail breakers which are specially designed for cutting rails for heavy and light rail systems. The particular design of the jaws, combined with the efficiency of the hydraulic system and the robustness of the machine body, allow the cutting of rails up to approximately 70kg/m. At bauma, Indeco launched the 'ISS 8/13' shears, which can be used on excavators from 6t. The ISS 8/13 features a short and sturdy structure, low weight and balance, with the jaws being designed and modified to optimise the cutting power and to increase maximum opening. The shears also include the presence of four interchangeable and reversible knives and the latest generation piercing tip.

www.indeco.it

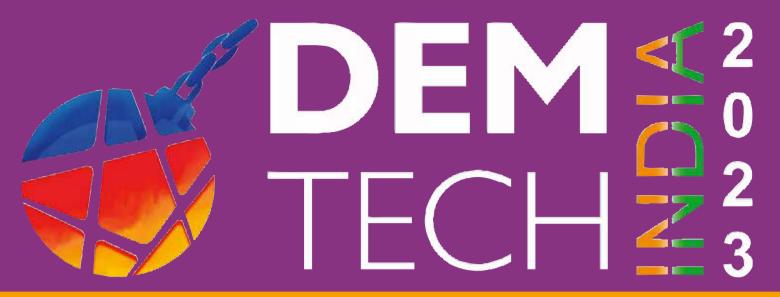


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NEW SANY PRODUCTS INTRODUCED AT BAUMA 2022

Sany unveiled its newly designed trade fair stand at bauma 2022, with its presence at the show focused around the motto: 'Keep on growing with a strong partner'.

he construction and port machinery manufacturer showcased a range of new products at Munich show in front of a backdrop that aimed to create a real construction site feeling. In addition to the traditional excavator portfolio, wheel loaders, telescopic handlers, road construction machinery and cranes were all displayed on the spacious area.

Electrically driven SY19E mini excavator

Designed to incorporate zero emissions and significantly lower noise levels, the SY19E mini excavator in the 1.8t class has been introduced with a focus on sustainability. Equipped with an electric motor that delivers a peak output of 15kW, along with a load sensing hydraulic system, it has been designed to ensure a fast workflow and high flexibility output. The new mini excavator is equipped with an innovative accumulator pack that lasts for an entire working day on one battery charge. The 'LFP' battery pack with 22 kWh is designed without cobalt, making it particularly environmentally friendly and safe to operate. It is said by the company to impress with its high power density and long service life, plus permanent charging to 100% that does not affect its longevity. Other highlights are the short charging times and flexibility, with charging being possible at either a fast charging station via DC in 1.5h, at a public AC charging station in 2.5h, or overnight using a 220v socket.

The saving potential of the electric excavator is said to be very high. Sany states that compared to machines with combustion engines, electric operation reduces power costs by around 30%. The savings are said to be even more significant in terms of maintenance costs, which are around 80% lower. The mini excavator has also been designed to be user friendly thanks to major reduction in noise, which is just 66 dB(A), and the newly developed clear touchscreen monitor which is easy and safe to operate. Last but not least, the standard proportional auxiliary control circuit offers more functional possibilities in various applications.

SW305 heavy duty wheel loader

The SW305 has been developed to take productivity

to a new level, with optimal conditions created by the particularly robust heavy duty frame design and the driveline with its leading brand name components. These include the Deutz six cylinder common rail diesel engine with EU emission class V, the automatic 'Ergo Power' power shift transmission, and heavy duty axles with what the company says is a selectable 100% limited slip differential, both made by ZF. The new machine has been designed for reliability and durability in combination with a high degree of maintenance reduction.

In terms of safety and operating comfort, the cab aims to set new standards. It is mounted on silent blocks which significantly reduce vibrations in the interior. Four cameras provide a 360° panoramic image directly onto the monitor for unobstructed all round visibility. The hydraulically driven fan blade, which is electronically controlled according to temperature, not only reduces noise emissions but also aims to reduce cost thanks to lower fuel consumption. It is also automatically reversible for self-cleaning. As usual with Sany machines, the heavy duty wheel loader is comprehensively equipped as standard, being equipped with a third hydraulic control circuit, vibration damping, automatic bucket recirculation, adjustable lifting and dumping speed, as well as selectable floating position.

STH1440 and STH1840 telescopic handlers

The new telehandlers have been designed to provide robustness and flexibility, with one major operator focused highlight being the German developed cab. This has been designed to provide a comfortable seat, a touchscreen display with encoder control for on screen navigation, Bluetooth connection, a tiltable and telescopic steering column and much more. A high level of safety is said to be provided by a rear view camera and sensors for visual and audible warnings. To prevent overloading and instability, the weight system and the load management system work together optimally. A safety switch that prevents vehicle movement when the operator is not seated, as well as lifting cylinders with

hose rupture check valves, is also included in the package. The machine's design also provides the operator excellent all around visibility.

Power is provided by the high torque engine which does not require expensive AdBlue additives. The Dana transmission and axles are matched to ensure maximum power and efficiency. The options available are extensive depending on the situation, with the operator being able to select two wheel, four wheel, or crab steering. The load sensing hydraulic system also regulates the hydraulic pressure proportionally to the required outputs so that he boom can be raised and extended at the same time.

Sany states that flexibility is inbuilt enabling the servicing of heavy duty trucks, lifting platforms and load hooks etc., with numerous attachments being available to make the machines productive specialists. Changing attachments is convenient thanks to the hydraulic auxiliary air valve via the keypad in the cab. Durability is also ensured by what the company says are high quality components, robust designs, and innovative processes. For example, the booms are welded from two 'C shaped' high strength pressed steel parts. As a result, the heavily stressed parts are extremely stable and durable. This says Sany has been verified in tests with more than 80,000 damage free cycles.

New and adapted for Europe

Sany already successfully supplies its range of road construction machines in many areas of the world. Now, they are also coming to Europe. Adapted to European standards and requirements, the first step is to offer a choice of two single drum compactors and three tandem rollers. These cover the weight ranges of 2t, 3t, 4t, 8t and 12t.

New and versatile Sany cranes

Another highlight from the manufacturer is the SCE 800TB-EV crawler crane with an all-electric drive. Also new to the European market is the Sany truck mounted crane SAC600E, with which the company aims to conquer the European market with its all-terrain chassis.



"Our goal is to create value for our customers and to be a trusted business partner who takes overall responsibility. We are not just a manufacturer that supplies machines and tools," says Karin Falk, who has been president of Husqvarna's Construction Division since September 2020. PDi's editor in chief Jan Hermansson had a chat with Falk during the bauma fair in Munich.

n connection with the bauma tradeshow in Munich in October, PDi's editor in chief Jan Hermansson had the opportunity to interview Husqvarna Construction's president Karin Falk, a position she has held since September 2020. A well as being president of the Construction Division, Falk is also part of the Husqvarna Group executive management team.

Sustainable growth

What started off as a side business in the 80's is today a

global division with what is probably the widest offering for professionals in the light construction industry. Husqvarna is a leading brand in the construction and natural stone processing industries, with innovative equipment, diamond tools and services to support its customers in almost every corner of the world, with its growth journey continuing to this day. In the last few years, several acquisitions have been completed that have raised eyebrows in the industry and amongst competitors. Some examples are the acquisitions of HTC and Pullman Ermator, done 5 years ago, and latterly Blastrac and Heger. "They have all brought us new colleagues with application know how, and strengthened our product offering and our go to market," explains Katrin Falk.

But what drives Husqvarna Construction to continue growing organically and through acquisitions?

"We want to be a more complete business partner for all our customers. Our most important goal is to create value for customers, strengthen them in their business and empower them to explore new business opportunities by offering better solutions in additional application areas," she adds when we meet at PDi's stand at bauma.

A broader offering from a solutions provider

"When we started working with methods, tools and machines for surface preparation, we broadened this product area by also including products and services that were not traditionally part of our portfolio. Then I think specifically of our series of compactors, rollers and concrete placing equipment. Today, we basically cover the most important parts that have to do with surface preparation." One example of this strategy was the acquisition of Atlas Copco's light series of compactors and vibratory plates as well as trowels from Wacker Neuson.

"For us, it is important to constantly be one step ahead and lead development in all our product areas, which of course is a challenge. We want to give our customers the best support for them to be able to develop their businesses and services. We don't want to be only a supplier of equipment and tools. We want to be a partner to our customers and provide integrated value added solutions that help them improve their business. And we are continuously monitoring where the market is going, to envision what challenges there are, so that our customers can get more out of their investments, both short and long term," added Karin.

Strong investment in electrification

Clear examples of this approach can be found among the latest product developments. Implementing battery operation among higher power professional machines is a good example of being a partner for today and tomorrow. Today, Husqvarna has two main battery platforms: the Husqvarna BLi 36v battery system, and the Husqvarna Pace 94v battery system. The new battery power cutter K 1 Pace was the first machine launched on the 'Pace' platform and it has achieved great success, providing ergonomics and performance equivalent to petrol power cutters but with all the operator convenience of a battery machine. Several other battery powered machines have recently been introduced, such as, the innovative and high performing handheld 36v core drill motor DM 540i. A stationary battery drill motor in the Pace system will soon be launched along with the new 'H' class battery powered dust extractors as well as the all new 18v rebar tier product 'Knut'.

Infrastructure projects present opportunities

Husqvarna Construction is present in basically all markets around the world, but where it is strongest is in Europe, North America and Australia, and here it wants to continue to develop. Other important markets with great potential are the emerging markets. "We see strong investments in infrastructure and rebuilding activities in many countries due to urbanisation and economic development and here we actively participate and offer our systems of products with improved efficiency, ergonomics and safety. Within Husqvarna,



PDi's editor in chief Jan Hermansson was shown by Karin Falk how to operate the new battery powered rebar tier machine Knut.

we have created a broad product range with improved application efficiency and are well equipped and see good potential to grow further within products used in infrastructural projects. The investment in infrastructure also takes place within emerging markets, which is also a priority area for us.

"As we are all aware, we are living in unprecedented times with the global pandemic, war in Ukraine, energy prices skyrocketing, and continued supply chain disruptions. This has been a challenge for the whole industry, but when we face uncertain times, being a reliable partner is even more important. We look at what challenges the market outlook present to us and our customers, and what they expect and need from us," concludes Karin Falk.

www.husqvarnaconstruction.com





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This year sees the launch of a new waste and recycling kit for Doosan's DL-7 wheel loaders, as well as two brand new excavators from Hitachi. Furthermore, three Bobcat telehandlers are in use dealing with inter-municipal waste in eastern Poland.

New waste and recycling kit for Doosan wheel loaders

Doosan has launched a new waste and recycling kit for the company's DL-7 range of wheel loaders. It is the first kit of its type for Doosan wheel loaders and is designed to help operators work safely in the hazardous conditions that often accompany waste handling and recycling applications, including contending with airborne dust, dirt and other dangerous particulates and materials. The kit is available for all Doosan wheel loader models from the DL200-7 through to the DL480-7, which is the segment of the Doosan range that is most widely used in this kind of environment. There are many new safety features provided in the kit, including the windshield guards, rim covers, road light protection and other protective covers, a fine mesh air intake cover and solid tyres. Several features will be available as options, so users can choose a kit of their choice to tailor their wheel loaders. Doosan is also preparing an aftermarket version of the kit for users who decide to install the kit at a later date. In addition, Doosan is providing a wider fin air conditioner condenser as standard to facilitate cleaning and maintenance. The kit matches with other features of the DL-7 range, such as the air compressor, high lift arm, quick coupler and so forth. According to Doosan, the new kit created much

interest among visitors to the Doosan stand at this year's bauma where it was shown for the first time, installed and displayed on a new generation DL280-7 wheel loader.

The DL-7 wheel loader range from Doosan offers a complete line of next generation machines. Like all DL-7 wheel loaders, the DL200-7 to DL480-7 models' feature redesigned buckets with standard bucket capacities from 2m3 to 4.8m3. The 'Z-kinematic' lift arm on DL-7 wheel loaders delivers high breakout forces and lifting capacities, as well as a large dump angle, according to Doosan. An optional high lift arm is available. The loaders also have smooth and responsive hydraulics and auxiliary hydraulic connections. Various bias and radial tyre options are available. The loaders can be ordered with a choice of different counterweights with options including 300kg, 400kg or 500kg depending on the application. The new Doosan and Scania six cylinder engines meet Stage V emission regulations without the need for exhaust gas recirculation through the use of selective catalyst reduction, diesel oxidation catalyst and diesel particulate filter after treatment technologies.

Two new excavators from Hitachi

To meet the growing demand for 40t class machines in Europe, Hitachi presents the ZX390TC-7. Based on a

Hitachi ZX350LC-7 standard excavator, with 'Zaxis-7' technology and Stage V compliant engine, the new tool carrier model has been specially adapted to work with larger working tools, and can be used for secondary demolition works. Larger boom and bucket cylinders, and a one class higher reinforced linkage, enable the ZX390TC-7 to carry 5t tools. It is equipped with a full hydraulic control system, suitable for use with all attachments, which can be changed from the operator's seat. The ZX390TC-7 has a robust 25cm longer undercarriage than the standard ZX350LC-7, and is supplied with an additional 1.4t counterweight. The machine has side impact protection and a demolition spec cab with FOPS guard level 2 and high spec P5A safety glass. The model features a 270° bird's eye view provided by the 'Aerial Angle' camera system. All of the main components and spare parts are supplied by Hitachi, and the modifications are approved by Hitachi's quality assurance team.

"The launch of the ZX390TC-7 shows how Hitachi is addressing the specific requirements of such industries, delivering a specially equipped model that sits between the existing ZX350LC-7 and ZX490LCH-7 models," says Burkhard Janssen, product manager Special Applications and New Technologies at Hitachi Construction Machinery (Europe) NV. "We are constantly listening to the needs of

PDi special feature





our customers, particularly regarding improvements to productivity and efficiency on site. This is one of three new special application machines that Hitachi has developed exclusively with Kteg, Kenki Technology Group GmbH, a joint venture between Hitachi Construction Machinery Co., Ltd and Kiesel Technologie Entwicklung GmbH."

Hitachi also introduced the ZX400MC-7 at this year's bauma. The multi carrier model is based on a Hitachi ZX350LC-7 standard excavator, with Zaxis-7 technology and a Stage V compliant engine. This is one of three new special application machines developed exclusively with Kteg. Built to meet the requirements of demolition projects, it is supplied with up to four front attachments, including a mono boom, two piece boom, and high reach demolition front of 21m or 24m. The ZX400MC-7 is equipped with a full hydraulic control system, suitable for use with all hydraulic attachments. Both the boom and attachment can be changed from the operator's seat thanks to 'Boom Quick Connect' and 'Tool Quick Connect' technology. The model also features a triple boom cylinder, extendable undercarriage for 360° working, longer track frame, as well as a reinforced demolition cab. The FOPS level 2 and front window protection, plus P5A glass, protects the operator from falling debris. Furthermore, the machine features a tilting cab (to an angle of 30°), load movement indicator, additional counterweight, alarm system, bucket cylinder protection and reinforced travel drive covers.

The camera systems show multiple views from the cab, including that of the attachment, side and rear of the machine, and a 270° view of the surrounding environment. The upper structure has side protection and a reinforced underside. Main components and spare parts are supplied by Hitachi, and modifications to the standard Zaxis-7 model are approved by Hitachi's quality assurance team. Hitachi states that it believes that there is a large demand for 40t class tool carriers in Europe, so it introduced the new model to the European market. The ZX400MC-7 has been developed to save Hitachi customers time and money, reducing the number of machines they need to send to a demolition site, and improve performance and safety for operators.

Three Bobcat telehandlers for waste recycling in Poland

ZZO Włodawa is an inter-municipal waste management organisation within an association of seven municipalities in eastern Poland near the borders with Belarus and the Ukraine. Due to the need to recycle waste from more than 24,000 inhabitants, its operation runs 24h/ day, six days a week. Transfer machines play a key role in the proper functioning of the operation. Articulated loaders are often used in similar places, but in the village of Włodawa they use three Bobcat telehandlers instead, occasionally supported by a front loader tractor. "The Bobcat telehandlers are perfect for our conditions," says Krzysztof Chilczuk, chairman of the board of ZZO Włodawa. "They are compact, easy to operate and offer a high lift height. Disposal of waste on the sorting line is organised in such a way that the loader must rotate through 90° in a small space. This is an easy job with these machines."

The first Bobcat telehandler, a TL470 model with a maximum lift height of 7m and a load capacity of 3.5t, was delivered to the plant in Włodawa in 2013. So far, it has completed over 20,000h and is still in

use. "It has never had a serious breakdown and we have never repaired the engine in it. There was once a problem with the fuel pump, but it was not the fault of the manufacturer, but rather the fuel itself," adds Krzysztof Chilczuk. In 2018, a second Bobcat machine, a TL35.70 model, was bought with the same operating parameters as the older machine. This machine is now approaching a total of 5,000h. Having evaluated that the investment in the machines is very efficient, the management of ZOO Włodawa therefore added a third Bobcat telehandler to the fleet in August 2021. Again, a TL35.70 model was chosen, but this time with a slightly different specification.

Telehandlers with these working parameters meet our needs and working conditions well. However, the two older machines have 20in wheels. When considering the purchase of another telehandler, we wanted it to be equipped with 24in wheels. As a result, it has a greater ground clearance and is even more efficient when working in a landfill. In addition, when loading on the processing line, the operator can drive more boldly directly into the waste heap. The new machine also has more features, which include, for example, air conditioning, an air cushioned seat, cab protection and also a reversing warning system that does not beep, but provides the white noise sound we really wanted," explained Krzysztof Chilczuk.

At ZZO Włodawa, there is no division of tasks between the Bobcat telehandlers. This is mainly due to the assignment of individual telehandlers to specific operators, which facilitates their maintenance. The sorting area operates 24h/day, so the telehandlers change with the operators. In addition to loading material onto the processing line, they are used here for pushing and stacking waste to maximise the use of available space. The waste that is filtered and sub sieved goes to containers that were initially handled by another leased carrier. However, this solution was associated with high costs, so the decision was made to introduce another method. The telehandlers are now equipped with special holders, while small wheels are attached to the containers at the rear. This allows the Bobcat machines to tow the containers and empty them: the undersized portion into three composters and an overflow amount in a dedicated yard, from where it is picked up by an external company after being picked up by the transport unit.

The Bobcat telehandlers are also used to unload composting bins, create compost piles and to turn them over for aeration. After the compost has matured, it is sieved. Loading material into the sorter as well as collecting and transporting the resulting products is also the job of the telehandlers. An important task that they perform almost daily is also the loading of the so called sliding floors of waste for disposal and bulk recyclable materials. Packaged materials are also loaded onto trucks.

At ZZO Włodawa, Bobcat telehandlers are also used to maintain the currently operated landfill and to rehabilitate a landfill that has already been closed. They are used mainly for the creation of transmission layers



and the construction of technological communications. In order to make the use of Bobcat machines more efficient, in addition to the universal bucket, two high volume buckets, pallet forks and a bale grab, the ZZO Włodawa range of attachments also includes a sweep-

ing brush. As a result, the loaders can help clean up the plant premises. Krzysztof Chilczuk praises the Bobcat telehandlers for their performance, good visibility and versatility, and also draws attention to their low fuel consumption, on average 4.7 l/h.



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WORLD OF CONCRETE

CENTRAL H



Hilwaul

SLOWLY GETTING

BACK TO NORMAL

Again it is time for World of Concrete, the only international annual construction show. WOC has also managed to run every year during the pandemic, even if the dates were changed at one time. Here we take a brief look of how the show is set to look like in January 2023.



he show takes place from 17 to 19 January. As usual it takes place at the Las Vegas Convention Center in Las Vegas, Nevada, USA. Even though another US mega show is to take place the same year, ConExpo-Con/Agg, also in Las Vegas but in March, WOC has a pretty good line up. Almost 1,200 companies are booked to exhibit at this point which is around 100 exhibitors more than in January 2022, which is quite good considering 2023 is a Conexpo year. And when compared to the show is 2020, the numbers of exhibitors were just 100 more. Let's hope there are also good visitor numbers.

A great reunion expected

Most suppliers in the concrete sawing and drilling, concrete floor grinding and polishing as well as some

demolition equipment suppliers are to exhibit. Just about two months ago, another mega show, actually the world's biggest, took place in Munich, Germany. However, exhibitors at bauma did not reveal as many innovations as expected, so the news at WOC will probably be more or less the same as was found at the bauma.

During the three show days, Las Vegas will be exciting as usual during a World of Concrete week. However, WOC has cut down from four days to three and that is possibly a good idea considering the situation with the pandemic and the ongoing war in the Ukraine. At the show grounds, all is arranged with busses for commuting to and from the hotels and the mono rail train stopping at the exhibition center. As usual, there will be a number of seminars to attend starting on 16 January continuing to 18 January. Detailed information on the seminars

can be found at the WOC official website. Visitors are expected from all over the world, but this time, as with the recent previous shows, the numbers of foreign visitor will not be as high as a few years back before the pandemic started. Quite a large number of visitors are expected from North America however.

Exhibition areas at WOC

World of Concrete 2023 will take place in the North, Central and South Halls and will be utilising the Silver and Bronze Lots for outdoor exhibits and events. In the Central Hall, visitors can find exhibitors offering material handling solutions, various equipment, tools, products and services for the commercial construction, concrete and masonry industries and tools and equipment for masonry work. The North Hall is the



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for the commercial construction, concrete and masonry industries as well as the Cement Production Pavilion in the North hall.

The South Hall will be for concrete repair and demolition tool and equipment as well as equipment for concrete surfaces and decorative products. The Silver Lot area is for outdoor exhibits featuring industry leading suppliers, live demos, heavy equipment, and decorative concrete products. The same applies to the Bronze Lot

where visitors can watch championships, skills challenges, creative demos, and other events.

Alongside this text you find a selected list of exhibitors at World of Concrete 2023 with exhibitors related to the product areas covered in PDi Magazine. As usual, PDi Magazine and its sister publication PDa Magazine will be exhibiting as WOC. You are welcome to come to our booth C4627 in the Central Hall.

www.worldofconcrete.com





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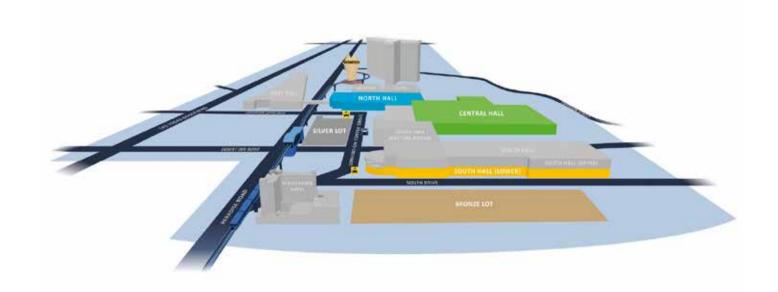
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EXHIBITOR	воотн	EXHIBITOR	воотн	EXHIBITOR	BOOTH
Advanced Concrete Technologies Inc	N427	DITEO Osmanatica	C4333	Milwaukee Tool	O30361
Allen Engineering Corp	C4315	DITEQ Corporation			C4549
	N113	DITEQ Corporation	O32061	Multiquip	
ALLFLAT Consulting, Inc.		DMI Tools	O31552	National Flooring Equipment	S11327
American Construction Equipment	C6651	Bobcat Company	C5339	National Hispanic Contractors Association	S10754
Ameripolish, Inc.	O31833	Dustcontrol, Inc.	S12045	National Hispanic Contractors Association	S10756
Antraquip Corporation	N2021	Dustless Technologies	N2312	NEWGRIND INC.	O30262
Aqyajet Systems	C4019	Dymatec USA LLC	O31472	PR DIAMOND PRODUCTS	O31460
Merlo (AMS)	C5327	EMI Construction Products	N2400	Quanzhou Sang Diamond Tools Co., Ltd	S12617
Ashine Diamond Tool Co. Ltd.	S12727	EZ Concrete Supply	S12155	Bosch	O30899
Astec Industries	N837	EZ Scaffold	C3218	Runyon Surface Prep Rental & Supply	S12339
AUSA	C6477	E-Z Drill, Inc.	C5803	PDi Magazine/ PDa Magazine	C4627
Autec North America	C6752	Fujian Pengxiang Industrial Co Ltd	N537	Norton Clipper	C4031
Aztec Products, Inc	O31546	Fujian Xingyi Polishing/Shangdong Vanse	O31849	SASE	O31999
Bartell Global	S10815	Fuzhou Bontai Diamond Tools Co., Ltd	S12109	Scanmaskin Sweden AB	O30946
BlastPro Manufacturing, Inc.	S10615	General Technologies, Inc.	N2037	SlurryMonster, LLC.	S12645
BlastPro Manufacturing, Inc.	S11139	Diamond Vantage	C3539	SmartBarrel	N1152
Brokk Inc	C4019	Diamond Vantage	C3541	SONMAK DIAMOND TOOLS	C4039
CAT DIAMOND TOOLS	O31158	Diamond Vantage	C3547	Stihl Inc	C4631
Caterpillar Inc.	C5961	Gensco Equipment	N2936	Sunbelt Rentals	S11215
Concrete Sawing & Drilling Association	C4211	GSSI	N1838	Superabrasive, Inc.	O32112
Concrete Show Brazil	C3356	Ground Penetrating Radar Systems	C5988	Superabrasive, Inc.	S10507
Conjet	C4537	Ground Penetrating Radar Systems	N2069	Surface Systems and Instruments, Inc	C4858
CS United Inc	O30940	Concrete Sawing and Drilling Safety Week	C5988	Syntec Diamond Tools Inc.	S11755
ACE Diamond Tooling	S12509	Hatz Diesel of North America, Inc.	N2423	Syntech Systems Inc./FuelMaster	N2154
Cutco	C6647	Hilti, Inc.	O30303	Terex	C5549
Cutco	N2150	Husqvarna Construction Products	O31420	Terra Diamond / GDM Equipment	C4519
Cutco	S12411	Buffalo Turbine	S12014	Terrazzo & Marble Supply Companies	S11351
Darda GmbH	C5985	ICS, Oregon Tool, Inc.	O31670	Terrco Inc	S11450
DDM Concut Diamond tools	C4859	IMER USA	C5377	TITAN DIAMOND USA	S12407
DEWALT	O31168	World of Concrete India 2023	C3129	Leaktronics	S11641
Diamond Blade Warehouse	S11413	International Concrete Repair Institute	S10938	U.S.SAWS	O31658
Diamond Products	C4305	Jetstream of Houston LLP	C3135	U.S.SAWS	S11307
Diamond Products	O32052	Kanga Loaders	C4343	Vantage Products Inc.	S12926
Diamond Products	O32159	Lissmac Corporation	C4844	Vermeer corporation	C6826
Diamond Speed Products, Inc.	S12517	Makinex Construction Products	S11507	World Diamond Source Inc	S10514
Diamond Tech. Inc DTI	O31857	Makita	029946	Xtreme Engineered Floor Systems	S11551
DTI Blades	S12312	Makita	030040	Xtreme Polishing Systems	S12845
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The LSM 400 sets new standards in diamond tool production

With the new saw blade laser welding machine LSM 400, Dr. Fritsch aims to reinforce its position as a leader in the diamond tool industry.

ith numerous new technical features, the LSM 400 has been developed to set new standards in diamond tool production and increase the added value for users in the construction industry.

New standards in productivity, process and cost efficiency

The laser welded saw blade has been indispensable in the construction industry for more than three decades. The laser welding machine LSM 400 received its global launch at Dr. Fritsch's bauma stand (Hall A1, Stand 432). It replaces the previous LSM 300 generation and is said to set new standards in terms of increased productivity as well as process and cost efficiency. "The LSM 400 is designed for operation with fibre lasers. The combination with a line scanner ensures penetration depths of up to 6mm (with 3kW fibre lasers), a significantly better connection between segment and blade as well as a visually more attractive welding seam. In addition to the increase in productivity, above all, the operating costs are reduced, e. g. through reduced power consumption and eliminated laser maintenance costs," explains Volker Wörn, sales manager, Dr. Fritsch Sondermaschinen GmbH.

Inside the machine, up to four cameras ensure precise monitoring of the machine interior. Two of them are used to check the welding seam on the screen. In addition, set up times are significantly reduced when changing over to other segment shapes. Accessibility of the machine is optimal in all areas, especially for segment feeding and blade loading at the front. Finally, the LSM 400, which was developed in close cooperation with the company Diamond Tools Austria, has a modern design.

New benchmark

"An important further development of the LSM 400compared to the previous machine generations is the maximum blade diameter of the blade of up to 2,000 mm. This feature was regularly requested by our customers and previously considered as not feasible," adds Volker Wörn. "Along with the increased diameter the possible segment heights and thicknesses were also expanded. This in turn requires a powerful laser source that makes it possible to weld even thick segments from one side." For example, cutters for laying fibre optical cables can easily be welded with the LSM 400. Furthermore, it is possible to select a specific side clearance for each individual segment. "By adapting the helical axis, we can weld all common helical segment shapes, even for large diameters," states Volker Wörn.

Advantages for customers

Thanks to the new and intelligent programming, the operator saves valuable time during set up. With additional (optional) motorised setting aids, infeed belts are controlled fully automatically, which saves time and prevents operator mistakes. "The new programming of the LSM 400, which also performs an automatic calculation of the helical welding path, suggests pre-set parameters, depending on tool dimensions or assists with the parameter set creation. This sets new standards," says Volker Wörn. The graphic panel ensures maximum clarity of operation. During development, Dr. Fritsch placed special emphasis on the protection of sensitive machine components. Optimally placed protection and suction systems have reduced process related dirt and fumes to a minimum. "In addition, we are preparing a laser power measurement, a segment strength test unit and a marking station. These will be available as options," concludes VolkerWörn.

Dr. Fritsch: technology leader for laser welding machines

Dr. Fritsch is the world market leader in the diamond tool industry. The innovative company has a unique selling point in the industry: the combination of manufacturing know-how and expert knowledge of material production. PDi spoke to Uwe Funk, head of development at Dr. Fritsch Sondermaschinen GmbH about the development of laser welding machines.

PDI: Uwe, please briefly describe the advantages of the new LSM 400 blade welding machine from Dr. Fritsch for users in the construction

Uwe Funk: "The LSM 400 is the fourth generation of laser welding machines from Dr. Fritsch. The most important advantages are the wide range of tool dimensions that can be welded, the very good operability of the machine, the short set-up times when changing segment shapes and the very high productivity. I would also like to point out the modular design of the machine, which enables us to respond to individual customer requirements and the energy efficiency of the fibre laser technology."

PDI: For more than three decades laser welded blades have been indispensable in the construction industry. How did this development come about?

Uwe Funk: "In 1989, when Dr. Fritsch launched the first laser welding machine LSM 800, the rather conservative industry reacted quite sceptically. Until that time, brazing had been the common method of attaching segments to the blade. Dr. Fritsch, however, continuously developed the laser technology and launched the second generation of innovative laser welding machines in 1998. Almost 100 units of the LSM 240 were sold and many of them are still in daily use at our customers. The next development step was the LSM 300, introduced in 2009. This machine particularly impressed with its robustness and several new features."

PDI: What about the application in other areas, like the stone industry?

Uwe Funk: "The development of laser welded tools for the stone industry is progressing more slowly. However, there are signs of change. After all, laser welding as an alternative to brazing offers considerable potential for cost saving and automation. With the development of the LSM 400 and its advanced features Dr. Fritsch is well prepared to meet the requirements of the construction and stone industry."







n November 24-25, the Nordics' own demolition show DEMCON was held in Stockholm. It was four years ago when the show was postponed twice due to the pandemic. The interest was great both from exhibitors and visitors. A total of 40 companies exhibited, which together represented over 70 different brands in demolition, hydrodemolition, recycling of demolition debris, concrete cutting, diamond tools, cleaning, grinding and polishing of concrete floors, software programs and more. Some of the famous brands exhibited were Husqvarna, Brokk, ICS, Tyrolit, AGP, Sila, Delfin, Cardi, Hilti, Pentruder, Ehwa Diamond, Shinhan, OilQuick, Steelwrist, Rototilt, Milwaukee, Deconta, Jansen, Moldex, VTN, Simex, Scanmaskin, Pladdet, Trevi Benne, WLP, Dee Tec, Hi Tech Diamond Tools, Lavina, Von Arx, Weka, Dustcontrol to mention some of the brands represented by many national distributors.

High quality of visitors

The atmosphere was very good at the show, both among exhibitors and visitors. Even maybe a little too good during the closing hours on Friday afternoon. It was perhaps the best show in a long time in terms of the outcome. Just over 1,700 people visited the show over the two days and the quality of the visitors was high. Mainly there were professional contractors who work in the sectors covered by the show.

The number of visitors to the show was fairly evenly distributed over the two days. It was clearly noticeable that it had been a long time since both entrepreneurs and manufacturers met in this way. Everyone had a lot to catch up on.

Most of the exhibitors are well known to the Nordic market, but some of the exhibitors were completely unknown on the Swedish market. These were two Indian diamond tool manufacturers, Dee Tec and Hi Tech Diamond Tools. The Swedish trade organization Byggnadsberedning, the trade associations IACDS and

the European Demolition Association and the Indian Demolition Association were also present at the show.

The harvest of news and innovations may not have been gigantic, despite the fact that the fair had to be postponed twice due to the pandemic, but there was still a lot of news in the stands. On the first evening of the two show days a dinner held on the premises. During the dinner the Swedish Demolition Award ceremony took place where 13 winners were announced. A full report about the Swedish Demolition Awards has been published on the pages 33-36 on this issue.

DEMCON 2024

The next time DEMCON will be held, the show will be rescheduled for September 19-20, 2024 unless a new pandemic emerges along the way. Then the plan is that there will once again be an outdoor part where the exhibitors have the opportunity to demonstrate their products.

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PDi shows

















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EDGE INNOVATE AT CONEXPO 2023

Edge Innovate will exhibit examples of its bulk material handling and recycling equipment including its latest developments at the Las Vegas show in 2023.

Lee Williamson, Edge Innovate North American sales manager explains what will be on show in Las Vegas: "Edge Innovate is delighted to be exhibiting once again at ConExpo. Our theme for this year's event is, 'Next Level Solutions'. Our objective is to showcase the latest equipment and technology that allows organisations to increase processing capacity, provides greater efficiency and offers the best possible return. The equipment we will have on display will allow operators to do just that to bring their operation to the next level." Edge Innovate says that amongst its offering at the show will be the large mobile trommel, the TRM831, the FTS75 'Mulch Master' and the VS420 high torque shredder. The company says that products to be displayed are proven to meet customers demanding requirements when it comes to reliability, production capacity and cost of ownership.

TRM831 mobile trommel

The company's latest offering is said to be one of the largest wheel mounted trommels on the market being designed to provide operators with unrivalled production rates. With extensive stockpiling capabilities thanks to its end discharge conveyor design, the TRM831 design prevents product cross contamination and reduces the double handling of material. This is complimented by a remote operated 180° radial fines conveyor as standard which has the capacity to stockpile up to 1,030m3. The TRM831 is said to be ideal for the high capacity screening of various applications including topsoil, compost, sand, household waste and construction and demolition waste. With a wide range of different drum types and screening media available, the TRM831 can be customised to suit the customers exact application requirements. The TRM831 has been designed with a host of features such as an eco-power saving functionality which reduces unnecessary running costs and a user friendly control panel for the easy adjustment of machine parameters. An intelligent load management system prevents drum overload and ensures that the trommel screen is always operating at optimum performance with minimal supervision.

FTS75 Mulch Master

The FTS75 is designed for turning, blending and stockpiling of organic material. It is a portable feed stacker

that has been specifically designed for processing lower density organic materials such as mulch, compost, and soils. Its hopper has been designed to ensure that 100% of feed stock sees the turner; a process the company says is not possible with traditional windrow turners. By combining the methods of flipping, rotating and constant conveyor flow, the FTS75 prevents unwanted material friction and compaction. Material is untangled via the forward/reverse high speed turning drum which allows the feed material to breathe whilst allowing the material to remain cool, thus, reducing the risk of combustion and anaerobic or 'sour' mulch. With a production capacity of up to 764m³/h, the FTS75 enables operators to increase their ability to turn material whilst also providing greater flexibility.

VS420 high torque waste shredder

With decades of knowledge in the design, manufacturing and installation of mobile waste shredders, Edge Innovate will launch its latest VS420 twin shaft shredder at ConExpo 2023. It has been designed to provide high capacity, reliability and low running costs and provide an excellent shredding alternative to what is currently on the market. As the company's next generation shredder, the VS420 has been developed to deliver the ultimate versatility and high resistance to contaminants with a number of customisable shredding programmes and chamber configurations available. An intelligent operating system incorporates tramp metal protection that provides security from contaminants and prevents asset damage.

The VS420 has a host of design features include hydraulic hopper extensions, a large automatic tipping hopper with remote functionality, hydraulic height adjustable twin pole magnet and a 'one point' service area. Edge's 'VS' status lighting system provides a quick and simple communication link between the machine and the operator. It allows the operator to know the status of the shredder, when to continuing loading material, when not to load or if there is a blockage, thus ensuring maximum throughput while preventing material overload. The next generation shredder is said by the company to be proven to achieve high capacity throughputs, operational reliability, and offer low operational costs.

Edge Innovate will be showcasing its products and services in the Silver Lot, stand #S5066 from the 14 to 18 March.



New wheel loader slashes fuel costs

Since 1920, the company, Müller und Töchter GmbH & Co. KG, has been operating various sand pits in the Franconia region of Bavaria in Germany. Now the arrival of the company's first Doosan wheel loader, a new DL420CVT-7 model, with a 'Continuously Variable Transmission' (CVT), has been said to significantly reduce fuel costs per ton of sand produced.

The new machine is being used in the sand plant at the company's headquarters in Wilburgstetten. The Doosan wheel loader is working exclusively on feeding material into the washing plant. Here, the DL420CVT-7 transfers more than 1,000t of sand into the washing plant every day. One of the main factors for the low fuel consumption is the variable transmission. Marc Glesius, sales manager for wheel loaders at Doosan in Germany, explains: "This transmission combines the advantages of a mechanical and hydrostatic transmission and eliminates the disadvantages underlying both systems. The variable transmission changes smoothly from hydrostatic drive to mechanical drive as the speed increases and depending on the requirements of the application. The advantages of this system include, in particular, the excellent traction offered by a hydrostatic transmission and the ability to drive over longer distances with a purely mechanical one. The fuel savings of up to 30% are due to the lower engine speed required to achieve maximum speed or traction compared to conventional transmissions."

Especially for the quarrying and mining industries, where the productivity in terms of ton of materials per litre of fuel is crucial, the faster loading cycles and higher bucket capacity of the new generation DL-7 wheel loader series also provides more efficiency. At Müller und Töchter, the DL420CVT-7 wheel loader is used with a 4.7m³ bucket, working in both loading and travel modes, enabling the advantages of the CVT transmission to be fully exploited. Managing director, Georg Müller, bought the machine from the Doosan dealer, Rühle, with whom he has had a close relationship for many years. One of the decisive factors behind the purchase decision was the performance of the wheel loader in a one week demonstration at the sand works.

BUILDING THE NEW MUMBAI-PUNE EXPRESSWAY

Between two of India's biggest cities, a new and fast connection road is being built: the Mumbai-Pune Expressway. The new connection road will provide a safer route for commuters and decrease travel time by around 45min. RVR projects, a tunnelling construction specialist, is using emission free electric portable air compressors from Atlas Copco to sustainably build 10km of tunnel.

Mumbai, India's commercial metropolis and one of the most densely populated cities in the world, is changing. Its population has increased significantly over the last half century and continues to grow rapidly – as does its traffic. The roads are congested and overcrowded, making travelling an often unpleasant and frustrating experience. Mudslides caused by monsoon weather conditions also critically impact traffic delays, as well as threatening the safety of commuters.

To improve the situation on the road, a new and fast connection expressway is being built between Mumbai and Pune, two of the biggest commercial cities of the country. The Mumbai-Pune Expressway is an ongoing project that consists of the construction of different tunnels, bridges and roads, creating a reliable shortcut for the existing road. Scheduled for completion next year, contractors are working 24/7 on this prestigious

project to ensure its success. When finished, it will decrease travel time by around 45min and improve the safety of those travelling.

Emission free 'E-Air' compressors

RVR projects is one of the two contractors' onsite to take on the tough job of building the expressway's tunnels. The local construction specialist opted to use two of its 13 Atlas Copco electric E-Air compressors for shotcreting the hanging and side walls of the underground excavation. This strengthens the tunnel while leaving the structure of the rocks intact. The tunnelling expert is also using an Atlas Copco pneumatic 'stoper' drill to support the drilling works.

RVR projects has more than 800 members of its team building the Mumbai-Pune Expressway, with at sometimes up to 2,000 workers joining forces, working in shifts to ensure its success in time for the scheduled completion date. Their working conditions in the tunnels are tough; inside it is dusty, muddy, and very hot, with the temperature rising to around 45°. As the ideal partner to help withstand these extreme conditions, RVR projects choose the highly efficient, low cost and ultra-quiet electric E-Air compressors. The E-Airs' do

not produce emissions, which makes them an ideal fit for the inside operations. The compressors are working 24/7 to keep the project running continuously; maintain a consistent supply of clean air to help improve the air quality and reduce the noise for those working inside the tunnels.

The construction company decided to choose the electric E-Air due to it being fitted with Atlas Copco's in house developed electric motor and power electronics, which have both been expertly refined and proven suitable for the toughest of applications and environments. The unit's motor is oil cooled and therefore able to withstand high humidity and dusty environments, and its power electronics are liquid cooled, offering what Atlas Copco says is unparalleled reliability.

Road to net zero

Atlas Copco is committed to being at the forefront of change in offering sustainable solutions for the machine driven industry. It has developed a portfolio of solutions that target net zero goals while delivering better efficiency and contributing to a lower total cost of ownership than traditional alternatives. Atlas Copco Portable Air has taken an innovative step towards decarbonisation by offering sustainably driven electric compressors.



Brokk's compact and flexible demolition robots can easily access confined spaces without compromising on power, they can also carry a variety of attachments and do not emit exhaust fumes making them ideal for piling.

Prior to a major renovation project and the construction of a hotel, the foundations of the historic building Draken on Järntorget in Gothenburg needed to be reinforced. The property was built in the early 1950s and the foundations were piled with timber, which over time has begun to rot, causing the foundation to be compromised. Many cities are built on timber piles and they work well until they are exposed to oxygen. Soil conditions have a major impact, but densification of cities may have an effect as well. New buildings, road construction and new landscaping near house facades disturb the soil conditions which in turn

impacts the timber piles meaning that the foundations will often require reinforcement.

The obvious choice

Project supervisor Richard Hammar of Grundia AB stated that the Draken project lasted about seven months. Early in the planning process, several challenges emerged, which resulted in a demolition robot being the only solution for the job. "Some areas in the building are confined and sometimes difficult to access, the size, power and flexibility of the Brokk made it an obvious choice," says Richard.

Since the work was to be carried out in a basement, the requirements were specific. The robot needed to get through narrow passages (less than 800mm) as well as travel up and down stairs. The Brokk 200 delivers maximum power in relation to its size, which was crucial as the task required the use of a large hydraulic breaker in a limited space. As the Brokk robots are remote controlled, the operator has the opportunity to manoeuvre the robot from a safe distance allowing the best possible view of the work. As the project was carried out entirely indoors, an electric powered machine was essential. The exhaust fumes from a diesel powered machine would have made the work environment unbearable.

A flexible solution

A Brokk robot is incredibly versatile thanks to the ability to use different attachments. When piling, the choice of hydraulic breaker may differ depending on the soil conditions and the state of the building; in this particular case a breaker with a large diameter piston was needed. When using a heavy breaker, the robot needs a counterweight for good stability. With these types of jobs, where there is limited space and limited ceiling height, a side mounted breaker made it possible to maintain a high working pace. In addition, this type of breaker made it possible to maximise the length of each pile.

About the project

In total, Grundia AB laid 303 piles on the building's 1,500m². The average depth was about 41m but varied between 17m and 70m. Due to changing ground conditions, some piles could be driven quickly, and others took several hours. For the deepest piles, the first 40m took about two hours, while the remaining 20m took almost four hours. In this project, Brokk 200 was used for a total of 1,500h.



The dates have now been announced for India's Demolition Association IDA for its IDA convention and Demtech exhibition. This time it will be held over two full days on the 28 and 29 September in Bengaluru, India.

t the Demcon trade show held at the Inframässan on the 24 and 25 November this year, India's industry association for demolition, remediation and concrete cutting exhibited. The industry association is called IDA, Indian demolition Association, and was formed in 2019. At its last annual meeting in 2019 a one day conference and the Demtech trade show were also arranged. The trade show proved highly popular and saw over 500 delegates attend. Furthermore, around 30 manufacturers from all over the world exhibited. Due to the pandemic, which hit India hard, it has not been possible to arrange a follow up, but now the IDA has now arranged the next IDA convention and Demtech show on the 28 and 29 September 2023 in Bengaluru (Bangalore), India.

Presentation at Demcon

IDA board member Fazrulla Basha represented IDA and Demtech at the Demcon show with a stand at the show. He also gave a presentation where he talked about the IDA and Demtech. He welcomed Swedish manufacturers to exhibit their products at the show and hold presentations at the conference next year. Naturally, all relevant global manufacturers are also welcome to participate. Demtech 2023 will now be held over two days with there being opportunities to

exhibit and demonstrate products, with the show also having an outdoor area for the latter. The show will be held at the White Petals Palace Grounds located in the heart of Bengaluru near Mekhri Circle.

Any manufacturer that wishes to attend the conference and show is also invited to become a sponsor. There are five levels of sponsorship: Headline Sponsor, Affiliate Sponsor, Platinum, Gold and Silver Sponsors. For Headline Sponsor, only one sponsor will be allowed and that has already been taken up by the manufacturer Volvo CE. Information on the other levels of sponsorship is outlined below.

Affiliate Sponsor

There are a total of eight sponsor places available at a cost of €12,000 per package. The sponsorship package comprises of a sponsor banner in all newsletters about the convention and trade show, a sponsor banner and logo on the official website of Demtech, www.demtech. in, a company logo on all mailings and other materials before and during the conference including leaflets, advertisements, mailings, tickets and more. Also included are two rollup company promotion pieces positioned in a prominent place during the conference and show, a half page advertisement in the conference programme, three free tickets to the conference and the trade show,

and free stand space of 3m x3m. There is also the opportunity to place advertising and brochures in the bags that all delegates receive when they visit the show and the conference, a company presentation film to be shown on several LED screens during the conference and a year's free membership of the IDA. From Sweden, Epiroc and Husqvarna have already booked their places as Affiliate Sponsors.

Platinum Sponsor

For this sponsor level, there are a total of 10 sponsor places available at a cost of 66,000 each. Included in this sponsorship package is the featuring of the company logo on all newsletters for the conference and the trade show, a logo on www.demtech.in and the company logo included on all documentation material sent out before the trade show and the conference. During the conference, the company's logo will be included in the conference programme. Two free tickets to the conference and the show, a 30% discount on equipment demonstration, and one year's free membership of the IDA are also included.

Gold Sponsor

For this sponsorship level, there are a total of 10 sponsor places available at a cost of €4,750 each. This sponsor-



ship package includes a company logo featuring on all newsletters for the conference and the show, two free tickets to the conference and the show as well as one year's of free membership of the IDA and a 20% discount on the demonstration of equipment at the show.

Silver Sponsor

For this sponsorship level again there are a total of 10 sponsor places available at a cost of €3,500 each. Included in this sponsorship package is the company's logo will featuring on all newsletters for the conference and show, as well as two free tickets to the conference and the show being provided along with and one year's free membership of the IDA.

Exhibitor stand

Manufacturers also have the option of booking only a stand at the trade show. There are a number of different sizes of booths available, and to determine size and location, please contact the organiser via the website: www. demtech.in. There are also so-called 'table top displays' which costs £1,600 each and consists of a table, two





chairs, electrical outlet and one person representing the company at the table.

Entry

The last time IDA's conference and trade show was organised in November 2019, over 500 people attended. This time, the organisers expect significantly more delegates from near and far to attend. The cost to attend the conference and visit the trade show during the two

days is approximately €72. The entrance fee includes coffee, refreshments and dinner.

Organisers

IDA's conference and trade show Demtech is organised by the IDA and the company Riverbends Publishing, LLC. The official magazine for the event is PDi. For more information about the conference and trade show please visit the IDA or Demtech websites.

> www.ida.org www.demtech.in









FIRST DOOSAN DX1000LC-7 **100T EXCAVATOR SOLD IN EUROPE**

Estonia based Kiviõli Keemiatöötus (KKT), part of the Alexela Group. has purchased the first Doosan DX-1000LC-7 100t crawler excavator in Europe. The new DX1000LC-7 has been supplied by Intrac Group. the Doosan dealer for the Baltic countries of Estonia, Latvia and Lithuania.

The new excavator has joined the existing Doosan DX800LC-7 and DX490LC-7 models already working at KKT's oil shale mine at North Kivióli in Estonia, where the company also operates a number of other 80t excavators. The purchase decision to replace one of the existing 80t machines with the new DX1000LC-7 was based on the successful performance of the DX800LC-7, which Doosan says uses 10l/h less fuel than competitive machines, for the same production output. Doosan states that the savings add up as after over 4,000h, the DX800LC-7 had already saved the equivalent of 40,000l of fuel. Doosan states that when compared to the other 80t excavators, the DX800LC-7 uses €1.5l less fuel, saving €60,000 after only 4,000h. After 10,000h, the saving will be equivalent to €150,000.

Even greater savings

Doosan says that the new DX1000LC-7 promises even more savings. Driven by what the company claims is the most powerful engine in the 100t class, the DX1000LC-7 is also said to have the highest hydraulic flow for this size of machine, delivering, what Doosan says is higher productivity, lower fuel consumption and smoother controls. It is also equipped with a 6.8m³ bucket. The DX1000LC-7 excavator is powered by the new stage V version of the Perkins 2806J diesel engine, providing a power output of 469kW. The high output of the engine is combined with a 'Virtual Bleed Off' (VBO) hydraulic system ('D-Ecopower+'), providing a hydraulic flow of 1,569 l/min and a high system pressure of 360bar.

Dating back over 100years

Estonia discovered more than 100 years ago that the stone at the North Kivióli mine contained oil inside and from that time onwards started to extract it. The process to obtain the oil remains unchanged. First the stone is taken out, and after around 8m3 of overburden is removed this provides around 1 m³ of the precious oil shale. To remove the overburden, different techniques are used. The first involves blasting and loading trucks with the 80t or 100t excavators. Another uses a 50t excavator equipped with a breaker and one of the larger excavators for loading trucks. The third method employs an 80t excavator, equipped with a vibrating hydraulic ripper ('Xcentric') and another 80t excavator equipped with a bucket to load trucks.

After removing the overburden, the extraction of the oil shale starts, again using different techniques. These include direct use of an excavator to load a truck or using a surface miner to extract the precious material, crush it and load it into a truck at the same time. The transformation process to produce oil from the stone begins with the stone being crushed and then loaded into a reactor unit, where it is heated to between 400° to 800° depending on the size. As well as oil, phenol is also removed from the stone. Overall, the process takes around two hours. Generally, a kg of stone can be 20% to 30% comprised of oil and the mine operator is moving around 10M/t per year (combining the overburden

Primary energy source

The oil shale industry in Estonia is one of the most developed in the world. The National Development Plan for the Utilisation of Oil Shale 2016-2030 describes oil shale as a strategic resource. Estonia is the only country in the world that uses oil shale as its primary energy source. In 2018, oil shale accounted for 72% of Estonia's total domestic energy production and supplied 73% of Estonia's total primary energy. About 7,300 people (over 1% of the total workforce in Estonia) are employed in the oil shale industry.

Dealer support

Intrac is solely responsible for sales and servicing of the Doosan crawler, wheeled and mini/midi excavator. wheel loader, articulated dump truck and attachment ranges in Estonia, Latvia and Lithuania.

Intrac's sales and service centre for Latvia in Riga is highly regarded in the Baltic region. The company also has facilities at its branches in Vilnius and Tallinn, which are the focal points for the service provided in Lithuania and Estonia respectively. In total, Intrac has 13 outlets

with workshops and 55 fully equipped service vans in the Baltic region. Intrac customers benefit from onsite service networks, covering everything from emergency repairs to routine maintenance. The company's factory trained engineers have many years of hands on experience of repairs and servicing of plant and machinery.





Vemcon integrates Lekatech attachment app into its 'CoPilot' platform

The Vemcon CoPilot platform system ensures productivity, transparency and efficiency for optimal collaboration of man, machine and material.

warnings, such as the hammer stopping automatically in the event of a fault. Vemcon founder and CEO Jan Rotard says of the platform: "Our CoPilor system sends

The Vemcon CoPilot has been developed to support the operator in difficult work processes, providing mental and physical relief. Additionally, an inexperienced operator is said to be able to work faster, safer and more precisely by using the platform, which automates and optimises recurring machine movements.

Excavator operators, contractors and OEMs who control their fleet via the Vemcon CoPilot platform will have access to operating modes for Lekatech's electric tools with the platform providing one application to control their mining and construction attachment via just one display. In addition, the app allows users to combine different frequency and energy settings for the electric hammer. At the same time, the user monitors data coming from the electric hammer at a glance.

The app can be used to collect the hammer's operating hours. It has also various safety functions and

warnings, such as the hammer stopping automatically in the event of a fault. Vemcon founder and CEO Jan Rotard says of the platform: "Our CoPilot system sends all data to the respective fleet management system used by the contractor when required. In doing so, all components can be individually combined with each other by the user at any time and expanded almost indefinitely."

Lekatech Oy was founded 2018 in Kausala, Finland. Lekatech's mission is to revolutionise hammer and other attachment technology. The Finnish start-up firmly believes that direct electric drive is the future in hammer technology. Vemcon GmbH is a development and manufacturing company of machine control for work machines. Its CoPilot system is a modular technology platform that offers several functions which are available for excavators markets. With the integration

of the Lekatech app into the Vemcon platform, users can now select different application modes.

IoT meets heavy machinery

Vemcon rethinks machine controls and simplifies processes on construction sites as well as in the execution of construction projects through digital solutions. Founded in 2012 by Jan Rotard and Julian Profanter, Vemcon aims to solve the fundamental challenges of its customers. For example, its solutions aim to reduce costs on construction sites, optimise work processes and in this way counteract the shortage of skilled workers. Vemcon also offers manufacturers uncomplicated new sources of revenue. Around 20,000 machines worldwide are equipped with Vemcon technology. Customers of the Munich based company, which has around 50 employees, include Kiesel, Kinshofer, MTS and Sennebogen.

THE BEST OF BOTH WORLDS

"Before installing a floor during a renovation project, contractors must first remove the existing flooring and prepare what's underneath. Choosing the right floor stripper is integral to effectively preparing the substrate ready for new flooring, so contractors must take the time to choose what equipment, or combination of equipment, will work best for the job at hand. Existing floor covering, power availability and site size and layout are some of the parameters to consider when selecting a floor stripper. In most instances, equipment distributors will recommend using a ride on stripper to remove hard goods, such as hardwood and ceramic tile and for sites with a large and open square footage. To remove soft goods, such as carpet, work in smaller spaces or to prepare floors where there are weight limitations, walk behinds work best.

"There are always exceptions to the rule. For example, if contractors discover from the client that the space has a large square meterage, they may assume that a ride on stripper would provide the best production rate. However, if the space is divided into small units, the doorway is small or the space is on a higher floor with no access to a lift, a ride on machine might become impractical. In these instances, contractors can look at using a more compact walk behind stripper. However, if they usually operate ride ons, they might experience some differences," explains Connie Hardy, vice president of marketing, National Flooring Equipment.

Walk behind limitations

Connie continues: "Unlike all electric ride on strippers, legacy self-propelled walk behind machines are controlled using hydraulics, making the equipment heavy and sometimes difficult to steer. This makes it particularly difficult to effectively remove hard goods, where contractors need a powerful machine. To overcome this, an operator might push their whole weight into a walk behind to remove the covering, which can be tiring, time consuming and can lead to operators digging into the substrate. Contractors often choose walk behinds for floor removal jobs on higher storeys. Before starting work, contractors can visit the site to see how they can access these higher storeys and assess whether there a lift and/or does it have the capacity for the machine. If the answer is no, contractors will then need to consider how to get the equipment to the work area. Though walk behinds are more compact than ride ons, contractors may still find it difficult to safely manoeuvre the machine upstairs. If it is not possible to safely transport equipment to the work site, contractors may be forced to complete the surface preparation job with manual tools."

Meet in the middle

Advances in floor stripper machinery means that contractors can now have the best of both worlds.

The new National Flooring Equipment's fully electric walk behind stripper, the 'Rogue', for example, has all the benefits of a larger ride on in a compact machine. The machine offers reduced machine weight, increased power capabilities and simplified controls. For example, there are toggles on the handle for steering, which reduces operator input, and enables the operator to quickly manoeuvre the machine with less strain. Reducing the weight also makes the equipment quicker as traditional walk behind strippers typically work to (approx.) 1m/min, whereas the Rogue is said to be able to do up to (approx.) 50m/min at the same time.

Contractors concerned about how to get equipment on sites that are difficult to access can benefit from choosing a modular machine. Modular machines mean contractors can remove weights or split the machine into multiple parts, making it easier to safely carry the machine onto transport or to a higher floor. "Whether it's to make someone's life easier or to create a novelty product, two in one products are popular in the consumer market. Similarly, when developing surface preparation equipment, taking the power of a ride on floor stripper and the compactness of a walk behind can give operators what they need to deliver quality floors in a range of applications," concludes Connie.





Avant Tecno's new subsidiary, Avant Power, is set to start producing battery packs for fully electric Avant's in 2023. Two new loader models, Avant e5-27 and Avant e5-13, will be equipped with Avant 'OptiTemp' batteries (27kWh and 13kWh) featuring what the company says is a unique thermal management system.

"Avant Tecno has been doing research and development related to electric loaders since the 1990s, and our first fully electric loader was introduced in 1997. After working with electric loaders and batteries for decades, we realised that there was no battery pack in the world that would be perfectly optimised for compact loaders. That's why we decided to start making batteries ourselves," says Mikko Piepponen, chief operating officer at Avant Power Oy. Avant Power has introduced two new generation OptiTemp battery packs for the new full electric Avant e5-27 and e5-13 models.

Key features

The batteries have been designed with a high capacity of up to 27 kWh enabling work for a whole day. The

innovative thermal management system keeps the temperature optimised and provides the same capacity in hot and freezing weather. As the battery is plugged into a charger, the temperature control system is automatically switched on; when the workday starts and the loader is unplugged, the battery temperature is optimised and adjusted to the prevailing weather conditions. Rapid charging stations are available, and due to the structure of the battery, it can be charged in 1.5h with a rapid charger, which enables long workdays. For safe operation, the OptiTemp batteries are designed so that there is no risk of propagation - thermal runaway from one cell to another - or flame leakage outside the battery device. Therefore safety is guaranteed by the structure and the immersion cooling system of the battery.

"The cooperation with Avant Power, and the batteries they have developed, allows us to build the kind of electric loaders that the market has been longing for. Longer working time and more affordable pricing have been key issues with electric loaders until now. With the new e5 models, we intend to tackle them both," says Jani Käkelä, CEO of Avant Tecno. The new Avant e5-27 and e5-13 loader models and the Avant OptiTemp battery packs were unveiled at the international bauma fair in Munich, Germany, on 24 October 2022 at Avant's stand with production set to start in 2023.

ONCE IT'S SECURED, IT WON'T LET GO

MB Crusher sorting grapples have been used to demolish and recover as much material as possible in Italy.

Michele Foglia of Effe Emme Edilizia chose an MB Crusher MB-G900 grapple mounted it on a Kobelco to demolish a farmhouse. Rather than knocking it down, he dismantled it piece by piece using the MB Crusher grapple. He recovered all the materials - floors, beams etc. - and still managed to recover the limestone to be reused for constructing a new building. The grapple grasped the materials with agility, allowing work to be safely undertaken both on the building site and on the street side. "We had a great time: it was exact in dismantling the structure, and it worked nimbly. We are amazed that we managed to demolish an entire house with a grapple," says Michele.

The claws' high clasping force allows recovery without destruction, thus safeguarding materials that can be reused. This prompted Gianluca Venturuzzo of the Venetian company Trevisan Carlo &C. to use MB Crusher's MB-G1200 for several jobs, notably the demolition of a

prefabricated building with insulated panels and iron as well as a 1950s farmhouse. "It is a very practical piece of equipment, simple and quick to use. It has very intuitive controls for opening and closing the claws and rotating the equipment itself. For example, in the disassembly, l could take several wooden beams at a time, making the work considerably faster," says Gianluca.

Roberto Chiappelli from Friuli also chose the MB Crusher MB-G900 because it allows him to do precise work quickly. "It allows you to grab materials just like a hand. It is as if before I was reduced to having one finger. Now I have the feeling of having two fingers and therefore being able to grasp what I want. Having been in the business for many years, I can testify that a long time ago such equipment would have been pure science fiction." The dismantling of the structures piece by piece already sorts and separates the materials that can then be recycled, disposed of, or reused on the construction site. This saves time and, consequently, cuts costs.



If versatility, safety, and speed are the motto on the job site today, then having an extra 'hand' makes everything easier. All MB Crusher's MB-G grapple models are equipped with a safety valve (which keeps the grapple closed in the event of a leak in the oil circuit). Some are also fitted with a silent block that allows the grapple to be used even in areas where noise needs to be mitigated such as found on construction sites in city centres or densely populated areas. The MB-G grapple can also be equipped with various accessories that make it even more versatile and easy to use.



The new range of SQ50 quick couplers and tiltrotators is targeted towards 7t-13t excavators. The 'SQ' provides high performing fully automatic oil connection technology used in quick couplers and tiltrotators on excavators to connect to hydraulic work tools. The SQ50 also meets the specifications of the Open-S standard for fully automatic quick couplers.

50 and SQ50 quick couplers are steel cast and have the Steelwrist front pin lock safety solution. The X12 and X14 tiltrotators have been redesigned with a new top and attachment coupler in order to make it possible to upgrade from \$50 to SQ50 at a later stage. The SQ is located on the top side (upper coupler) of the tiltrotator for rapid change between tiltrotator and other work tools, and SQ on the bottom side (attachment coupler) of the tiltrotator for rapid change between hydraulic work tools. By using SQ, tiltrotator work tools can be made less expensive as the rotation function is included in the tiltrotator. "With the introduction of SQ50 fully automatic quick couplers and tiltrotators, we will change the game in the growing 10t excavator segment with flow capacities of 120l/min with low back pressure. This allows for efficient use of high flow work tools also for mid-size excavators," says Stefan Stockhaus, CEO of Steelwrist AB.

High flow hydraulics

Steelwrist says that with the introduction of SQ50 'Qplus' technology has been updated to allow for even higher flows, adding another 20% to flow capacity which allows users to also run the high flow requiring work tools on mid-size excavators. Its introduction also sees the implementation of a new 'Absolute Rotation Sensor' on the tiltrotators in order to give higher accuracy to machine control systems. The Steelwrist range of SQ fully automatic quick couplers includes models for excavators up to 70t, and fully complies with the global Open-S industry standard for fully automatic

couplers for excavators. This means that the SQ system is designed to be able to connect to other brands following the Open-S standard.

Steelwrist expands the tiltrotator range

The installation ratio for tiltrotators on the smallest excavators is starting to grow globally, and in response Steelwrist is now introducing the new X02, a tiltrotator suitable for 1.5t to 2.5t excavators. The X02 is accompanied by a complete range of work tools for increased efficiency and versatility which also convert the smallest excavators into true tool carriers. The X02 tiltrotator has a number of innovative design solutions and comes with either a 'direct fit' or an S30 top for the connection to the excavator. The coupler side (bottom) of the tiltrotator is available with hydraulic locking for S30. The hydraulic lock version with the integrated front pin hook is said by the company to probably be the only tiltrotator in this class that has work tool safety to support CE requirements.

The X02 is positioned between the smallest 'TCX' tilt coupler for machines below 2t and the X04 tiltrotator for excavators from 2.5t to 4t. Again, the focus with X02 has been to make a fully cast product with the best strength weight ratio and low building height. Other innovative design solutions introduced with the X02 are: a new gearbox design which makes it possible to easily eliminate play over time; lubrication free bearings for easy maintenance; valves and control module placing to protect from outer damage and a bolt on lifting eye or lifting hook as an option on direct fitted tiltrotators.

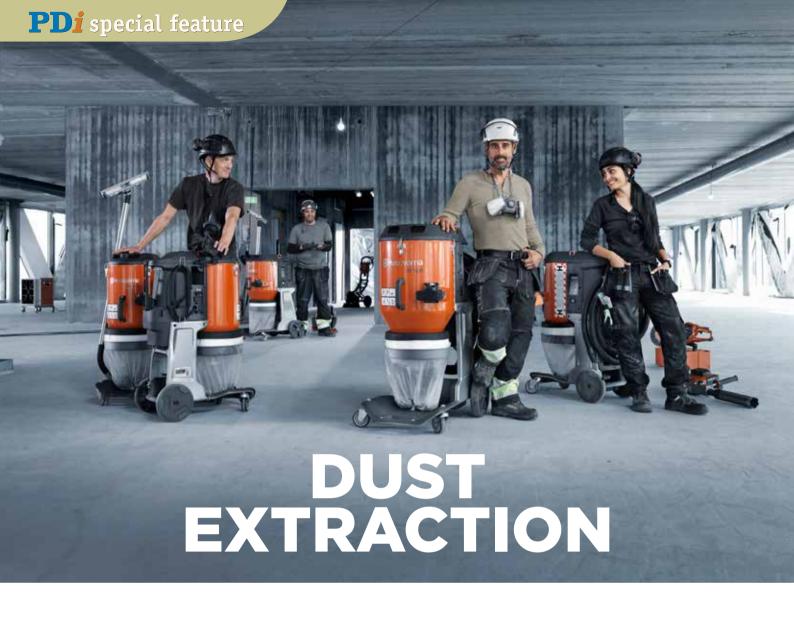
Optimised range of work tools

The X02 tiltrotator is accompanied by a complete set of Steelwrist S30 work tools, such as grading/digging, cable/trenching and 'v-ditch' bucket, asphalt cutter and ripper. In autumn 2022, a multi grapple was also added. The latter turns the excavator into an efficient and versatile tool carrier

that can do work in a wide range of applications. "With the launch of the X02, we finally complete the tiltrotator range for excavators below 2.5t. The X02 is a fantastic combination of innovation and robustness which customers have been waiting for," says Stefan Stockhaus, CEO of Steelwrist AB.

Compatibility with VDMA MiC 4.0

Steelwrist is a member of the German industry organisation VDMA (Verband Deutscher Maschinen- und Anlagenbau e.V.). The VDMA working group MiC 4.0 aims to create a uniform, manufacturer independent and machine independent digital communication model for the construction process. For attachments, this includes an open tiltrotator control system interface. Communication of attachments with the carrier is a very important safety aspect. The purpose is to achieve appropriate communication between the attachment and the carrier in order to identify the attachment accurately. This should transmit the necessary settings for safe use, prevent possible hazards and simplify the operability of attachments independent of the carrier. The new Steelwrist models are said to meet these requirements.



This year sees two new releases relating to dust extraction, wet vacs and air cleaners. The Danish manufacturer V. Brøndum has released a remote control for two of its models, while Husqvarna has launched a new range of dust extractors.

Husqvarna introduces new range of 'H-class' dust extractors

Husqvarna Construction has launched its new range of H-class dust extractors. Created to compliment working with grinders, power cutters, drill motors and other light construction equipment, the five dust extractors in the range include two battery driven models and are designed to contribute to a healthier working environment while increasing productivity. "On any construction job, dust is the enemy. It can harm machine operators. It can cause problems with equipment. And it can have a negative effect on working efficiency. With our new dust extractors, you can immediately take a major step towards creating a better working environment for yourself and your colleagues," says Joakim-Leff Hallstein, director product and service management for Concrete Surfaces & Floors at Husqvarna.

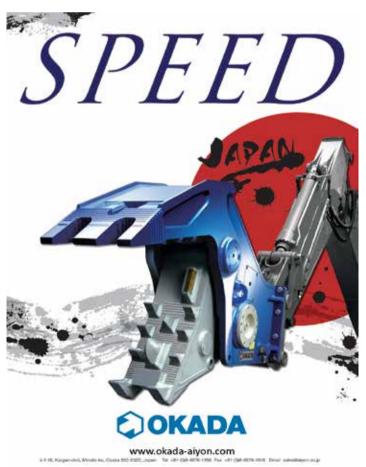
Husqvarna's H-class dust extractors feature new

'e-flow' technology that enables continuous high performance. A redesigned filter cleaning mechanism also ensures that the cleaning process can be done by closing the inlet and pressing a button. Husqvarna states that a cost efficient, improved Longopac dust bag attachment system in combination with long filter lifetime delivers low cost of ownership. "New filter technology enables higher productivity through reduced downtime and all five models in this new range comply with the latest H-class standards for heavy duty dust extractor usage," says Christofer Swahn, global product manager at Husqvarna. "They are also equipped with EN1822 certified HEPA 13 filters. At the same time, the machines offer compact design and smart features such as e-flow technology, improved HMI for easy onsite troubleshooting, fast hose connection, an integrated inlet cap and a smart dust cap that helps reduce exposure to dust."

Husqvarna states that key characteristics of the

new range include a lightweight yet robust construction, ease of manoeuvrability and lockable wheels which make moving between sites and floors simpler and safer with less strain on the user. The new range includes two battery driven models ('Pace' and 'iseries') and comes with a comprehensive series of accessories and Husqvarna 'Fleet Services'. The latter includes geo location info, predictive maintenance and wireless updates. Christofer Swahn believes that the all-round benefits of the range represent true business value. "Versatility is something our construction professionals appreciate. These machines are ideal for multiple applications, which reflect user demands perfectly. They also understand the difference a high quality, ergonomically superior dust extractor can make to their working day. Consider these points and we believe our new H-class range will strengthen our position as a total solutions provider."







PDi special feature









New remote control for 'Ronda' 200H Power and 1800H Power

V. Brøndum has launched a new remote control for its Ronda 200H Power and 100H Power, two vacuum cleaners for fine and hazardous dust. According to the company, battery powered hand tools have become popular among professional users, placing demands on vacuum cleaners when used as dust extractors for the tools. Conventional power tools with cables are connected to the vacuum cleaner's electrical outlet with an automatic start/stop function, whereby the vacuum cleaner starts and stops when the tool is switched on and off. With battery powered tools this is not possible, and the user must therefore either switch the vacuum cleaner on and off manually each time the tool is started and stopped, or leave it running continuously, resulting in unnecessarily high power consumption and machine wear. To overcome this, the Ronda 200H Power and 1800H Power can now be equipped with a remote control, which is mounted on the hose near the user which makes it possible to start and stop the vacuum cleaner. This is useful when working with battery powered tools and facilitates the use of a Ronda 200H or 1800H Power for dust extraction directly with the tool.

When working with loud tools such as a concrete grinding machine, hearing protection is mandatory and it can be difficult to hear the vacuum cleaner's acoustic alarm for low air flow, especially when the user is standing some distance from the vacuum cleaner. The new Ronda remote control features a visual alarm that flashes red when the vacuum cleaner's alarm is beeping, indicating that the air flow in the hose is lower than the required 20m/s. This typically happens when the collection bag needs to be changed, a filter needs cleaning or the hose is clogged. All Ronda 200H Power and 1800H Power vacuum cleaners manufactured after 1 January 2022 are prepared for remote control, but a communication print must be installed in the motor top of the vacuum cleaner. This must be ordered separately and installed by a professional service technician.



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