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Words from the IACDS President

It's time to look ahead!

It's done! The Christmas goose is eaten, the presents are unpacked, the family is back home again and New Year's Eve is over. In short, we have passed the year 2020 and we have made it through the year of the years.

We can finally look ahead, look forward to a new era and have new goals in mind. But what are your goals for the coming year? For example, I made a resolution this year to devote more time for my children and grandchildren. I think that is a very good decision, because the time you spend with your children or grandchildren cannot be taken away from you. And what do we really want to achieve in this life? Do we want to get rich like Elon Musk? Do we want to have power like Donald Trump? In the end, we can't take either wealth or power with us. It's not for nothing that people use the saying: 'the last shirt has no pockets'. But what we can take with us is the experienced love of our children and grandchildren. So let's take the time, it's a time that won't come back.

But what did the IACDS achieve exactly in the past year? We held a virtual annual general assembly in October at which it was decided to hold webinars over the coming year.



Michael Findeis, President of IACDS

In autumn of last year, a structural survey was started among the member companies of the associations and the member associations themselves, which can be accessed and viewed at www.IACDS. org. As you know, the IACDS would have loved to celebrate its 25th anniversary last year. Unfortunately, the celebrations had to be cancelled, but as a small compensation our anniversary yearbook has been available at www.IACDS.org since December 2020.

Looking ahead, in early March next year, the CSDA is planning to hold its annual general assembly at the Hamilton Princess Resort on Bermuda. In April the FBS is planning to host the BeBoSa and the annual general assembly in Willingen. In autumn Demcon is planned to take place in Stockholm which will also host the annual general

assembly of the IACDS. At these events and other occasions, I hope to meet you personally again and find some time for a personal exchange.

Before I will wish you a good start into the New Year, good business and above all, to stay healthy, I would like to bring the latest breaking news to you: Ikea has stopped the production and distribution of its catalogue. Many millions of Swedish pine trees say 'thank you' as do we all.

I hope to see you soon!



TREVI BENNE APPOINTS FORTUS

Trevi Benne has appointed FORTUS as its new distributor throughout Australia. The company will be supplying a comprehensive range of Trevi heavy duty buckets for quarry and mining industry providing aftermarket care, spare parts and customer service.

With a proud and strong history spanning almost 3 decades in the GET and wear parts industry, Fortus aims to set the standard in performance and reliability with a comprehen-

sive range of GET system solutions in mining, quarrying and construction applications.

"We are sure that the combination of Trevi Benne equipment and global GET aftermarket support, together with the local knolewdge and industry expertise of Fortus, will enable customers throughout Australia to benefit from a winning combination," said Fortus group sales manager Justin Dadd.

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New image based campaign

The Deutscher Abbruchverband – DA (German Demolition Association) has launched an image based campaign. This was drawn up by a PR steering committee set up specifically for this purpose together with a Cologne advertising agency. The aim of the image campaign is to rejuvenate and modernise the entire external image of the association. The central graphic of the campaign focuses on six mission statements supported by visuals, with a red thread running through all the communication channels and communications of the association.

The mission statements are intended to show that the demolition industry is a progressive sector with its finger on the pulse 'of time' and at the cutting edge technology

wise, with sustainability in demolition being central. DA members have been working on sustainability for decades, promoting the recycling of concrete, being the 'bread and butter' of the association's members and thus one of the key messages to be put across.

The images and the further upcoming measures of the campaign were presented to the members at the General Assembly 2020 held in Cologne. The association's website, which recently went online following the relaunch, was also presented there. The mission statements have a central function on the newly designed website and in all the social media channels of the DA and may be viewed at: www.deutscher-abbruchverband.de

New leaders for Finlay and EvoQuip

Terex Materials Processing is pleased to announce the appointments of Matt Dickson as business line director for Terex Finlay and general manager of the Omagh site, and Barry O'Hare as business line director for EvoQuip.

Pat Brian, vice president and managing director, Mobile Crushing and Screening, commented on the appointments: "Matt Dickson has a successful commercial and engineering background, experienced not only in sales and global distribution growth with entry into new markets, but with a strong technical aptitude for our equipment. For the past four years he has led the EvoQuip business, taking it from its inception to becoming one of the world's top three brands for compact mobile crushing and screening equipment. Before that, Matt worked for Terex Finlay in Omagh for over 10 years, culminating in the role of engineering director. We are confident that Matt will be warmly welcomed back into Omagh and equally by the Terex Finlay dealer network as they work together to expand the Terex Finlay business globally."



Barry O'Hare, Business Line Director, EvoQuip.

Paul O'Donnell, the previous business line director for Terex Finlay, will transition to director of Strategic Sourcing, Terex Materials Processing. Pat Brian continues; "During his time with Terex Finlay, Paul has overseen an impressive period of growth of the brand as well as the expansion of the Omagh facility into the centre of excellence for the design and manufacture of mobile crushers. We thank Paul for his vision, dedication and leadership and wish him every success for the future."

Commenting on Barry O'Hare's appointment to business line director for EvoQuip, Pat Brian concludes: "Barry has a wealth of experience in the crushing and screening industry, having worked in several positions for Powerscreen and Terex MPS over the past 12 years. Through his most recent role, Barry has guided the strategic and operational sales activities for EvoQuip and led the development and management of territory sales. We are confident that Barry is well placed to take EvoQuip into its next exciting phase of growth."



Matt Dickson - Business Line Director, Terex Finlay.



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and tooling ranges for concrete grinding and polishing, Lavina has everything you need for your floor project. And, from job setup to machine care, Lavina makes your work easier so you can get it done faster and more profitably.















PDi business

PDi 's 20 years of challenges and satisfaction

December 2020 makes it 20 years since the first issue of PDi Magazine was published, with a great deal happening in the industries PDi covers during those years. When it all started, PDi was the only international trade magazine that actually combined all the techniques a professional demolition contractor and a concrete cutting firm uses. PDi's content was focused on how demolition and concrete cutting firms operated, being a mix of traditional concrete sawing and drilling, use of remote controlled demolition robots, concrete floor grinding and polishing, demolition with heavy duty and long reach demolition machines and recycling with mobile concrete crushing units etc.

Some large contractors at that time kept all these services under one umbrella, while others were more specialised. The picture looks more or less the same today, but what has changed is how we work and what areas contractors cover. Over the years we have seen a dramatic tightening of regulations covering noise, vibrations, dust, pollution and working ergonomics, whilst digitalisation has also changed the daily working lives of operators while the corresponding demands placed on operators have increased a great deal. To operate today's demolition, recycling, concrete cutting, concrete floor grinding and other equipment, takes a lot of skill and extensive training, as the equipment has developed a great deal. During the last 20 years we have for instance seen the use of high frequency machinery in concrete cutting being implemented. Although hydraulically driven equipment is still used in certain projects, high frequency equipment has come to dominate, with now the first fully battery powered professional concrete cutting equipment being in operation.

Diamond tools have also undergone a great deal of development, becoming safer, faster and more efficient, whilst at the same time reducing in price. The number of suppliers in this field has simply exploded with the increase mainly coming from Asia. A quite new branch of the industry arose at the beginning of the century, namely concrete floor grinding using planetary designed floor grinders. This industry simply boomed around 2008-2010, being adopted all over the world, particularly in the US. A multitude of new manufacturers appeared, with the industry becoming somewhat over heated. Today the industry has consolidated with there being far fewer competing brands.

An extension of the floor grinding or floor preparation industry saw the concrete floor polishing method being developed. This technique was actually invented in the late 1990s but rapidly grew in use. This involved using a new type of finished flooring product instead of applying an epoxy layer on the concrete surface. Many concrete cutting firms and demolition contractors picked up the development and technology including it in their services. Today these companies mainly offer floor prep services with floor polishing usually offered by specialised flooring contractors.

The changes we have seen during the last 20 years when it comes to hydraulic demolition attachments is shown particularly with the growth in what is now an extensive variety of types of tools and number of manufacturers. Efficiency, speed, protection of the tool from dust, etc. has improved dramatically. Thanks to booster technology the tools have become more powerful and less heavy allowing powerful demolition with extra-long booms. During the past 20 years machine operators' daily work has been made less stressful and irksome with more ergonomic and comfortable cabins being developed that are easier to operate. The modern operator no long needs to leave the cabin to change hydraulic tools thanks to the development of smart fully automatic hydraulic quick couplers. Furthermore, the carrier sector has undergone a transformation with fully purpose built demolition machines, which were only seen with demolition robots.

Sustainability is another development that today is a major focus. For a demolition contractor now, almost all waste has to be recycled. In the early 1990s the manufacturer Nordberg (now Metso) launched a series of mobile crushers aimed at recycling called 'City Crushers'. However, regulations did not keep pace with product development which led to the line being discontinued. With the plethora of tracked small scale recycling crushers and screens on the market, things today are very different. In order to meet the increasingly strict regulations that are now in place, these compact, mobile and efficient mobile recycling plants can handle a lot of different types of waste even with the same machine.

Well, that was a very quick flashback over what has happened during the 20 years PDi Magazine has been in business. We hope to survive for at least another 20 years and remain your source of information and news when it comes to the sectors we have covered. We wish all our readers, supporters and contributors a 'Merry Christmas and a Happy and Successful 2021'. Let's pray that we together can conquer Covid-19 during 2021.

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



Aquajet adds Brokk Germany to its global distribu-tion network

Aquaiet, has partnered with Brokk Germany to expand its global distribution network. The new relationship will provide localised sales and service for hydrodemolition contractors in Germany and Austria and increase support for Aquajet customers across Europe. Brokk Germany officially starts distribution of Aquajet products on 1January 2021 and is already offering equipment demonstrations.

Brokk Germany will offer Aquaiet's full product line, including its innovative 'Aqua Cutter' 410V and 710V hydrodemolition robots and the compact 'ERGO' system for surface preparation applications. This will be delivered at three locations; the company headquarters in Friedenweiler, a subsidiary in Rheinberg and partner in Pirna. Accessories and support equipment such as the 'EcoClear' water treatment system and 'Ecosilence' 3.0 power pack will also be available. The latter newly redesigned unit reduces noise and emissions and allows for a more compact jobsite, making it ideal for urban projects throughout Germany.

Brokk Germany will also provide service and training with a staff of five certified technicians operating between the three locations, as well as a technical sales manager. Onsite demonstrations are available by appointment, allowing customers to experience Aquajet's versatile and innovative hydrodemolition equipment and choose models and attachments best suited to their needs. In addition to the three sales and service locations, Brokk Germany will stock Aquajet components at two strategically located warehouses, one in Berlin and another near Austria, to ensure availability and timely delivery throughout

"Germany is one of the biggest hydrodemolition markets worldwide," said Andreas Ruf, managing director, Brokk Germany. "Partnering with Aquajet allows us to provide cutting edge equipment that expands our customers' capabilities beyond concrete demolition to surface preparation, concrete restoration and industrial cleaning applications. Aquaiet's versatility perfectly complements our Brokk equipment.'

Aquajet's global distribution network also includes partners in the United Kingdom, France, Spain, Italy, Switzerland, North America, Latin America, Australia, the United Arab Emirates, Singapore, China and Japan for localised service in these regions. "Providing local service, in the language each customer is most comfortable with, is a key component of Aquajet's commitment to customer service," said Roger Simonsson, Aquajet managing director. "Our global distribution network allows us to do that, and we're happy to work with our sister company, Brokk Germany, to provide convenient, top tier hydrodemolition support for the German and Austrian market."

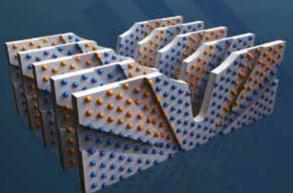




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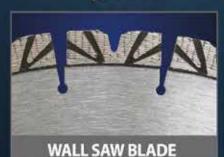




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Words from the EDA President

Starting a new year with confidence

2021 is a new chapter, full of challenges and opportunities that we all, after a 2020 more complex than expected, are set to face. And that, of course, includes the demolition industry, which in 2020 proved to be a strong and safe industry, able to overcome complex situations. That included what we are currently experiencing, using sufficient resources to deal with the unexpected. This is shown by our European Demolition Industry Report 2020, which has just been published.

Despite the circumstances, which have not been particularly favourable, the study shows that the forecasts for 2020 in the sector are generally stable, with a small reduction when compared to the previous year. All in all a very positive figure when we consider the complex problems faced during the year. This shows the strength of our industry, as does the data on temporary closures of companies. Practically half of European companies did not close during the most difficult months of the pandemic, with 72% of the projects already planned having either gone ahead in 2020 or have been rescheduled for later.

Another figure to consider, which speaks of the strength of the sector, is the investment forecast. 77% of the participants in the study state that their investment in machinery, equipment and consumables will remain stable or increase. Of these, 25% say that this investment will grow by more than 15%. This gives us confidence for the new year, in which we will face new challenges, but with the knowledge that we can do it successfully. The EDA Industry Report 2020 shows that we have sound foundations on which to build, with enthusiasm, as we enter the New Year.

2020 has indeed been an exceptional year, but one that has enabled us to study the demolition sector in greater depth than ever before. The industry has not stopped working on projects, but has

2021 is a new chapter, full of challenges also spent time on training, working in and opportunities that we all, after a 2020 more complex than expected, are set to face. And that, of course, includes the demolition industry, which in 2020 proved to be a strong and safe industry, Yearbook 2020.

The latter publication, together with the already mentioned EDA Industry Report 2020, is the definitive summary of the last 12 months and is also an essential guide for the coming year. It presents a combination of perspectives that shows how we will continue growing and enable us to enter 2021 with the confidence that has been generated from our efforts and our work.

We invite you to visit www.europe andemolition.org/yearbook and www europeandemolition.org/industry-repor and take a look at both publications.

About EDA

The EUA was rounded in 1978 and is the leading plat form for national demolition associations, demolition contractors and suppliers. The EDA has a strong focus on developments in Europe, which are of interest to the demolition industry.

info@europeandemolition.org www.europeandemolition.org



Francisco Cobo, President of EDA, European Demolition Association



PDi business



Komatsu wins Prime Minister's Award

The 'Japan Service Awards' were handed out this year for the third time, recognising contributions evaluates in a wide variety of services in Japan in education, entertainment, healthcare and so forth. Winners of the award can be viewed as leading service providers and models in their field, with the service industry accounting for about 70% of Japan's GDP and employment, being an important industry that will be the key to the future growth of the Japanese economy.

One such winner of an award is Komatsu, which has in recent years launched 'Smart Construction' globally. This uses 3D topographical data, drones, connected machines and so forth to provide services for all construction processes from surveying to completion inspection for improved safety and productivity. Furthermore, and in addition to construction machinery and advanced services, Komatsu now offers a machine guidance retrofit kit that converts conventional hydraulic excavators into connected machinery at low cost.

Mr. Yoshihide Suga, the Prime Minister of Japan, said of Komatu's innovations: "Komatsu Ltd goes beyond selling goods for the manufacturing industry and has optimised the entire construction process by integrating and utilising topographical data measured by drones, design data and operation data from construction machines. I have heard that Komatsu Ltd. has been providing services all over the world that dramatically increase productivity at construction jobsites. I understand we will be able to realise an accident free construction jobsite with even higher labour productivity if we combine those services with autonomous driving and remote control functions in the future. This is not only selling goods but selling services as a whole, and I think it is one of the models that shows the way the Japanese manufacturing industry should go."

Komatsu machines aim to bring excellent value to customers during the construction phase of a project. And by digitally transforming the iobsite with Smart Construction, Komatsu aims to start delivering value throughout the whole project, from bidding on the tender to reporting to the project owner, Richard Clement, DGM Smart Construction at Komatsu Europe, says: "The data we capture with Smart Construction enables us to make estimates based on previous activities on how long a task will take, and allows us to propose to our customers an ideal choice of machines for a specific task." He adds: "Construction companies can now also easily monitor and report on bottlenecks. With Smart Construction services, our clients can count on us on being their greatest ally on their next project."

Mas Morishita, CEO of Komatsu Europe, added: "Our Smart Construction team at Komatsu Europe is leading the way to transform a manufacturing company into a top service provider. The added value of this unique service is now being recognised by the customers and the public in general. I think this is the meaning of this award: it encourages us greatly to push ahead with Smart Construction in Europe."



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EVENTS

SAMOTER 2021

3-7 March, 2021 Verona, Italy

www.samoter.it

CSDA ANNUAL CONVENTION & TECH FAIR

March, 4-6, 2021 Fairmont Hamilton Proncess Resort, Hamilton, Bermuda

www.csda.ora

NDA ANNUAL CONVENTION 2021

New Orleans, Louisiana Demolitionassociation.com

BEBOSA 2021

April, 15-17, 2021 Willingen, Hochsauerland, Germany

www.bebosa.com

BAUMA CONEXPO INDIA

April 20-23, 2021 Gurugram, New Delhi,

www.bcindia.com

CONCRETE SHOW BRAZIL 2021

(Dates not set yet) São Paulo Expo, São Paul, Brazil www.concreteshow.com.br

WORLD OF CONCRETE 2021

June, 8-10, 2021 Las Vegas Convention Center Las Vegas, USA

www.worldofconcrete.com

DEMCON 2021

September, 9-10, 2021 InfraCity, Stockholm,

www.demcon.se

THE ARA SHOW 2021

October 18-20, 2021 New Orleans, Louisiana

www.arashow.ora

ECOMONDO 2021

November, 2021 Rimini. Italy

www.ecomondo.it

FACHTAGUNG ABBRUCH 2022

March, 11, 2022 Berlin, Germany

www.deutscher-abbruchverband.de



Alba-Macrel Group unveils new website

Alba-Macrel Group, the Spanish manufacturer of construction equipment, has unveiled its new website and product catalogues.

The company's new website, available in three languages, is adapted to the current needs and trends of the construction industry. presenting an innovative design without losing sight of its corporate identity. It is intended to generate greater international visibility and brand prestige, while strengthening relationships with customers. Among other features, the website contains new product catalogues,

high quality audio visual material and newly created sections, such as its own blog, which is periodically updated.

Alba-Macrel Group designs and manufactures machinery for construction applications providing high quality products and solutions. Its wide experience in the sector and its safety record defines the company's values and brand. Today, the company continues to innovate by developing new products and optimising existing technology in order to respond to the needs of its market.

IACDS presents its first industry report on the evolution of companies and forecasts for the sector

The International Association of Concrete Drilling and Sawers, IACDS, has released the IACDS Industry Report 2020. This is the first report to analyse the evolution of the global drilling and sawing industry whilst also showing trends that will help future decision making. The publication includes information concerning the development of contractor companies in 2019 and provides forecasts for 2020. The information in the report has been collected through an online survey that was translated into 10 languages from eight countries.

Thanks to the data provided by National Associations, manufacturers and contractors, the IACDS has produced a report with graphics and statistics to give an overview of the situation facing the drilling and sawing industry worldwide. The document is only available online, providing interactive navigation adapted to all devices (mobile, tablet and computer) through the IACDS website (www.

iacds.org/industry-report/). The International Drilling and Sawing Industry Report 2020 is an effective tool, helping stakeholders increase their knowledge of the industry.

Main results of the IACDS Industry Report 2020

Globally, according to the data in the report, the most common type of company in this sector is a small business that operates mainly at a local and regional level, focusing on activities related to drilling and sawing (more than 75% of its turnover). The business prospects for these specialised activities seem to be stable or slightly increasing, with no significant changes reported in terms of staffing. The companies surveyed indicated that their investment plans will also remain stable, both in terms of workforce training as well as machinery, equipment and consumables

www.iacds.org

Aquajet extension kit brings additional versatility to hydrodemolition

Aquajet, a leading name in hydrodemolition robot manufacturing, has launched an extension kit system for improved reach and versatility in a variety of concrete removal and surface preparation applications, from bridge deck, berth and pier work to dams, tunnels and wastewater plants. The kit allows extended reach side to side as well as vertical extensions and bends for hard to reach areas. Versions of the kit work with the Agua Cutter 410, Aqua Cutter 710 and 'Aqua Spine'. "Our customers know how effective our robots are at removing concrete from flat surfaces like bridge decks, but our 'Extension Kit' allows so much more," said Roger Simonsson, Aquajet managing director. "The accessory gives operators the ability to get into spots unreachable by other equipment, allowing a higher versatility, improved productivity and a quick return on investment."

The extension kit provides an additional reach ranging from about 1.5m to 2.5m depending on the model to help operators access hard to reach areas, with the cutting head or rotolance for surface preparation. In a bridge repair application, for example, contractors can use the extension kit to reach girders, the parapet edge or even over a railing to remove concrete on the side of a bridge or column while the robot remains on the deck, all without the time and hassle of dismantling the bridge railing. The kit can also be configured to allow removal of material from the underside of a bridge deck, for example, by reaching over the edge and aiming the cutting head upwards. In addition, operators can use the kit to extend horizontal and vertical reach to about a 4m working width for a wider surface removal.

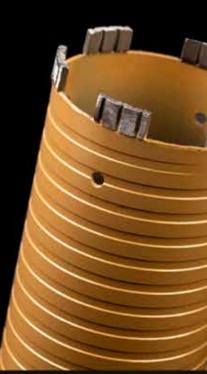
The flexibility provided by the kit saves contractors time and improves safety by eliminating the labour intensive alternatives of using hand tools to remove concrete from difficult areas such as the side of a wharf below the water line. In addition, the extension kit provides the inherent benefits of hydrodemolition, including faster concrete removal, a better bonding surface for new concrete, no micro fracturing caused by heavy vibrations, and overall improved safety by allowing work from a distance. The kit includes extension beams and articulated joints. Protective splash covers and a support wheel are available options.





















In this feature about remote controlled demolition robots, PDi has invited Joakim Furtenbeck, sales director, Brokk, to share his thoughts about three ways demolition robots increase efficiency in concrete cutting applications.

emolition, like every industry, is constantly evolving. To keep ahead of the curve, contractors seek out the machines and methods that increase productivity while decreasing the physical toll on workers. Concrete sawing is viable option for fast, effective removal. However, savvy contractors are finding that adding remote control demolition robots to their sawing operation not only increases productivity and safety, but also allows them to reduce bid prices and maximise profits. Here's how.

Complete jobs faster

Take a wall sawing job for example. To remove a 10m x3m wall in a confined space with a saw requires, on average, 25 cuts. Depending on depth, this might take several passes. Once cut, the concrete blocks need to be broken down for easier removal. The whole process would take at least four days with two saws and require a crew of at least three: two to run the saws and at least one more to handle removal. Using a remote control demolition robot can cut the time in half. Rates vary based on machine, material and depth, but demolition robots are capable of extraordinary productivity — up to 5m³/h in some cases.

To remove the same 10m x 3m wall used as an example above, the contractor would still require perimeter cuts to avoid transferring vibration to surrounding structures. After that though, the demolition robot and a single operator could quickly and effectively break up the concrete into small pieces that are easily cleaned up with a skid steer loader.

Bank vaults and other heavily reinforced concrete removal applications are another area where a demolition robot can reduce removal time by more than half. The robot works its way across the surface, exposing the rebar for cutting with a torch. This method greatly reduces diamond costs from standard methods such as core drilling, wire sawing, and wall sawing. Additionally, demolition robots reduce the need for scaffolding on larger vertical demolition projects since some models can reach up to 5m. This can save up to a week before and after the project, allowing contractors to take on more revenue producing jobs instead.

Keep operators out of harm's way

Machine reach, paired with a 300m remote operating distance, also keeps workers away from jobsite dangers such as falling objects, flying debris, weak floors, ledges and silica dust. Perhaps the biggest safety advantage though is limiting the human element in the more manual aspects of concrete cutting. Using a demolition robot minimises the need for handheld saws, coring equipment or pneumatic breakers. Working with these machines, some of which can weigh 18kg or more, can easily fatigue workers and the vibrations can lead to long term injuries. Robotic demolition also creates more manageable rubble that is easily lifted and removed, further reducing strain on workers.

Versatility with a range of attachments

Attachments can further increase safety and productivity. A crusher attachment, for example, is quieter than a saw or handheld pneumatic devices and breakers, making the jobsite safer for workers and the public. It also opens up new opportunities in areas where saws would be too noisy, such as near hospitals or schools. It also makes waste disposal easier by separating concrete and rebar onsite. The possibilities go beyond concrete cutting as well. In addition to crushers and breakers, leading remote control demolition robot manufacturers offer a range of attachments for cutting pipes, taking down stud walls, sorting debris, digging, and even vacuum lifting slabs. This means that a demolition robot with the right array of attachments can not only increase productivity, but also limit the need for additional support equipment on congested jobsites.

In effect the bottom line is that concrete sawing contractors who supplement their operation with remote control demolition robots can do jobs faster, safer, and with lower overheads. It's that simple. What used to take a week with a large crew can now be done in just a few days with a small crew and a single machine.

Once the first job is done, they can quickly move on to the next, doubling their productivity. Labour and diamond savings add up, as does the profit margin with each extra job they can take on. Not to mention the savings from a healthy, happy workforce. Demolition robots won't replace concrete sawing, but as part of a versatile operation, it can easily open up doors - or bank vaults — to increased profits.

ABOUT THE AUTHOR

Joakim Furtenback is sales director for Brokk AB He has more than 20 years of industry experience. His work with Brokk focuses on developing sales globally together with Brokk subsidiaries, distributors and agents.





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TopTec has the right machine for every application

PDi Magazine recently had a chat with the founder and president of TopTec Spezialmaschinen GmbH that revealed some new features of the company's remote controlled demolition robots.

When nuclear power plants and nuclear technical facilities are demolished, we speak of constructive dismantling today. Conventional demolition technology cannot simply demolish the contaminated buildings and facilities," says Olaf Dörfler, president of the German manufacturer of demolition robots TopTec Spezialmaschinen GmbH. Since the radiation intensity and the associated 'man-dose' rate is very high in most cases, demolition robots are used that can withstand prolonged use in the radiated area. Reliability and robustness are particularly important, with TopTec Spezialmaschinen GmbH manufacturing exactly this kind of remotely operated robot.

During the Corona shut downs, TopTec used the available extra time to further develop its equipment. Full redundancy and multi stage recovery and emergency systems have always been special features of TopTec machines, whilst until now, air filters have been used to reduce possible contamination in their interior. However, the best solution against the spread of contamination would be to dispense with the flow of cooling air, with this being exactly what the TopTec developers have achieved. The surface of the entire machine body now works as a cooling medium. All conventional jobs within a contaminated area no longer require cooling air sent through the machine with the machines remaining 'clean' inside the housing without any cooling air openings.

In addition, the main arms are designed with inside routed hydraulic hoses which provide the best available protection in the nuclear field. New protective shields made of tungsten and remote controls with integrated

video transmission round off the latest innovations. All developments are based on the company's extensive experience in the field and are incorporated into the design of the machines, with new experiences adding to the number of possible applications.

The Top Tec machine range includes the small Top Tec 1500 and the universal 1850E, with an operating weight of approximately 2.3t. Other models include the Top Tec 2500E, 4500E and D, 5500 E and D, 6500 Nuclear and the Top Tec 7500 (available as electric and diesel powered version). "The Top Tec 7500 is currently the most powerful demolition and dismantling nuclear robot, with a standard weight of almost 8t and attachable tools up to a weight of 1,500kg. Top Tec is the reliable machine for difficult and challenging tasks," concludes Dörfler.

www.toptec-germany.de

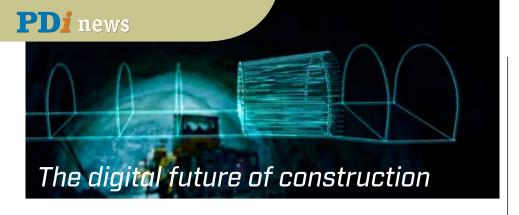


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Epiroc, as a leading productivity partner for the mining and construction industries, is increasingly providing customers with ground breaking solutions within automation, connectivity and digitalisation. As development picks up speed. Epiroc aims to keep its customers at the technical forefront and accelerate the digital transformation in all fields of their operations.

"Automation, digitalisation and electrification are transforming mining into a much safer, more sustainable and profitable business. The construction industry, all the way from tunnelling and infrastructure to demolition and recycling, is moving in the same direction and we want to make sure our customers have access to the right solutions that truly meet their current and future needs," says Helena Hedblom, president and CEO of Epiroc.

Automation functions

Big infrastructure and civil engineering projects are complex, with endless moving parts to consider. When compared to mining, the timeframes are usually much more compact. Still, a clever use of data and autonomous functions, smoothly integrated to existing operations, can optimise production without compromising productivity. Epiroc drill rigs, for example, through delivering a precise amount of power for each phase of the drilling operation, all based on continuous data, sees fuel consumption optimised without compromising productivity. Additionally, the optional hole navigation system (HNS), that uses positioning data and provides high levels of accuracy in basically all aspects of the drilling process, helps cut drill and blast costs considerably. For tunnelling projects, the 'Dynamic Tunneling Package' has a similar impact. By using the existing 3D CAD model of the project, the drill rig can create its own drill plan directly on the face of the tunnel. This enables a more flexible work process that saves time and delivers a very accurate end result.

Connectivity and data analysis

Making data and new technology accessible and above all easy to use in the daily operation is key. 'HATCON', a remote monitoring device for hydraulic attachment tools, provides an overview of the entire fleet as well as status of individual tools via 'My Epiroc', an easy to use application available on any device. Service reminders minimise unplanned stops with ordering and delivery of parts being integrated. The effects on efficiency and profitability are substantial. Epiroc's telematic solution for gathering and processing data from surface drill rigs, 'Certiq', gives customers a deeper look under the skin of their equipment. Position (GPS coordinates), equipment utilisation and performance, fuel consumption and machine health are all accessible via a web browser, providing a perfect solution for fleet management in order to monitor vital operational KPIs and plan service activities.

The 'World of Epiroc' online

Through Epiroc's interactive virtual experience, World of Epiroc, customers can learn more about the company's ground breaking solutions. Accessible via www. epiroc.com/world-of-epiroc it lets the user easily access product and service information, videos and customer case stories. "With the new online feature World of Epiroc, we give our customers a virtual experience that showcases many of these solutions," concludes Helena Hedblom.



Genesis Attachments adds GRX 295 to 'Razer X Multi-Jaw Demolition Tool' line

Genesis Attachments has announced the new GRX 295, the second model in the award winning Razer X Multi-Jaw Demolition Tool line. The new release features jaw change outs in two minutes or less, with the excavator operator staying in the cab. The GRX 295 is available with shear, cracker or pulveriser jaws, with jaw openings ranging from 508mm for the shear jaw to 762mm for the cracker and pulveriser. Jaw depths are 508mm, 813mm and 762mm for the shear, cracker and pulveriser jaws respectively.

The 295 Razer X is designed for 29.5t minimum excavator weight, whilst the 395 Razer X is designed for 40t minimum excavator weight. The GRX's short, flat top head with bolt on bracket shortens the centre of gravity, making it easy to change the mounting for different carriers. The heavy duty pivot design is integral to the jaw set, providing a power curve to match each jaw's primary application and versatility for concrete and structural steel recycling, C&D processing, and general and bridge demolition.

www.genesisattachments.com

Benefits of using an aerial work platform with a hydraulic generator

Self-propelled aerial access platforms are useful on construction sites, providing workers with a stable and safe platform for working at heights, but when there is a need to use electrical tools from the platform, can hydraulic generators benefit users?

Aerial work platforms are often equipped with an electrical socket that is installed onto the platform. The socket is wired via the boom of the machine, but the other end of the wire is not connected to anything. So, the socket on the platform is basically the end of an extension cord that is pre-installed into the boom. To get electricity out of the socket, there is a need to attach the other end of the cord to an electricity supply. So, the user of the platform needs a power supply, with there being

three options: power grid, gasoline or diesel generator, or hydraulic generator. The main benefit with hydraulic generators is that the aerial work platform can produce electricity itself. So, instead of using an electricity grid or combustion engine, the hydraulic generator enables the production of electricity by the machine itself.

How to install

Aerial work platforms often use hydraulic power for lifting tasks, making the installation of a hydraulic generator easy as the machine already has a hydraulic system, making aerial work platforms, bucket trucks, aerial lifts ideal machinery for a hydraulic generator. The hydraulic generator is installed into the main unit of the



aerial access platform, and as the hydraulic generator is installed in the main unit, it will not take precious space on the platform itself. The electricity that is produced by the hydraulic generator is led to the platform's sockets via the pre-installed extension cord, which if missing, can be easily installed.



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WHERE YOU NEED IT!





Mecalac's new 'AS900tele' for optimised logistics

Mecalac, a global designer, manufacturer and distributor of compact construction equipment for urban environments, has introduced the AS900tele to North America.

The new machine combines the compactness and mobility of Mecalac's revolutionary AS 'Swing Loader Series' with telescopic technology to provide versatility on the jobsite. Functioning as a loader, telehandler or landscaping tool, the AS900tele reduces the need for additional equipment and optimises jobsite logistics. "When you rely on one machine for each task, a jobsite can end up looking more like a parking lot," said Peter Bigwood, general manager for Mecalac North America.

Like all AS Series units, the 8t AS900tele's 'swing design' enables operators to swivel the fully loaded bucket 90° on either side, transforming space management and allowing for a radical new approach to tasks. With the rotated bucket, filling trenches or carrying pipes requires minimum operating space. On a road project, this rotation limits necessary space, requiring only a single lane closure rather than the two needed for traditional loaders. For a congested urban jobsite, this flexibility allows for optimal equipment positioning in confined spaces.

Additionally, the unit's telescoping capabilities pair reach with power. With a lifting height of 4.72m and outreach of 3.5m, the AS900tele allows operators to minimise repositioning while maximising reach. The AS900tele has a carrying capacity of 2,270kg at full extension, providing ample power for applications such as loading walking floor trailers or waste handling. Paired with a range of attachments, including pallet forks, buckets, brushes, snowploughs and hedge trimmers, the telescoping allows the unit to replace traditional backhoe loaders, wheel loaders and telehandlers.

For even more versatility, the AS900tele features three steering options: '2-wheel', '4-wheel' and 'crab'. This allows operators to simultaneously drive, pivot and manoeuvre, regardless of ground conditions. Combined with the swivel arm, it results in a 20% smaller turning radius (when compared to traditional wheel loaders) increasing productivity and safety for a range of common tasks including loading a trailer, material handling as well as municipal jobs such as mowing, snow handling and pruning trees.

The AS900tele also provides increased stability over traditional articulated loaders and telehandlers. A well balanced design and automatically locking rear axle allow operators to safely manoeuvre in all positions and on all terrains. Traditional equipment, on the other hand, can become unstable with only a 45° turn. "All the AS Series units were designed around a single idea: how do we improve the articulated loader to provide better efficiency and streamline the worksite," Bigwood said. "The AS900tele takes that innovation a step further, replacing two or even three other machines without sacrificing the productivity or safety of Mecalac's swing loader."

New generation rotary telehandler range from Bobca

Inspired by the company's 'next is now' philosophy, Bobcat has announced a major new development in collaboration with Magni TH of Italy to launch an expanded line of new generation rotary telehandlers.

The new Bobcat rotary telehandler range includes 10 Stage V compliant models for the European market, with lifting heights from 18m to 39m and lifting capacities from 4t to 7t. These are complemented by another four Stage IIIA engine powered models aimed at the Middle East, African and Russian/CIS regions with lifting heights from 18m to 25m and lifting capacities from 4t to 6t. Olivier Traccucci, Bobcat Telehandler senior product manager, said: "Our new rotary telehandler range offers an expanded model selection and increased lifting heights and lifting capacities. The new range offers cutting edge technology that continues the theme of reinvention that is at the core of our 'next is now' philosophy. As a result, they offer enhanced 360° performance to create the ultimate tools for even the most complex site handling jobs. A big choice of over 20 attachments and various options also ensures that working at height has never been so versatile, efficient, comfortable and safe."

Growth in market

The rotary telehandler market continues to grow worldwide. In Europe, for example, the market has increased over the last five years by 23% and, in 2019, it reached over 3,000 units for the first time. In fact, 85% of the global market volume is in the EMEA region. Developed in the early 1990s,



rotary telehandlers feature a rotating turret and four stabilisers which enable them to work solidly in place with full operating capacity. The 360° rotation allows the machines to handle loads everywhere in the working envelope without needing to move. This is an ideal solution in urban areas where spaces are tight and manoeuvring is limited. Their ability to work from a single point to cover all of a site, and the fact that they can be used from the first to the last day of a construction project, has made them an increasingly attractive machine for construction sites. Rotary telehandlers combine the attributes of a telehandler with those of an aerial working platform and a crane, with applications being mainly in construction (80%) but also in industrial maintenance.

With Bobcat's rotary telehandlers, attachments are almost as important as the machine itself, as they provide the versatility needed on site. The attachments are usually forks (supplied as standard), crane jibs, winches or jib winches, man platforms and buckets. Most of the new Bobcat rotary telehandlers are equipped with a remote control to operate the machine from the 'man basket' when elevating people as well as operating the machines remotely to enhance visibility and precision. They also automatically recognise the attachment they are being paired with using 'RFID' technology, which also uploads the corresponding load charts onto the display. As a result,

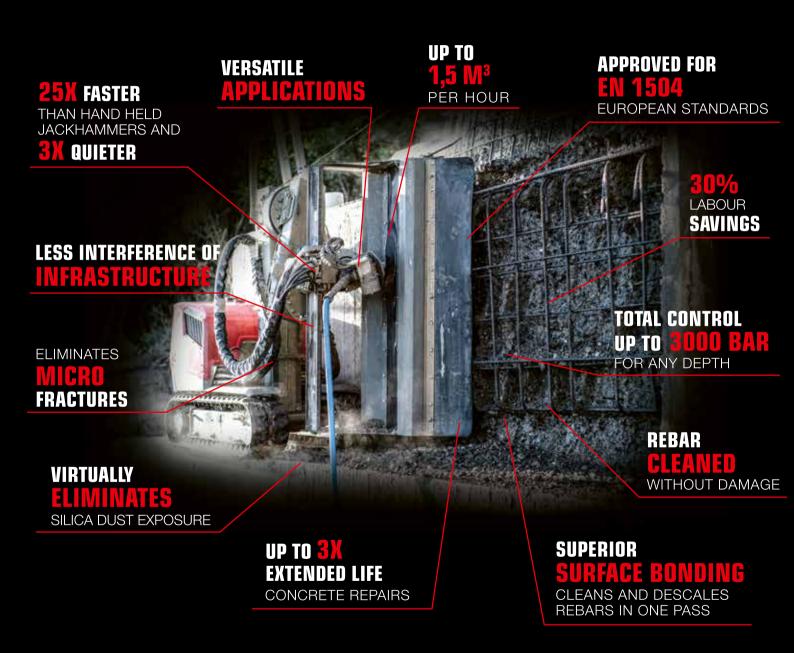
the machine is ready to work safely within seconds and the touchscreen displays a dynamic load chart which allows the operator to keep an eye on the load's centre of gravity. The 'limit' page also allows the operator to restrict the working zone in three dimensions and limit working speeds for maximum control and safety.

Large choice of options

To provide customers with the ideal machine for their needs, Bobcat offers a large choice of additional options. These include a remote control with drive function which provides radio control with a screen that allows the machine to be driven remotely and the stabilisation phases to be managed directly from the basket. This results in increased productivity and efficiency in winch, jib and man platform operations (among others). Also as an option, 'Twin Power' allows the machine to be used without starting the diesel engine keeping the emissions on zero level and providing noiseless operation. By connecting the machine to an external electricity supply (380V) a power source for the machine is provided enabling it to perform all normal lifting and load positioning operations. A 15kW electric motor and a 90 l/min piston pump guarantee the performance and precision required for each and every movement.

Hydrodemolition advantages

with Aqua Cutter® robots





A busy weekend for three Indeco hammers working on the Princes Freeway

The Princes Freeway is a 160k Australian motorway that connects Melbourne to Geelong to the west, to Traralgon to the east, and is one of the main routes connecting Melbourne's western and eastern suburbs, being used daily by commuters and families, public and freight vehicles. Its Duncan Road junction is a key route to and from many suburbs with its bridge, built 61 years ago, having a daily circulation of approximately 11,000 vehicles.

To improve traffic flow and road safety, the State of Victoria carried out upgrade work on the Duncan Road junction. The works included the construction of new exit ramps, the demolition of the old bridge and the construction of a new bridge with two lanes in both directions. Two new ramps were added for traffic to and from Geelong, as well as the construction of cycle and pedestrian paths and safe crossings on Duncan Road. To minimise traffic disruption, the old bridge had to be demolished in just one weekend, with the flyover being closed to traffic on Saturday 20 June in the evening and reopening on the Monday morning.

The works were carried out in record time by City Circle Demolition, a major and well-known Australian demolition company. A user of Indeco equipment since 2016, the company used a HP 5000 and two HP 7000 hammers for an important role in the demolition of the Duncan Road bridge and of the safety barrier pillars. The latter were constructed using high MPA concrete with extra steel reinforcements to withstand the impact of a truck of about 70t traveling at 100km/h. The end result is that the Indeco hammers proved to be a reliable partner for the demolition work.





NEW BOBCAT

mini excavators and loaders used in Milan

Demolishing a building in the centre of Milan requires specific prerogatives. The work must be carried out with surgical care, without damaging the adjacent buildings and without disturbing the residents, all undertaken in full compliance with environmental and safety regulations

This was certainly the case for the interior demolition work in a prestigious five storey building in the heart of Milan. To carry out this delicate work, the contractor, Seli Manutenzioni Generali Srl of Monza, chose to purchase a fleet of five new Bobcat compact machines comprising of two E17z mini excavators, an E10z mini excavator and two S70 skid steer loaders.

Thanks to their small dimensions and low weights, the three Bobcat mini excavators, equipped with breakers and other attachments, easily dealt with the precision demolition of the floors and other structures to make way for new stairwells and lift shafts. One of the E17z mini excavators was also used in top-down mode to demolish the roof to create new floor levels for the building. The two S70 skid steer loaders were used to complete the process by handling and removing debris, unloading it into self-tipping bins, which in turn were moved with a crane. The five compact Bobcat machines involved in the work inside the building were able to work comfortably even in the tightest spaces, where bulkier machines would not have been able to manoeuvre properly.

Seli Manutenzioni Generali Srl

Founded in the 1960s, Seli is a well-established company specialising in the construction of civil and industrial buildings, being structured into four business units comprising of Construction, Finishing, Plant and Demolition/Excavation. Each of the units is managed by a technical manager with proven experience in each sector. The most recently formed business unit is Demolition/

Excavation, which has recruited several engineers and Ivano Perego as its sales manager. Since October 2019, this division has been winning important contracts, particularly in Milan and the surrounding region.

For Seli, the brand of choice for the machines to carry out this important demolition work is Bobcat. "We chose to purchase Bobcat skid steer loaders and mini excavators as we consider them to be extremely high performing and reliable," said Ivano Perego. "This allowed us to provide a guarantee to the customer that the job would be carried out with maximum efficiency and precision. Our operators are completely satisfied with the quality of Bobcat machines and attachments in terms of their power, comfort and safety. We are very happy with the choice of Bobcat equipment and our relationship with the Bobcat dealer, DMO."

In fact, Seli has recently signed an agreement with DMO, which is the authorised dealer for both Bobcat and Doosan for the regions of Emilia Romagna, Veneto, Friuli Venezia Giulia and Lombardy (the provinces for Milan, Cremona, Mantua, Lodi, Pavia, Varese, Monza and Brianza) as the company's main supplier for the rental and sale of construction machinery. The negotiations with Seli were led by Gianmaria Lupis, DMO sales manager for Lombardy. "The strong partnership with Seli has led to a number of machinery orders, including the five Bobcat compact machines involved in this demolition work," said Gianmaria Lupis. "Alongside DMO's role in sales and rental, we also offer a full aftersales service, which proved to be a decisive factor in Seli's choice of DMO as machinery supplier."



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It's by getting to know your job down to a T that we can do our best job. That's why we'll be by your side throughout - in order to listen to your advice, understand your needs and provide you with a range of tools that will satisfy your every requirement in terms of productivity, efficiency, reliability, versatility and durability.





Having something to look forward to has long been a strategy for coping with difficult times; and after a year like 2020, we all could use something sure to bring a bit of joy in the coming months.

ere's a suggestion for coping with 2021; plan a new equipment purchase to prepare your business for what we all hope are better business days to come. Compact loaders and skid steers are a perfect place to start. Highly mobile, built to last, and suitable for any type of worksite, these versatile machines are an invaluable part of every contractor's equipment inventory. What's more, there's a product for every need and every budget.

Kubota compact loaders and skid steers

Patrick Baker, Kubota Tractor Corp.'s product manager for construction equipment, says a number of key factors bode well for the compact construction equipment market. "Compact construction sales and rentals will continue to be strong as these machines are ideal for residential projects and property improvements. With these key market segments continuing in a positive direction, Kubota has an optimistic outlook for 2021." In fact, the first quarter of the New Year will see new additions to Kubota's compact track loader line. Firstly the SVL97-2, which features improved durability and reliability with an updated diesel exhaust fluid (DEF) system, in cab technology and enhanced operator comfort. The track loader will have an operating weight of 5,261kg, and a rated operating capacity of 1,451kg.

Kubota has also introduced the SCL1000, a new stand on track loader with wide tracks, narrow body,

and a rated operating capacity of 454kg. The SCL1000 features a wide 249mm track that comes standard on the overall narrow 914mm machine. The integrated track design is engineered for durability with the undercarriage welded to the mainframe of the body. The grease track tension design includes sealed oil bath rollers for less maintenance and greater durability. The wide track design is low impact and minimises damage to grass

and landscaping. The machine boasts an 18.5kW turbo charged Kubota diesel engine with quiet operation, high altitude performance and no diesel particulate filter requirement. A hydraulic pump directly connected to the engine reduces maintenance. The loader arm has a hinge pin height of 2.1m and a reach of 658mm at a 45° dump angle, and is said by Kubota to have a 'best in class' travel speed of 8.2kph. Furthermore it is



engineered with cushioned loader boom cylinders and an adjustable platform suspension system that increase operator comfort. The loader comes standard with a keyless start with passcode protection, 12V charging port and a 109mm LCD colour dash monitor for consolidated machine monitoring.

Kubota's skid steer loaders include the SSV65 and SSV75. With standard two speed travel and optional high flow hydraulics, the skid steers are designed for construction, rental and agriculture customers. The rated operating capacity is 884kg and 1,220kg, respectively for the SSV65 and SSV75. Both models feature a unique slide up front entry door that rises overhead, a side light for better visibility and safe night operation as well as a spacious cabin with climate control. An optional multi-function lever is available allowing for fingertip control of major machine and implement functions.

Bobcat's MT100 mini track loader

Powered by a Tier 4 diesel engine and efficient hydraulic system, the new mini track loader delivers fast cycle times, strong breakout force and excellent pushing ability. The MT100 has a rated operating capacity of 454kg and comes standard with removable counterweights. These can be mounted in the undercarriage or at the rear of the machine to increase lifting performance. At just 914mm wide with standard narrow tracks (1,041mm with optional wide tracks), the new MT100 mini track loader offers an ideal combination of an easy to use machine in a smaller size. The exclusive 'Bob-Tach' attachment mounting system makes it simple to use a wide assortment of Bobcat attachments, using an 'overcentre' latch mechanism and wear compensating pins for an easy and efficient proper attachment.

MT100 also has a completely new, more durable undercarriage that requires no daily maintenance. Permanently sealed and constantly bathed in oil for permanent lubrication, the rollers and their idlers feature heat treated surfaces to minimise the wear and tear of typical use and further extend the life of the track system. Operators benefit from enhanced comfort and confidence thanks to ergonomic ISO joystick controls and enhanced performance features, including optimised roller spacing on the track system. Additionally, an integrated ride on platform gives operators a wider view to the sides, as well as to the bucket cutting edge or attachment.

Also from Bobcat, are the new R-Series T62 compact track loader and S62 skid steer loader with a redesigned 2.4l Tier 4 Bobcat engine with inline design and durable direct drive system. Bobcat engines feature a robust combustion chamber that handles more pressure and produces more usable horsepower and torque than ever before, meaning better performance for pushing, digging,



lifting and operating attachments. The cooling system has been completely redesigned for optimal operation and maximum uptime. Other key improvements include a larger, higher capacity radiator; 50% larger fan size for more cooling at a slower rotation and a tailgate with heavy duty steel louvers allowing for optimal airflow while still providing defines against jobsite debris.

R-Series loaders are also equipped with new, stronger cast steel lift arm sections and powerful hydraulics to improve lifting capabilities which are stronger in key areas, yet offer a slimmer profile to ensure optimal performance and increased visibility. The new roomier one piece, sealed and pressurised cab design repels dust and dirt, isolates the operator from engine and hydraulic noise, and enhances the efficiency of heating and air conditioning. When it's time for maintenance or repairs, the entire R-Series cab lifts out of the way to provide improved service access with hardware on the cab exterior for easy removal.



ASV 'Max-Series' loaders with next generation cab

ASV's Max-Series loaders new, next generation cab features 360° visibility, a more spacious operator area, a fully adjustable seat, and a new state of the art touch screen display. Operators are also provided with a new fully suspended seat with an adjustable recline, slide, weight and four arm rest settings. A new one sided lap bar frees space around the operator's waist and also makes entry and exit easier. Along with extra shoulder and leg room, the cab also features a Bluetooth radio, improved speakers and speaker placement and a new antenna placement for a better signal. ASV also designed the new cab with features to ensure long term reliability. New wiring harnesses and fuse panels are fully sealed, watertight, and installed with a design that further protects the electronics. Operators can also choose to include a factory installed full rear brush guard, as well as a heavy gauge, falling object protective structure (FOPS) level 2 cab; a feature previously only on the 'RT-120 Forestry'.

ASV's 'Posi-Track' loaders feature hydraulic and cooling efficiencies, with drive motors transferring torque to the patented internal drive sprockets with internal rollers reducing friction loss in the undercarriage, allowing for maximised performance. In addition, all machines include large line sizes, hydraulic coolers and direct drive pumps (rather than belt driven pumps) for transferring more flow and pressure directly to the attachment and preventing power loss. ASV's advanced cooling system helps contractors operate MAX-Series machines at 100% load, 100% of the time in ambient temperatures up to 48°C.

John Deere grade control technology now available for 333G compact track loader

'SmartGrade', John Deere's proprietary grade control technology, has now been integrated into the 333G compact track loader. The feature expands user capabilities on site development, roadbuilding, landscaping, residential and commercial building operations by enabling them to take on new tasks and larger jobs that require accuracy. The SmartGrade 333G increases productivity by helping to automatically complete grading tasks faster with fewer passes and less rework. Moreover, operators





can reap the benefits of using a versatile, more transportable piece of equipment where the grade control system is fully integrated into the machine's structures and software, delivering precise grading performance while eliminating vulnerable masts and cables.

Operators are also to benefit from the launch of 'DozerMode', a control solution that enables the EH joystick control system to function like a crawler dozer with the push of a button. This is beneficial when operating the machine equipped with the John Deere designed and built, six way dozer blade attachment that can both cut a grade and spread materials, as well as streamline attachment needs and setup time. The blade is fine tuned to meet the performance needs of a compact track loader and does not require tools to change between other attachments. It also enhances the versatility of the machine by accurately and automatically cutting or finishing light materials in tight spaces. In conjunction with SmartGrade technology, the blade reduces the amount of operator input, ultimately lowering operator fatigue.

John Deere has introduced improved rubber tracks featuring improvements to the construction and design, boosting performance and durability even when navigating challenging terrain and conditions. The new arched roller path helps to shed debris and improve roller path life. Additionally, updated steel cords reduce bending stress, while enhancements to the metal core adhesive process further improve durability. In addition to the design updates, the rubber tracks warranty on new machines and service parts has been increased to 18months or 1,500h, whichever comes first. With the improved parts warranty, John Deere reaffirms its commitment to providing durable and reliable equipment solutions for its customers.

Mecalac offers 'AS900tele' for optimised logistics

Mecalac's AS900tele combines the compactness and mobility of the company's revolutionary 'AS Swing Loader Series' with telescopic technology for versatility on the jobsite. The 84l/min auxiliary hydraulics further increase flexibility



productivity and safety for a range of common tasks. By avoiding unnecessary movements and maximising the use of available space, the AS900tele can increase productivity with less noise, maintenance and environmental impacts. Even with the wide range of motion, the AS900tele offers increased stability over traditional articulated loaders and telehandlers. A well balanced design and automatically locking rear axle further allow operators to safely manoeuvre in all positions and on all terrains. **New MCR Series** Mecalac's updated 'MCR Series' compact

loaders, and telehandlers. It also has three steering

options, 2 wheel, 4 wheel and 'crab', allowing opera-

tors to simultaneously drive, pivot and manoeuvre,

regardless of ground conditions. Combined with

the swivel arm, it results in a 20% smaller turning

skid excavators maximise efficiency, comprising of three models: the 6MCR, 8MCR and 10MCR. They are said to provide speed, productivity and compact operation when compared to traditional mini-excavators, with the swiftness of a

skid steer with the 360° rotation of an excavator for versatility and high travel speeds. A compact footprint delivers increased safety, sustainability and efficiency. The MCR also features a hydrostatic transmission and drive motors strong enough to take on any job, with a dedicated pump that drives the motor, delivering what the company says is twice the speed of any traditional mini excavator on the market.

On the jobsite, the MCRs' versatility increases productivity and reduces congestion. This is due in part to the company's patented quick coupler, 'Connect'. The advanced system allows operators to quickly transition between attachments, such as pallet forks or digging buckets, without leaving the cab, decreasing downtime between tasks and increasing overall productivity. Additionally, once the pins are engaged, Connect provides zero risk of dropping a bucket.

By using a range of attachments, contractors can undertake the work of several machines with a single unit, freeing up resources and space without sacrificing efficiency. With a skid bucket attachment, contractors can move up to 75cm³ of material at top speed or rest the bucket against the blade for applications such as grading and ground levelling. This innovative feature stabilises the bucket, distributing the forces to the frame of the machine and reducing stress on the boom, prolonging component life.

Mecalac's developments feature an innovative speed control travel speed management system which is standard on all the manufacturer's crawler skid excavator models. By setting a maximum travel speed from 20 available speed options, operators can focus on the task at hand for increased safety and productivity. Speed control increases versatility for the 6MCR, 8MCR, and 10MCR machines, making it easy to move across the jobsite at speeds up to 10kph or maintain very low speeds for applications such as mowing or snow removal. When combined with the flexibility from a range of attachments, 'Speed Control' increases productivity and jobsite efficiency. MCR units also feature Mecalac's innovative three part arm with a 360° rotating ability for

allowing use with a range of attachments, including mowers, road sweepers and earth augers. Functioning as a loader, telehandler or landscaping tool, the AS900tele reduces the need for additional equipment and optimises jobsite logistics. Like all AS Series units, the 7,250kg AS900tele features innovative swing design enabling the swivelling of the fully loaded bucket 90° on either side, transforming space management. With the rotated bucket, filling trenches or carrying pipes requires minimum operating space whilst on a road project, with the rotation limiting necessary space, requiring only a









an extended range of movement compactness. Operators can do more from a single position or within confined spaces with increased flexibility and reach while minimising unnecessary movement. The three part arm can also be tucked in, allowing for extra compactness and mobility without overbalancing the unit in the front resulting in a true zero turn radius.

Caterpillar's 963 track loader

The new Cat 963 track loader combines versatility with what is said to be up to 10% better fuel efficiency. Replacing Cat's 963K model, the 151kW track loader has an operating weight of 20,358kg, and is easy to oper-

ate from an updated cab with suspension seat and adjustable armrests/controls. An intuitive 254mm touchscreen dash display features a standard HD rear view

camera, whilst 'Slope Indicate' helps make operation easier by showing machine mainfall and cross slope. The joystick option provides familiar controls for operators experienced with skid steers/compact track loaders, or there is the option to use V-lever/foot pedal controls. With either control scheme, operators can set implement response - fine, normal, coarse - to match operator preference or application.

The 963 is powered by a Cat C7.1 engine that produces 15% more peak torque than the previous model for more power to the ground under load. Up to 10% fuel consumption reduction is achieved with the 'Auto Mode' that will adapt the engine speed to the load. 'Eco Mode' uses even lower speed for further reduction in fuel consumption in lighter duty applications, whilst 'Power Mode' keeps engine speed high. An optional 'Performance Series' bucket boosts productivity up to 20% and optional 'Fusion Quick Coupler' enables fast attachment changes. A variety of buckets, forks and other tools can be shared among track loaders, wheel loaders and other Fusion compatible machines.

Caterpillar has also developed the new 'Durilock' for underground loader buckets. The fully integrated bucket system features hammerless installation and maintenance free retention of ground engaging tools (GET) with 'Infinitite' elastomer compression retainers. Three interchangeable shroud styles enable a mining operation to quickly remove one type and replace with the type that is best suited to the loader application without changing the base edge or retention system. The system is said to deliver 50% faster installation and removal of GET compared to legacy, mechanically attached systems, and, because there is no need to retorque bolts periodically, maintenance time for GET is reduced by more than 50%. Additionally, integral corner guards extend bucket in service time by about 30%. The Durilock system is available for Cat R1700 to R3000 loaders, and most buckets of 5m3 to 10m3 capacity. Cat's retention design provides superior retention reliability without time spent performing re-torque procedures, whilst the elastomer compression retainer installs in seconds to allow fast installation and removal with no complex hardware to fail, handle, or tighten.

The Durilock system offers three different shroud styles to enable matching the GET to the application and conditions. The 'D50S Standard' is a traditional wedge shape used in most production and development applications; the 'D50A Abrasion' has a contoured design that repositions more material on the shroud base, and the 'D50P Penetration' has less leading edge to deliver easier penetration in dense material. The lip assembly provides the mounting surfaces for the shrouds and corner protectors, which balance corner and centre station wear rates, with cast corners welded to the base edge assembly to create the lip assembly. The corners incorporate a stepped design that eliminates corner shroud torsional loads and delivers reliability. The integral corner design boosts corner life by 15% and improves penetration when compared to systems that experience corner erosion and shortened bucket life due to corner rounding.



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REMOVE THICK COATINGS





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FLOOR STRIPPERS
FOR THE REMOVAL OF FLOOR
COVERINGS





FOR GRINDING AND POLISHING LARGE FLOORS AND OTHER SURFACES





DUST COLLECTORS
TO WORK IN A SAFE & DUST FREE
ENVIRONMENT



Series includes the 'Super Boom' vertical lift linkage, a new 203mm multifunction LCD display with reverse camera, straight line tracking improvements, fully upgraded electrical harness and much more. The 300 Series will be offered in 11 new models in 'radial lift' or 'super boom vertical lift'. These models range from 45kW to 67kW rated operating capacity from 726kg to 2,041kg, and dump reach from 470mm to 902mm. With greater dump height and reach, customers are provided with more visibility to ease loading high sided truck boxes or hoppers. The super boom vertical lift linkage offers high levels of visibility and height, and a transparent area on top of the cab gives a clear view to the bucket, even at full height.

A simple operator interface brings new features such as maintenance tracking, engine protection and ignition time out for maximised uptime. The multifunction display conveniently shows engine data, performance information, RPM, fuel level, battery voltage, oil and engine temperatures and trip screen. Along with easy to navigate features, the display offers simple electro hydraulic control settings and is customisable to the operator's needs. For regular service or maintenance, the 300 Series offers easy access to the engine. The cab can be tilted forward to access components and easy cab cleanout, with the all new wiring harness reducing downtime from troublesome electrical issues.

The low profile durable track undercarriage improves durability and helps reduce noise, with the long wheel based skid steers and steel embedded track compact track loaders providing a smooth ride and excellent stability. The centre of gravity and weight distribution are designed for optimised traction and control during lift and carry tasks. Models built with electro hydraulic controls feature multiple speed and sensitivity settings, including the new 'creep mode' and automatic straight line tracking. The former is a slow speed option giving greater control for slow speed operations such as trenching with speed thresholds of one to 100 increments. Automatic straight line tracking also improves productivity and precision when working with a trencher or cold planer.

New 300 Series excavator from Takeuchi

The TB370 compact hydraulic excavator is the first in Takeuchi's 300 Series compact excavator line. The 6t -7t class machine is powered by a 44kW Kubota V2607-CR-TE5B turbocharged diesel engine that delivers 213Nm of torque. It also features a load sensing hydraulic system that provides over 117l/min of auxiliary hydraulic flow making it an extremely versatile, powerful, and efficient machine. As the first model in the 300 Series line up, the TB370 has a wide range of state of the art features that include an 203mm touch screen multi-function colour monitor with integrated air conditioner and radio functions. The automotive styled interior is completely redesigned and spacious enabling the operator to remain comfortable throughout the work day. An intuitive jog dial and switch panel further improves control of machine functions and features.

For greater versatility, the TB370 includes first, second, and third auxiliary circuits that enables the use of a wide range of attachments. The additional third circuit gives the operator the option of adding a hydraulic pin grabber coupler to simplify and improve attachment interchangeability.

Kanga's remote controlled loader works hard where no one wants to go

The remote controlled TR825 multi task mini skid steer from Kanga provides an ergonomic, safer, more efficient working alternative, with advanced safety features such as unique ID codes, redundancy control and automatic emergency stop. Standing 1,016mm high, the TR825 works in both manual and remote modes to provide the ability to eliminate traditional work methods in hazardous environments and confined access areas. Other features include an anti-corrosion chain that withstands harsh environments such as iron ore, salt, copper or red dust. The zinc coating protects the chain from seizing or rusting, whilst four certified lifting points allow the loader to be craned into confined spaces. Twin hydraulic cooling fans enable the loader to work in confined spaces at high temperatures while maintaining the hydraulic oil temperature for optimum loader performance. In the event of low oil level and excessive heat, an automatic engine protection shutdown prevents damage. Two removable panels allow additional engine bay ventilation when working in extreme heat situations.











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New 'R-Series'

Bobcat has launched the new R-Series Stage V compact loaders consisting of the S66 and S76 skid steer loaders and the T66 and T76 compact track loaders.

To ensure optimum performance and comfort, the stability of both types of new loaders has been further improved with longer wheelbases and track footprints compared to the previous generation machines. The higher stability combined with enhanced efficiency from the hydraulics provides leading push and breakout forces and increased lift capacity, resulting in higher productivity even on the toughest jobs. Longer wheelbases and tracks also ensure a smoother ride with the new T66 and T76 compact track loaders having a solid undercarriage system as standard with an optional '5-Link' torsion suspension undercarriage is available for rough terrain.

All R-Series machines come as standard with a fully enclosed one piece deluxe cab with HVAC, display unit and an LED lighting system. Available options include the 'Clear Side' cab, which has mesh free side screens to aid visibility, a rear view camera that connects to both the standard and the optional touch display, as well as the 'Premium' LED light package. The standard suspension seat can be replaced with a cloth heated air ride seat option.

Advanced controls as standard

The new loaders feature a variety of performance, comfort and visibility enhancements to help provide customers with increased productivity. As a result, many previous options are now built into as standard features. Based on easy to use low effort joysticks, the user is able to enjoy exclusive features and fingertip switches. This automatically configures the loaders as tool carriers for working all day with a selection of Bobcat attachments, as well as providing increased operator comfort and control. Customisable features include speed management, drift control and the ability to change the set up on the sensitivity of the joysticks.

Through the 'SJC' system, the R-Series loaders utilise the 'Attachment Control Device' (ACD) system as standard. Using 'Can-Bus' communication to recognise the attachment on the machine, the ACD system automatically sets up the joystick controls and the output flow to ensure the best performance when using attachments on the new loaders. Through the availability of 'High-Flow' hydraulics as standard, the versatility of the machines is expanded, allowing them to be used with advanced higher flow attachments such as planers and wheel saws.

Maximum durability and uptime

The R-series loaders are built to be tough with the new cast steel structures in the loader arms being said to be 20% stronger, allowing the use of narrower profiles in key areas such as the front knuckle, improving the visibility of the attachments and work area without sacrificing any durability. The lift height has also been increased so it is easier to dump loads into high sided trucks. The new cast steel 'Bob-Tach' attachment mounting system is supplied in manual operating mode as standard with a 'Power Bob-Tach' option. Finally a redesigned cooling system benefits from an optional auto reversing fan to further increase cooling system reliability and efficiency in tough conditions.



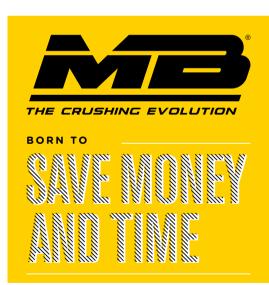
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DIAMOND TOOL **SUPPLIERS**

weather the slump by focusing on product development

If there is one silver lining to the catastrophic 2020, it is the fact that with travelling restricted and sales activity decreased, manufacturers of construction machinery and tools have had more time on their hands to focus on product development. And that was exactly what many leading suppliers of diamond consumables chose to do this year. Andrei Bushmarin reports.



In anticipation of a new decade, Austrian heavyweight Tyrolit has updated its 'Premium' range of dry cutting blades. The new tools, which are compliant with the OSA and EN13236 regulations, are reported to provide increased performance of up to 30%. The segments made by the company's patented TGD Technology are now bigger and boast better diamond distribution. The redesigned 'U-cuts' improve the cooling effect while

the reduced segment surface increases cutting rates. The Premium range has been available as of February 2020 while the 'Standard' and 'Basic' product lines are currently being overhauled. The complete revised range of dry sawing tools will hit the stores by spring 2021. Also new from Tyrolit this year is the 'CUT-ALL' diamond blade, which will be appreciated by both hardcore professionals and DYI enthusiasts. Living up to its name, the blade can be used on almost any construction material as well as for landscaping, gardening and rescuing tasks. The CUT-ALL disc will be available in all standard diameters as of late 2020.

www.tyrolit.com

Heger launches

the 'Titan Wave'

Germany based Heger Excellent Diamond Tools has designed a new segment called 'Titan Wave', which combines state of the art metallurgy with the latest innovations in artificial diamond manufacturing. The Titan Wave ensures up to 50% higher concentration of diamond on the blade. This enables the German manufacturer to use less wear resistant metal bonds for higher cutting speed and longer service life. According to Heger, the segment sets a new benchmark in concrete and asphalt cutting. Now Heger is looking to adapt the segment's special shape to its range of core drills. Dry drilling in reinforced concrete is probably the biggest challenge that diamond tool manufacturers are currently facing and as with wet drilling, there are considerable regional differences in the composition of aggregates and power rates of drill motors at play. To cover all bases, Heger has developed three types of segment compositions and tubes with unique ventilation spirals and openings for good airflow ensure an almost 100% dust free working environment. Heger is proud to be one of the first diamond tool companies that have taken part in the FEPA SEAM program dedicated to the sustainability of the abrasive industry.

Syntec Diamond Tools expands blade offering

Syntec Diamond Tools, an Australia based diamond tool specialist, has recently broadened its range of blades to cover a diverse range of applications. "At Syntec, we work closely with our customers, exploring their needs and listening to their feedback", says general manager, national sales & marketing, Phil Badcock. "We have always made custom-made tools for our clients but we are now rolling them out into our general portfolio." A part of the newly introduced series are Syntec's early entry blades, available for soft, medium, and hard concrete. Phil explains, "A common issue when pouring concrete is the occurrence of random cracks in the surface when the concrete hydrates and sets. During this process, the material shrinks, and tension develops internally. To prevent this random cracking, controlled shallow cuts can be made with our early entry blades, reducing the stresses within the material. As a rule of thumb, the 'gold blade' is for same day cutting, the 'red



blade' is for next day cutting and the 'magenta blade' is for cutting after two to three days. As an ancillary product, we also provide skid plates that typically need replacing with every third blade." Another addition to the range is the cordless 'quick cut blade'. Designed for hand held battery operated quick cut saws, it features a shorter 10mm segment, which reduces the surface drag and provides a faster cut by allowing for more pressure

on the segment surface. As a result, the draw on the battery is much lower. The high quality, laser welded segments enable full use of the segment depth, providing a long blade life.

www.svntecdiamond.com

Kern-Deudiam prioritises dry methods

and adds new ring saw blade blade offering



German based Kern-Deudiam is another example of a manufacturer that recognises the potential of dry sawing and drilling techniques. According to the company, an increasing number of general and specialist contractors ask for diamond tools tailored to dry applications. Kern Deudiam's 'UNIX2' and 'BETO' dry core bits are said to be 'a resounding success', with thousands of units being shipped out of the company's facilities in 2020. Another innovation unveiled by the German company this year is the 'EXPRESS2' ring saw blade for sawing

bolstered its portfolio of cutting rings that are suited to all leading machine brands.

www.kern-deudiam.de





Ashine unveils a new three step surface preparation technique

After years of vigorous research and testing, China based surface preparation expert Ashine Diamond Tools has developed a three step technique which allows grinding and polishing contractors to achieve a perfectly polished floor. The first step involves using 'Ashine Flex-Metal pads 200#' to open the surface. Secondly, the flexible resin pads should be applied to it to remove scratches left by the Flex-Metal and to hone the surface. After the first two phases, wet grinding must be the method of choice (as per the OSHA standard) to reduce dust pollution and to protect the operators from contracting silicosis. At the last stage, Ashine's brand new 'Flex-Resin pads 800#' are recommended for final polishing. According to the manufacturer, this three step approach results in finely finished surface with high DOI ('Distinctness of Image') readings

www.ashinediamondtools.com



Commitment to R&D drives Sonmak's success

Based in Ankara, Turkey, Sonmak Diamond Tools is the country's leading manufacturer of diamond consumables with a history of 45 years. By 2020, the company has grown into a global player, with customers in the US, Europe, Middle East and Australia. Baris Ortulu, Sonmak's business development manager, attributes the company's success to its unwavering commitment to R&D and investing in highly skilled staff. Listening to customers' feedback is another important factor in Sonmak's continued progress. As Baris Ortulu puts it, "Highways are our labs". Sonmak is a full cycle manufacturer that controls the entire production process from mixing powders and diamond particles to making segments, to final sawing and drilling tools. It produces brazed diamond blades of up to 2.1m in diameter and core bits of any conceivable diameter. Sonmak's diamond blades fit hand held and wall sawing systems ranging in power from 5hp to 110hp. The company also acts a supplier of drilling and sawing segments to many small manufacturers around the world.





makes it an environmentally friendly solution. When tested against the competition on a 5mm x 22mm steel profile and a Ø20mm pipe, the blade is reported to have performed faster by 49% and 26% respectively.

www.hsdeu.com

Despite the unprecedented challenges that 2020 has posed for industries all around the world, HSD Europe reports a successful financial year. Based in Eschborn, a business hub just about 10km from the city of Frankfurt, HSD Europe is the European arm of South Korean manufacturer Hyosung D&P. This year, HSD Europe is said to have slightly increased turnover and it projects further growth of up to 20% in 2021. The company also reports a boost in production of core drills, which it began manufacturing at its German facilities in 2019. As far as new products are concerned, this year HSD Europe has launched the second generation of 'EDIA-N' diamond blades suitable for a wide range of sawing tasks and a new metal cutting blade. The EDIA, which stands for 'Evolution of Diamond Impregnation Array', is HSD's in house diamond technology. According to the manufacturer, the updated EDIA-N range offers up to 50% increase in service life and has a more attractive price tag compared to the previous generation. The new metal cutting blade manufactured using vacuum brazing technology can be used on any type of metal. Unlike abrasive tools, this blade generates almost no dust, which

Solga Diamant is well prepared for 2021



With three factories located in and around Barcelona, Solga Diamant spent the best part of 2020 designing new products for 2021. Solga's bestseller, the 'Swift' blade', has been updated with a new support and a new segment to dissipate the heat generated during dry cutting. The blade can be used in either dry or wet mode on an angle grinder, a cutting table or a floor saw. The second new development is a new range of block cutting discs with a maximum diameter of 900mm. The manufacturer uses thin steel bodies to minimise the cutting area, thus maximising the power available with block cutting machines. In the floor cutting segment, Solga currently focuses on microtrenching solutions. Its slim floor cutting blade, only 2.0mm thick, is specifically designed for cutting expansion joints in green concrete. For dry drilling jobs, Solga has developed a new series of core bits featuring UNC connection. To achieve the best possible result, the company recommends using the core bits in combination with an impact drill motor and a vacuum cleaning system. Last but not least is a new line of surface preparation tools with a PCD insert and specially shaped segments to remove epoxy resins from concrete floors.

www.solgadiamant.com





BENEFITS

- Aggressive for coating removal, save time up to 45%!
- Average scratches pattern by Ashine PCD Technologies!
- Lower vibration and friendly for workers!
- Various Size and Design available for different usage!

www.ashinediamondtools.com www.linkedin.com/in/ashinediamondtools





Bobcat appoints new dealer

From 1 January 2021, Versatile Equipment Ltd will be the new authorised Bobcat dealer in the South East of England. Ewen Gilchrist, network development manager UK & Nordics at Doosan Bobcat EMEA, said of the appointment: "We are excited by the expertise, experience and enthusiasm that Versatile Equipment will bring to the role of the new authorised Bobcat dealer for Greater London and the South East. Versatile Equipment is well established and offers knowledge of the compact equipment and telehandler market that is second to none and is matched by a strong familiarity with the expanding Bobcat product range and an outstanding parts and service back up for new and existing customers in the area."

Lee Chater, sales and marketing director at Versatile Equipment, said: "We are very proud to be appointed as Bobcat's authorised dealer for London and the South East. To meet customer demand, we have complemented our successful track record in the compact market, with strong investment in our facilities both at our headquarters in Borough Green near Sevenoaks in Kent, and at our partner business, Hydraulics Plant Services, in East Grinstead, close to Gatwick Airport. We are looking forward to a long and fruitful relationship with Bobcat, helping to significantly increase the company's share of the construction, rental, landscaping, agriculture, industrial, recycling, waste management and other markets in London and the South East.'

As well as sales of the entire Bobcat range of machines and attachments, Versatile Equipment will be offering a full selection of genuine Bobcat accessories and parts to support both new and existing Bobcat customers in its area. This will be backed up by a stock of both brand new and second hand Bobcat machines for sale. Customers will also benefit from Versatile's onsite service network, covering everything from emergency repairs to routine maintenance.

For general hire and more specialist applications, Versatile Equipment operates a rental fleet of compact loaders and attachments, which is one of the largest in the UK. The company has a team of experts who are on hand to offer customers advice they might need regarding the best machinery to hire for their project. Lee Chater added: "Not only do we offer one of the UK's largest rental fleet of compact loaders, we also have a huge fleet of attachments to increase the versatility of the machines.'





OilQuick updates logo and profile

Recently, and with many not noticing, OilQuick changed its logo and profile in the German speaking market during the autumn. The change is now continuing in other markets. OilQuick marketing manager Johan Lindqvist commented: "The reason for this test was that we wanted to see how the market reacted. But as predicted, it was well received. All reactions were positive and now the change is continuing on other markets all around the world. The old logo has been around for a long time and we thought that it was time to have a

refresh and get a common design language for all our markets. The new profile is contemporary and the logo's minimalistic geometric shapes represent OilQuick's modern, innovative attitude very well. It also conveys our product's stable and high quality position, without being too frilly." OilQuick is currently working on a new website and replacing all other marketing material with the logo and the new profile which are to be rolled out worldwide during Q1 2021.

www.oilquick.com



Doosan launches new DL-7 wheel loader series

The new DL-7 range is the culmination of the first complete redesign of the Doosan wheel loader range in 10 years, with the exterior design, in particular, undergoing a complete transformation. In this first phase of the DL-7 range introduction, seven new models are being launched (DL280-7, DL320-7, DL380-7, DL420-7, DL480-7, DL550-7 and DL580-7) with four more models (DL200-7, DL220-7, DL250-7 and DL420CVT-7) being added in 2021. "Designed from scratch, based upon European customer needs, the new seven wheel loaders will certainly take customer satisfaction to the next level in terms of market leading operator comfort, fuel economy, productivity and durability," says Charlie Park, CEO Doosan Infracore EU.

The new wheel loaders feature the Doosan 'Smart

Touch', an intuitive interface for operation, 'Differential Hydraulic Lock' to maximise the bucket penetration force and an upgraded axle. They also come with an enlarged bucket, reinforced frame, additional counterweights to optimise machine and attachment performance as well as an 'auto detent' and 'kick-out' function.

Other features include enhanced full fender, 'Enhanced Load Isolation System', upgraded damper, five speed transmission with torque convertor lock up, as well as a 'transparent bucket' feature on the monitor for visibility and safety. The wheel loaders also come equipped with the 'Doosan Smart Guidance System', a customised analytical tool to help optimise operation, and Stage V compliant Doosan and Scania engines.



KOMATSU

WWW.KOMATSU.EU

PDi special feature



LP Systems presents its new cannon Demolitor 70. The water pump is submersible and it is integrated into the chassis, which, according to WLP, guarantee high efficiency and smooth functioning at 2.2kW. The new fan designed with side TIPS and a new flow-aligning system guarantee up to 60m of jet with 1kW of installed power, says WLP. The swing is freely programmable covering an arc of 340° and thanks to the release handle it can be rotated manually. The machine is equipped

with one main solenoid valve with an integrated filter, which, according to WLP, is easy to maintain and ensures that the cannon can also be used independently from a water supply through a water tank, without an additional supply pump. Just like all WLP appliances, the D70 is equipped with a radio control for operating from safe distance. The D70 is also available in an approved road version.

In view of the ongoing sanitary emergency, WLP decided to use its know-how to design and produce sanitation machines. This led to the creation of a complete line of cannons called Sanitank 70, Sanitank 300, using its know-how also on the management of high-pressure water and D50BP NCA, using the Demolitor cannons as a base frame. WLP also presents the new Sanigate, a portal to be placed at the entrance of commercial activities, offices, sport centres, hospitals, etc., which, according to WLP, guarantees the complete personal sanitation at each step.

New fog maker from Idrobase

Idrobase Group presents Falco, a new fog maker for air washing. Thanks to the small size of the water droplets (12mcr) it allows reduction of air pollution (PM10 and









PM2.5), dust suppression, odor neutralization, cooling and sanitization.

The most important innovation in Falco is the new 4,3" touch screen. Through the interface it is possible to control, program and record the machine's operation. The brushless motor mechanism, with the automatic movement system of the fan unit, allows to reduce maintenance costs by 80% and to increase trice the lifetime of the product, according to Idrobase. Falco is a fog maker with compact dimensions, 70bar working pressure with a 25m throw, equipped with 30 nozzles and available with 6, 11 and 15l/min flow rates, a rotation angle from 0 to 330°, a manual elevation from -20 to +30°, as well as full SS piping.

Idrobase also brings into play the fog maker Lince Disinfettante, which, according to Idrobase, soon finds wide use in institutional and welfare contexts (schools, kindergartens and administrative offices), but also in recreational sites (such as discos and shops). Lince Disinfettante is a wheeled fog maker of the Idrosan line.

The main advantage of the solution, according to Idrobase, is the power and calibrated size of the machine, so that it can do the job smartly and quickly in public places. Lince Disinfettante can be used both indoors and outdoors, thanks to the 800x650x1200mm (WxDxH) measurements that allow a single operator to manage movement and operation at the same time. The handle bar and the adjustable cannon (+30°) allows the operator to sanitize small and medium-sized environments, such as public and private rooms, and control the considerable volume of nebulization. Ten nozzles nebulize the liquid with a range of 7m in very fine micro-drops of 10mcr at a pressure of 60bar. The 301 tank allows a nebulization of 30min (the flow rate is 11/min). The

result, says Idrobase, is a fine and highly pervasive mist that works non-stop.

The Manual Disinfection Kit allows to dispense disinfectant or other solutions in targeted corners and small areas, through a comfortable lance and two different nozzle holders.

Lince Disinfettante can also be used with two products of the Idrosan line, distributed by Idrobase Group and suitable for the most frequent needs: BKD-Purple (sanitizer in 10l tank) and IdroSafe (disinfectant in 25l tank). Practicality, equipment and options are matched to make Lince Disinfectant the most suitable all-in-one solution to fight threats to health in public places, says Idrobase.

Generac Mobile introduces Power Jet

Generac Mobile has released its latest innovation in the field of portable dust fighters, the Power Jet. The new Power Jet joins the Dust Fighter product line, a series of dust suppression units designed to control and reduce dust and particulate matters in different environments and applications, such as mines, quarries, demolition sites and crushing plants.

The Power Jet has compact dimensions and a manual control panel that, according to Generac, allows the operator to set up and operate the machine in just a few minutes. Power Jet is equipped with an integrated high-pressure pump, able to increase the water pressure up to 75bar. This allows the unit's nozzles to spray a high-pressure flow of fine mist capable of

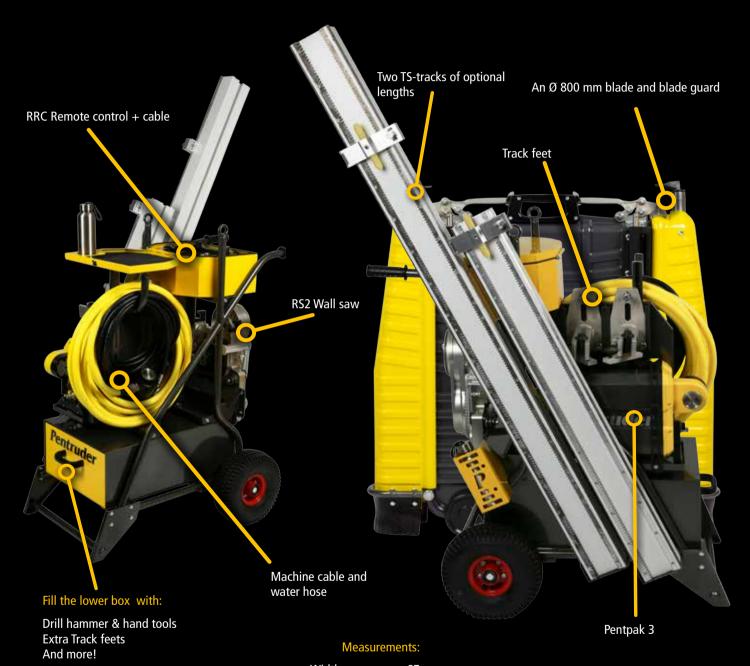
capturing and breaking down dust particles up to 30m, says Generac.

The power needed to operate the pump is provided by an integrated 6.2kW single-phase diesel generator, driven by a Yanmar L100V6 engine (Stage V). The Power Jet has been designed and developed with a built-in off-road portable trolley with two massive wheels and two handles that, thanks to the lightweight of the machine, makes the Power Jet repositionable by a single operator.





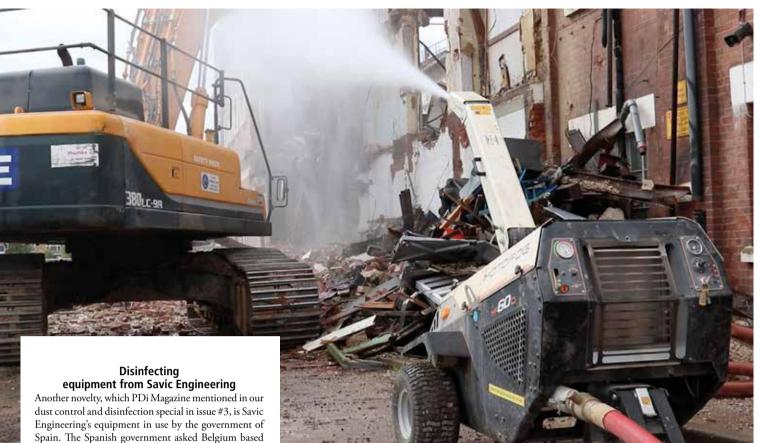
Pentruder® HFTROLLEY



Width: 67 cm
Depth: 98 cm
Height: 117 cm



PDi special feature



Savic Engineering to use its industrial dust suppression and disinfecting equipment to help combat Covid-19. A few days were spent testing the machines on site, approving their use before being put to work. The equipment was deployed on a large scale to thoroughly disinfect spaces destined for the care of Spanish coronavirus patients, with public areas receiving a similar treatment. Savic Engineering's Spanish dealer cooperated closely with the local authorities and the army.

"Our 'Spraystream' machines can generate droplets of water mixed with disinfectant in a highly controlled fashion," says CEO Mirko Savic. "We then use a turbine system to spray this mixture onto surfaces and through the air. The machines are controlled remotely and are suitable for fully autonomous, vehicle mounted operation. This makes it possible to disinfect large areas quickly at the correct flow rate and dosage. Moreover, our system is set up in such a way that we can work very efficiently, without flooding the surroundings with water and with a minimum of workers. We have a large supply of equipment available that is perfectly suited to these tasks with only a few modifications, either indoors or out."

Inmalo adding MB Spray Cannons

Inmalo are constantly adapting to market needs, as UK attachments and Dust Suppression specialists they have recently widened their offering for dust suppression units by adding MB Spray Cannons to their portfolio.

"We now have a combination of the best and most reliable dust suppression systems on the market which provide choice and flexibility when it comes to throw, ease of use and optional extras. With exclusive distribution in the UK for the Motofog and MB Spray Cannon brands, Inmalo have the most comprehensive range available in the UK today.

MB Dust Control has a solution to suit the environment you work in, whether inside or outside. With the largest choice of Spray Cannons in the world for disinfection and suppressing dust / odour our range extends from SC5 (5m) up to the SC150 (150m)", says Charles Polak from Inmalo.

Alongside the MB Cannons the MOTOFOG range of dust control units are going from strength to strength. They are now a common sight on many demolition projects due to the flexibility and manoeuvrability they bring.

Charles Polak says that "The Motofog is still our No. 1 best-seller, our customers appreciate the simplicity of using them, especially without the need for a generator or mains water if you have a tank available.

After having rented Motofog units over the past few years John F Hunt Group Ltd decided to purchase them added 6 Motofogs to their line-up.

We asked Chairman John Hall why he made the investment: "We chose The Motofog units as they provided the most flexible solution for our demolition sites where dust suppression was absolutely essential. A deciding factor was the Motofogs being simple to run and easy to maneuverer on site. Their ability to run off the mains or a tank was also a serious consideration to the site teams. We initially invested in 6 units (2 - MF20D and 4- MF40D) for sites in Kensington, Croydon and on our HS2 project in Euston, where they are not only suppressing the dust, but keeping our clients and stakeholders 100% happy.'

As well as fully supporting sales and servicing, Inmalo also provide a wide range of units within their hire fleet.





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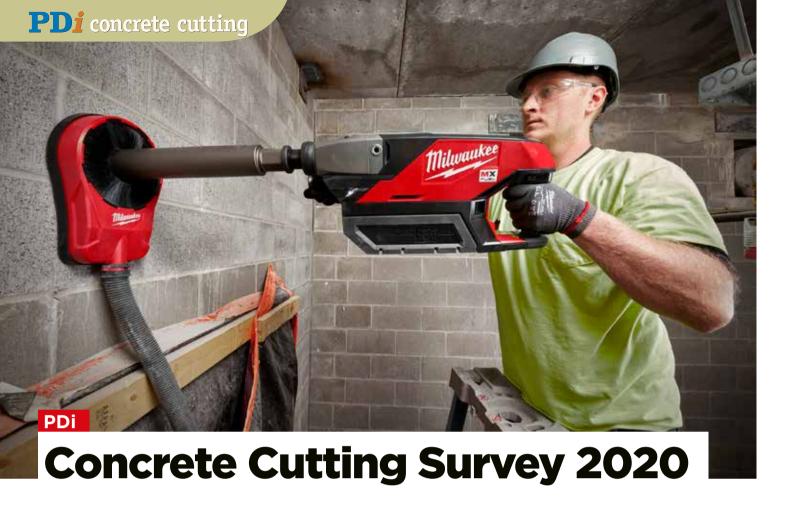












What's the size of our industry? How many professional players does it comprise of? What's forecast for 2021 and 2022? This article and the chart are aimed at providing some guidance in answering these guestions along with the new IACDS Industry Report 2020.

ince the start of PDi, the magazine has published its Concrete Cutting Survey in issue 6 every year, providing an estimated summary of the size of the global concrete sawing and drilling industry. One part of the summary has been based on data coming from the member associations of the international umbrella association, IACDS, with these figures proving to be quite reliable. For other countries and markets that either don't have trade associations in the field of concrete sawing and drilling, or are not members of the IACDS, PDi has estimated the size of the market, how many contractors and other relevant information.

IACDS Industry Report 2020

For the last four or five years, IACDS has not provided an industry report for the member associations. Last time PDi published an estimate of the annual revenue of the global concrete cutting industry was in December 2018. This year however, IACDS have provided a comprehensive industry report which has been used in the PDi survey. The figures provided by IACDS concern current data from the IACDS member associations of Australia, Austria, Germany, Japan, Spain, Sweden, Switzerland,

United Kingdom and United States. Other countries information that we have listed is based on PDi's own estimates; this will hopefully give an idea about the size of the global concrete sawing and drilling industry in 2020.



This year, IACDS has provided an in-depth and comprehensive industry report on the global concrete cutting market based on data from its current member associations. The industry report is free for IACDS members and costs only €100 for non-members and industry professionals, being a valuable source of information, and can be ordered through the IACDS website: www.iacds. org. The report both looks back on the past three years and gives estimates on 2020 revenues and forecasts on 2021 and 2022. The Industry Report is also free for all those who have participated in its elaboration. The idea is to publish it with a constant frequency, so that we can always have that general vision of the industry.

The pandemic has had a major effect on the industry

What can be said in general about the overall development of the market globally is that the Corona-19 pandemic has led to negative figures in terms of both sales of goods and services. These figures range from -3% to over -10% in certain markets when compared with 2019, which saw almost all markets having positive figures ranging between 0.4% to 6.1%. However, the forecast for 2021 is that all markets foresee a 'bounce



Power Input	3200W 220mm		
Cutting Depth			
Blade Diameter	330mm		

Power Input	3200W
Cutting Depth	300mm
Guide Bar Nominal Length	382mm

Power Input	3200W		
Cutting Depth	150mm		
Blade Diameter	405mm		



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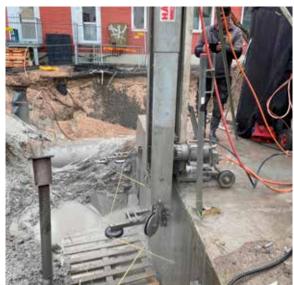
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back', with sales growth being estimated to be between 2% to 7.6%. Also, for 2022 it is believed that there will be further growth, estimated to be between 0.9 to over 5%.

In terms of manufacturing during 2020, there were quite dramatic drops in all markets during the spring, with the lowest figures being reported during the month of April. For some markets the drop has been more severe than for others, but in general, production levels have been picking up for all markets during May, June and July. Things are not quite back to the levels they were at the end of 2019, but are well on the way.

As well as hard performance data, the IACDS Industry Report has also provided other types of interesting information about what services contractors offer and to what extent. General concrete cutting services of

course dominate, with over 50% of contractors stating that they provide these services, but other services are also listed. These include (along with a % figure) such activities as anchoring, concrete scanning, grooving, floor preparation demolition with remote controlled robots, and so forth.

The report also gives information about the percentage of large, medium and small concrete cutting firms there are globally, and at what level most contractors work (i.e. locally, nationally or globally). Also found is a ranking in percentage terms of the turnover of the concrete cutting firms. These are provided in groupings ranging from small companies with a turnover less then €500,000, to large firms with a turnover of over €5M. The report also shows in percentage terms how much of the contractor's services result from regular concrete sawing and drilling.

An interesting chart found in the report is one that shows how concrete cutting firm's business has evolved from 2018 to 2019, showing in percentage terms any reduction or increase in business. A forecast is provided in terms of business prospects, change of workforce, training of staff, investments, utilisation rate of fleet, etc. Overall the report provides a highly valuable source of information whether you are an existing contractor, supplier to the concrete cutting industry, or if you are planning to enter the industry. The charts in the article give an accurate idea of the revenues of the global concrete cutting business, with the figures from IACDS members being highly reliable, although, as stated, the figures for the other countries are estimates by PDi Magazine.

www.iacds.org

Country	Association	Total number	Total number	Total number of	Number of	Average revenue	Estimated	Date Info			
Association	Members	of contractors	of employees	employees in association	manufacturers	company in US\$	total US\$	provided			
Australia	140	825	4500	700	16	1'450'000	427'000'000	2020-12-28			
Austria	66	140	450	250	24	454'000	55'000'000	2020-12-28			
Brazil	0	400	1200	0	10	400'000	160'000'000	2012-03-07			
Canada	28	350	0	0	10	600'000	210'000'000	2012-03-06			
China	0	1'000	1200	0	200	300'000	300'000'000	2012-03-06			
Czech Republic	0	50	200	0	3	500'000	25'000'000	2012-03-06			
Denmark	35	150	450	280	3	600'000	90'000'000	2012-03-07			
France*	35	250	1400	320	12	1'400'000	350'000'000	2011-05-07			
Germany*	713	850	8500	7130	35	977'000	1 142'000'000	2020-12-28			
India	0	700	4300	0	70	400'000	280'000'000	2012-03-08			
Ireland	40	60	180	100	3	300'000	12'000'000	2008-05-03			
Italy	13	200	800	80	12	600,000	120'000'000	2012-03-06			
Japan*	34	1'800	9000	1500	13	730'000	1'618'000'000	2020-12-28			
Korea	0	730	2200	0	40	1'000'000	730'000'000	2005-06-02			
Netherlands	110	400	1200	500	6	500'000	200'000'000	2012-03-06			
New Zealand	40	120	400	120	3	500'000	60'000'000	2005-06-22			
Poland	0	120	600	0	3	400'000	48'000'000	2012-03-06			
Portugal	0	30	150	0	4	300'000	9'000'000	2012-03-06			
Russia	26	500	6000	160	18	355'000	178'000'000	2016-12-31			
Spain*	9	100	300	60	3	500'000	73'000'000	2020-12-28			
Sweden*	85	250	3750	1500	16	1'835'000	366'000'000	2020-12-28			
Switzerland*	110	400	1200	1800	11	1'000'000	400'000'000	2018-12-19			
Thailand	0	70	420	0	8	400'000	28'000'000	2016-12-31			
Turkey	0	80	300	0	6	600'000	48'000'000	2014-06-01			
United Kingdom*	102	195	4200	3500	14	3'900'000	427'500'000	2020-12-28			
United States*	361	19167	300000	2800	84	2'700'000	1'054'000'000	2020-12-28			
	1'982	15'895	352900	20800	627	19'310'000	13'487'250'000				
# Adamshay of the Inter-	# Name has of the International control to the International Control of th										

Member of the international umbrella association IACDS Figures in red are based on pure guesses.



EvoQuip launches the versatile 'Falcon' range

EvoQuip has added the Falcon range of finishing screens to its product portfolio which will consist of the Falcon 1220 and Falcon 1230, providing a solution for scalping, screening and stockpiling in self-contained units.

Both new models are available to order now and will be shipped to customers in early 2021. Barry O'Hare, business line director said, "This enhances the EvoQuip product offering and results in us having a more comprehensive product portfolio that will improve our versatility and make us more competitive in the marketplace. We are confident that these highly aggressive finishing screens will open up new opportunities for EvoQuip custom-

The Falcon Range with its exceptional screen angle range provides efficient classification of fines and is ideal for multiple applications and processing materials including sand and gravel, crushed stone, coal, topsoil and demolition waste. In keeping with the EvoQuip range, both the Falcon 1220 and 1230 are compact, easily transported machines and offer operators rapid set up and tear down times.

The Falcon 1220 features a 3.65m x 1.5m double deck incline screen with remote tipping reject grid, hydraulic screen tensioning of bottom deck and three on board hydraulic folding conveyors as standard, with the option of adding the double deck vibrating grid. The screenbox on the Falcon 1230 features three inclined decks (top and middle deck: 3.66m x 1.52m, bottom deck 3.00m x 1.52m) giving a large screening area of over 50m² to provide efficient, high capacity screening even at small fractions. The fourth product conveyor has variable tilt and side slew to accurately discharge material for recirculation and stockpiling. The screenbox features quick wedge tensioning (top and middle deck), access holes and bottom deck hydraulic tensioning system to reduce time required for mesh changes.

The Falcons come with 'T-Link' telemetry system fitted as standard, providing the customer with real time information on the performance of their machine, meaning effective machine management and maximising uptime.





bauma China final report

PDi Magazine has now received the final update on the outcome of bauma China which was held in November this year. 2,867 exhibitors from 34 countries and regions exhibited with 80,000 visitors from China attending. The show had 300.000 m² of exhibition space and was one of the few 'face to face' trade fairs held in 2020.

After four show days, bauma China 2020 ended on 27 November. Despite the Covid-19 crisis and travel restrictions, the exhibition attracted 2,867 exhibitors and around 80,000 high quality trade visitors. Thanks to a sophisticated safety and hygiene concept, the 10th International Trade Fair for Construction Machinery, Building Material Machines, Mining Machines and Construction Vehicles, was able to be held at the Shanghai New International Expo Centre (SNIEC).

Stefan Rummel, managing director of Messe München GmbH, commented: "The year 2020 was marked by special challenges. But the construction machinery industry and its economy continue to grow while the effects of the epidemic are being warded off. There is far reaching demand for innovative technologies, intelligent and low emission machines, and vehicles with integrated digital solutions. Hand in hand with our partners we therefore made everything possible and provided the industry with a platform even in times of crisis." Xu Jia, chief executive officer of Greater China of Messe Muenchen Shanghai Co., Ltd. expressed her appreciation: "The success of bauma China owes to the great support from our partners, exhibitors and all participants. I am very proud to have such a strong bauma China team, together we overcome any difficulties!"

Considerable international participation

In spite of the circumstances, bauma China was able to retain 300,000m2 of exhibition space, enabling 2,867 exhibitors to present their products and innovations to 80,000 trade visitors. The huge area occupied by international exhibitors such as Caterpillar, Volvo, Bauer, Terex as well as German, Italian and Spanish pavilions, showed the continued international confidence in China's growth and development. Chen Ting, vice president of brand marketing and communications, Volvo Construction Equipment, Asia, commented: "With its professional and careful organisation, rich and diverse exhibit range, and digital communication network,

bauma China has become an important promotional opportunity that construction machinery companies do not want to miss."

Bin Qi, regional director, Eastern, Northern & Western China from Terex (Changzhou) Machinery Co., Ltd. Shanghai, added: "In this special time, the successful opening of bauma China has brought confidence to the industry, manufacturers, investors, and all those who are concerned about the construction machinery industry. The results exceed our expectations, and the visitors are highly professional." In addition to international companies, Chinese manufacturers XCMG, Sany, Zoomlion, Shangdon Lingong, Zhejiang Dingli also exhibited, increasing their presence at the show.

In addition to the on-site event, bauma China offered a range of online opportunities, especially for international participants who could not travel to China. Via the online platform 'bauma China Community', participants could search for exhibitors, exchange company information, get to know products, participate in events digitally and thus gain new market insights. Exhibitors and visitors had the opportunity to communicate via live chats or video conferencing. According to the statistics, this experienced over 1M online visitors.

Rainer Hirsch, a board member of Herrenknecht AG was impressed by this newly launched service: "bauma China provided the online platform to build a communication and interaction bridge that breaks the limit of time and space between exhibitors and participants who are not able to visit the on-site event. The combination of offline and online greatly facilitates communication and helps to achieve cooperation deals." The bauma China Community and platform, including live chat and business matching functions, remained available online until 12 December 2020.

The next bauma China will take place at the Shanghai New International Expo Centre from 22 to 25 November 2022.

www.bauma-china.com



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Kemroc EK 100 chain 🖺 cutter for high speed trenching

Under normal circumstances, the Bavarian company Verbautec relies on their own excavator with hydraulic quick coupler and specialist attachments for trenching projects. However, for a project in the city of Furth, Bavaria, the company rented a Kemroc EK 100 chain cutter as the trenching tool of choice.

The core competencies of Verbautec, a company based in Oberhaching, Bavaria, includes the design, installation and supply of shoring systems. As an additional service to its customers, it also offers a contracting service which allows the delivery of a fully finished product. Using its operator and excavator package, the company excavates starts and targets pits for boreholes, excavates foundations or undertakes trenching work. A dedicated range of attachments ensure efficient, cost effective results.

In October 2020, Marcel Zipfel, the plant and site manager for Verbautec, was given a week to excavate a 400m long service trench required for the construction of a new exhibition hall near the city of Furth. It was decided to rent a Kemroc EK 100_700 chain cutter attachment for use with a 30t excavator, with the attachment being needed since the ground along the length of the trench had recently been stabilised with an 800mm deep layer of lime.

Chain cutters from Kemroc have a chain fitted with tungsten carbide tipped picks running between two cutter drums. This allows trenches to be excavated as wide as necessary and as narrow as possible, without costly overcutting which can result from having to swing



traditional drum cutters sideways during operation. At the same time, chain cutters are powerful enough to penetrate solid rock. For Verbautec, the lime stabilised soil offered little resistance to the rental attachment used on the trenching project at Furth.

Marcel Zipfel estimated that during the one week long project, the actual cutting time for the attachment amounted to approximately 8h. In between, the fully hydraulic quick exchange coupler was often in use, changing attachments between the chain cutter, the bucket and a compacter. The process for completion of the project was to excavate a length of trench, lay the pipework, then backfill and compact before repeating the process for the next section of trench. One of the main advantages of using the chain cutter in this process

was, according to Marcel Zipfel, "The excavated material was so finely grained that we could use it as backfill after laying the pipes, without any additional processing or transportation."

The specialists from Verbautec are continuously on the road with their fleet of equipment, traveling from job site to job site. However, they do not need a chain cutter attachment every day, so for the project in Furth, the attachment was rented at short notice from B.I.V. Located in the town of Bindlach, B.I.V. is a construction equipment company and a dealer for equipment from Kemroc, having several customers in the states of Saxonia, Thuringia and Northern Bavaria. Kemroc chain cutter attachments have proved the ideal solution for trenching and pipeline applications, especially when rock is hit unexpectedly.



Reston Waste Management will be celebrating its 20th anniversary next year, marking the event with a new Hyundai HL940A loading shovel.

Andrew Reston invested in his first Hyundai machine, a 14t HX140LC in 2018, proving to be a sound investment for the company. "We purchased our first Hyundai two years ago from Hyundai dealer Ernest Doe. We opted for the Hyundai brand as we had heard that they were very good, solid, and reliable machines.

We were getting a poor service from our existing brand of machine and very little support from the dealer, so it was a good time to renew our construction equipment fleet. We have since bought another three Hyundai machines from Ernest Doe, the latest being the brand new HL940A loading shovel which is an excellent machine. Ernest Doe have been fantastic and we have a great relationship with both service and sales. We are already looking at purchasing another two Hyundai's next year."

Reston Waste's HL940A was ordered with extra features to cope in the harsh conditions of a waste recycling facility, including bolt on demolition cab guards and front light and suppression guarding. An automatic fire suppression system was also included as well as an 'AAVM' camera which allows a full 360° view of outside the cab, which is essential when working in a potentially hazardous environment. Jason Bosdet, Reston Waste's assistant transfer station manager gave the new loader a glowing report. "The Hyundai loading shovel is an excellent machine and it really stands up to the tough waste environment where it has to handle unstable loads and unstable underfoot conditions. It's also proved to be fuel efficient, which for such a powerful machine, is impressive! It's certainly the best model of loader we have owned and I have operated a number of different brands."

'We can't fault any of the Hyundai machines in our fleet; they rarely have any issues and there is very little downtime. Also, should there be an issue, the Ernest Doe plant service engineers are with us the next day. I can't recommend Ernest Doe enough and the company is by far the best plant dealer we have worked with." As the company prepares for its 20th anniversary, Andrew Reston has committed to a €1.3M investment in a new fleet of Hyundai Construction Equipment to help support future growth.



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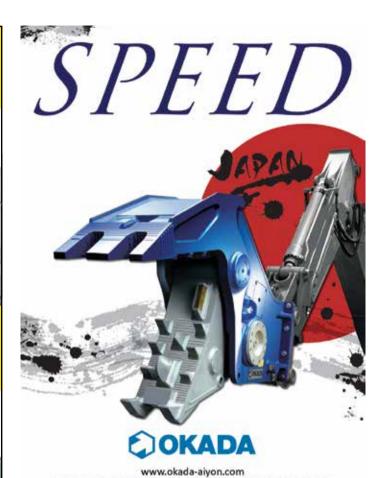
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At the beginning of next year, Arjes GmbH will present a strategic reorientation and divide its double shaft shredders into three basic product lines. These will consist of: 'Impaktor-Arjes Compact class': 'Ekomaxx-Aries Intermediate Class' and 'Titan-Aries Heavy Duty Class'.

he mobile 'Impaktor250evo' double shaft shredder has gained international recognition since its launch, now being considered an essential tool for many small to medium sized companies within the demolition and processing industry. The extremely flexible and robust shredder features a unique combination of track system and hook lift version, a revolutionary shaft quick change system, an innovative 'SCU' control and a shaft design that extends the machine's range of applications. In addition to numerous applications for construction and demolition waste, the mobile and stationary shredders making up the company's 'Compact Class' are also suitable for processing railway sleepers, rootstocks, old and trunk wood, tyres, household and commercial waste and many other applications.

Ekomaxx

The new Ekomaxx product line will replace the VZ750 D/DK and VZ 850 D/DK series pre shredders in the first half of 2021. The main reasons for this decision was due to technological advances that could not be further implemented in the design of the machines, as they would be too complex or too expensive. In the Arjes 'Intermediate Class', the concept of economic sustainability is the main focus in the development, with the goal being clearly defined as 'to achieve an ideal cost efficiency ratio for the maximum benefit of our customers and users'.

Under the name 'Ekomaxx800', the first machine in this product line will be equipped with the same features that are already standard with the Impaktor and 'Titan'. These include a standard track system, revo-

lutionary quick exchange system for shafts, an innovative SCU control system and a paddle shaft design that ensures long operational lifetime and durability. Demand for the new Arjes concept has increased within its price range in recent months as the Ekomaxx800 main applications include the processing of green waste, waste wood and root wood, as well as in the treatment of household, commercial and bulky waste. The shredding of old tyres, paper and cardboard are also not a problem with this machine.

The key differences that make the Ekomaxx800 a more efficient and economical machine than its predecessor (VZ850 D/DK) are self-evident. They include a smaller engine with emission Stage V, an optimised and more powerful hydraulic system, a reduced total weight, lower acquisition costs and more equipment fitted as standard. "Our aim is to develop a shredder which is in the price range of a VZ 750 D/DK, but has the performance of a VZ850 D/DK. The machine is currently still in the final phase of development and is undergoing the appropriate test runs. However, in the first half of 2021 the newly developed Ekomaxx800 double shaft shredder will be available to all users, with

INCORRECT INFORMATION ABOUT ARJES PRODUCTS IN PDI 5-2020 NOW RECTIFIED

In PDi Magazine issue 5-2020, the magazine accidently published incorrect information about the Arjes VZ850. The magazine stated that the VZ850 is a new product, which is not correct. The information has been removed from our internet site: www.pdworld.com but still unfortunately appears in our printed magazine. However, we are now happy to publish the correct information from Arjes.



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the focus on optimum efficiency, and will conquer the recycling market with its innovations," said company managing director Thomas Hayn and technical director Norbert Hammel.

Titan

Arjes' Titan stands for strength, reliability and durability, with these characteristics being key in the development of the 'Heavy Duty' class double shaft shredders (for reference, the 'Titan950' was previously known as the 'VZ 950Titan'). From the second half of 2021, the 16l stage II engine of the Titian950 will be replaced by a 13l stage V engine, which delivers at least the same throughput capacity. A more compact version, the Titan900, is set to be introduced in the second half of 2021.

In order to provide high levels of functionality over a wide range of applications with the best results, the mobile shredders are equipped with a track system as standard and are available in two different sizes. All Titan shredders feature Arjes' shaft quick change system, the innovative SCU control and a shaft design that is designed to meet the most difficult requirements. The Titan is ideally suited for various applications within the construction and demolition industry, including shredding light metal, car bodies, truck and tractor tyres, processing of household and commercial waste as well as for use in composting and wood processing plants.

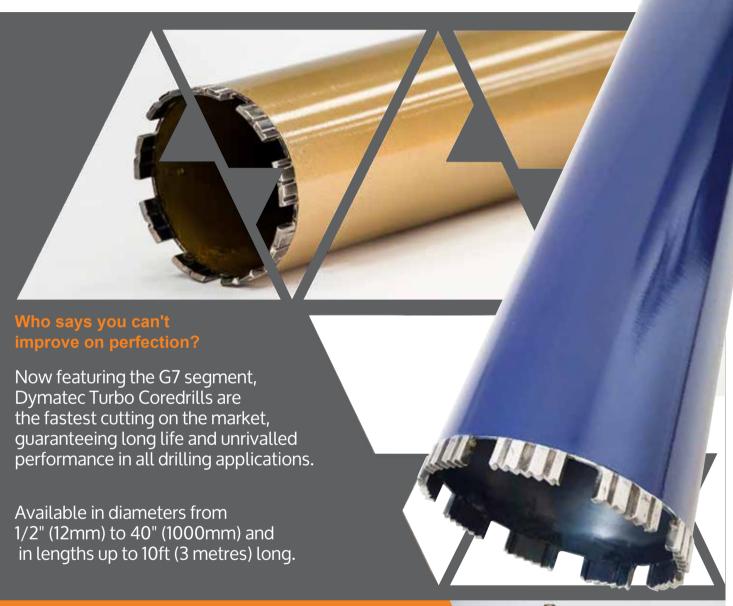
With the increasing importance of renewable energy sources, the use of electric shredders is also becom-

ing more and more popular. For customers with special requirements regarding exhaust and noise emissions, a stationary electrical version has been developed, the 'Arjes-Pu'. These are designed to be energy saving and efficient for the user as they can be used for shredding the most difficult materials with considerably less maintenance. Within the Impaktor and Titan lines, these are already standard, but an electric power unit version is also being developed for the Ekomaxx line.

From 2021 onwards, all Arjes machines will only be equipped with an asynchronous drive and intelligent control system for the shredding shafts, which is set to deliver user friendly and uncomplicated operations by remote control.

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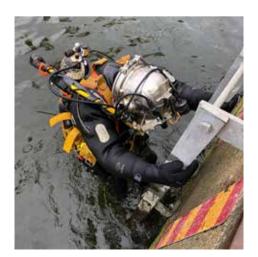
Specialist concrete cutter company RPP Dive AB possesses a unique level of competence for concrete cutting projects below the water surface, which is combined with concrete cutting equipment from Pentruder and support from Pentruder's dealer SDC (Swedish Diamond Tool Consulting).

ust over four years ago, Rickard Persson and Johannes Hjelm decided that it was time for them to combine forces and work together. Their friendship started during their teenage years when they went to a diving school in Olso, Norway in 2010 and 2011. After working a few years in the diving business, working four to six intensive working weeks in a row in Norway and one to two free weeks at home doing concrete cutting on dry land, they decided it was time to return to Sweden for good to work in the concrete cutting industry. It was then they decided to start up the company RPP Dive. "For us, diving competence is the foundation of the company. Both me and Johannes have a background in concrete cutting services. Making us available both above and below the water surface, and especially with wire sawing under water, has made us specialists in our field. We want to be able to offer our customers complete solutions for the construction jobs we undertake," says Rickard Persson.

A unique combination

RPP Dive is one of very few companies in Sweden, and probably in the whole world, that can offer both professional diving and concrete cutting at the same time. At present, four of its 12 employees are certified scuba divers. In a diving team there are always three people: a diver underwater, a dive attendant and a dive leader.

"In addition to diving and concrete cutting, we also offer services in hard rock and gradually we also work making concrete foundations. Having these four legs to stand on has been both a success factor and also a security for us. All of our divers are trained and certified in scuba diving for craftsmen in Norway. Even though



underwater work is our specialist competence, we of course undertake regular concrete cutting jobs on dry land as well," Rickard continues.

The choice of Pentruder equipment was obvious

The lake Mälar project at the Södertälje channel that leads out into the Baltic Sea became one of RPP's major projects during the company's start up. Unfortunately, this project received some criticism in the media, but none of this has been linked to the assignment RPP performed. A number of concrete foundations located out in the water that protect the bridge and leads ships into the fairway needed to be cut off. "It was for the Mälar project that we bought our first Pentruder equipment. We needed a really flexible and light weight wire saw that still had a good capacity and then the choice was quite obvious. The 3P8 (from Pentruder) greatly facilitated this project and it had to work for several hours during the year that the project took to complete. In the final stages of the Mälar project, we were also hired as subcontractors to help with all concrete cutting and drilling in connection with the large demolition project Slussen in the centre of Stockholm," says Rickard.

RPP Dive is now a loyal Pentruder customer with the knowledge to utilise the machines' capacity and modularity to the maximum. At present, they have

PDi reports







three complete wall saw packages with complementary wire saw units, two MDU drilling systems and an MD1 drilling machine. "There are many things that made us choose Pentruder. Some of the reasons are that it is made in Sweden and maintains a high quality with smart solutions in that it can be supplemented with different units. In addition to our machine packages, we have various extra solutions such as protractors, stich drilling rigs and more. For us, the relationship and support from our suppliers is incredibly important, and Ante Larsson at SDC in Stockholm is a star that contributes to us preferring Pentruder," says Rickard.

Advanced bridge renovation in the south west of Sweden

With Corona-19 making 2020 a difficult year, RPP Dive has fortunately performed well, with its 12 employees working on various projects. One such job during the autumn of 2020 was a major bridge renovation in Tollered, close to Gotheburg, where the middle joint of a bridge had to be cut to be able to bring the bridge together. The project went through the demolition contractor, Jansson Entreprenad and the construction company PEAB. For this job a Pentruder 8-20iQ, 27kW was used. The challenge on the project was to cut along a length of 150m to a 920mm depth at a 45° angle. The team on site consisted of Kristoffer Elfsström and Jens

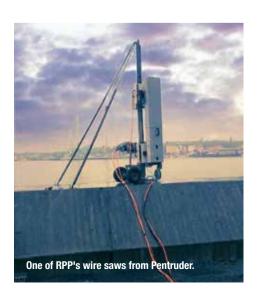
Karlsson who took almost a month to complete the job. Due to oblique sawing on the bridge where both the traffic ran in parallel and the carriage work being in progress, there was a lot of vibration that caused some jams, especially when sawing the deepest cuts with the Ø 2000 blade. Everything however was solved and the schedule was not affected. After the sawing, the project also included additional drilling for reinforcement for the new bridge parts, as the drill joint would eventually be joined together for the new bridge to be built.

The future plan for RPP

The future plan for the company is to continue to grow and expand. Although RPP is basically Stockholm based, the plan is to establish an operation for the western region of Sweden due to the great demand for the company's subcontractor services in and around Gothenburg. "Even though we of course do regular concrete cutting assignments, we of course want to invest in our special competence, which we are relatively alone to do. Therefore, an investment by dividing us in two subsidiaries feels just right. I take care of eastern region and the Stockholm area while Johannes, who lives in Lidköping, focuses on the west region and the Gothenburg area. Then it's just guessing and hoping that the world returns to a normal state after this strange pandemic," concludes Rickard Persson. And who knows

that this could just be the start, as maybe RPP Dive's special diving and concrete cutting services are needed throughout the world.

www.rppdyk.se www.pentruder.se







CONTROLLED DEMOLITION • REINFORCED CONCRETE CUTTING • MAKING THE AQ DEMOLITION SERIES THE ULTIMATE ATTACHMENT



Epiroc and Erkat deliver high performance

During the demolition in Siegen, a deep bunker from the 1930s had to be demolished in order to carry out the planned development with commercial and residential units on a site of around 4,000 m² in the middle of the city centre. The 75 year old Siegen based construction company, Otto Quast, took on the sometimes challenging demolition of reinforced concrete walls of almost 2m, trusting Epiroc and Erkat equipment. The latter's robust, high quality drum cutters are known for their efficient, yet very low vibration and quiet operation, attributes which were essential due to the central location near the Siegen bus and train stations which are also surrounded by apartments and commercial areas.

The demolition of the underground bunker system made of reinforced concrete, comprised of a total of 2,300m³ of area, and had to be carried out in separate construction phases, with Epiroc and Erkat equipment being involved in each and every one of them over a working period of around six weeks. In order to weaken the ceiling and wall structure, ER 1500 and ER 2000 transverse drum cutters mounted on Liebherr 946 and Komatsu PC240 excavators reduced 1.8m material down to 1m. Despite this taxing and demanding work, low vibration and low noise were essential at all times, with integrated water spraying equipment also ensuring dust binding whilst providing protection from airborne particles.

The demolition of the weakened bunker structure was then carried out by the new Epiroc CB 4500 'concrete buster', which made a short work of the walls with its jaw width of approx. 1.4m. The HB 3100 hydraulic breaker was then successfully used for the final demolition of the base plate. For final clean-up work, a BP 3050 R 'bulk pulveriser' carried out the additional reduction of the construction waste, while a HM 2000 F magnet took over removing metal components.

The bunker demolition work demonstrated the attributes of the Epiroc and Erkat products and showed why the high quality drum cutter units are often better suited than any other attachment tool for such demanding demolition work in sensitive areas, with performance, reliability and quality speaking for themselves. Minimal maintenance, quick pick changes and cutting heads with replaceable wear parts prolong service life and help to keep operating costs low. Furthermore during the demolition Epiroc and Erkat supported Quast's operations, helping to select the right equipment and coordinate work.

Easy handling and compact design crucial for new crusher in China

Since the summer, a Rockster R1100DS impact crusher has been used as a contract crusher by Kebao Construction Machinery Leasing in Chongging, China. The company, from Wanzhou, has been active in construction machinery rental for 10 years and has grown steadily, growing to understand the requirements of its customers, now offering a wide range of construction machinery including a jaw crusher and a scalping screen.

For Kebao CEO, Ran Maohe, its newly acquired crusher had to be easy to transport, reliable and ready to use quickly. "Thanks to the compactness of our new R1100DS impact crusher we are able to transport the machine, including the screening system, over our winding mountain roads using an ordinary flatbed truck. The crusher set up time is extremely short due to the saved settings. Our machine operators are also able to operate the crusher very quickly thanks to the intuitive and simple handling. We only rent our machinery with our own trained staff, which of course benefits the efficiency and longevity of our machines."

Hydrostatic drive

The fact that the hydrostatically driven crusher is extremely easy to handle was another important point for Ran Maohe when choosing the Rockster. "My operators are familiar with this kind of drive system from our excavators and wheel loaders; they are very familiar with hydraulic systems. I particularly like the crusher overload protection." Furthermore, the pressure of the hydrostat adapts to the power requirement of the crusher. This means that there are no blockages due to a lack of drive force and the crushing performance is consistently high, enabling the new crusher to prove itself even on hard granite, dealing with 40,000t of such

material per month. "At the moment we are mainly crushing very hard granite, basalt and also sandstone. The materials come from the surrounding quarries and are processed to -32mm and further screened down to -5mm, 5mm-10mm and 10mm-32mm. We obtain three perfectly defined product sizes with excellent quality. Our customers are extremely satisfied," said Maohe.

Expansion of application areas

The new Rockster crusher has not only been used for processing natural stone, but also for recycling demolition debris. "In recent years, China has generated more than 1.5Bt of construction and demolition waste annually, with a recycling rate still below 5%. By recycling with a crusher like our R1100DS, most of this construction debris could be reused, the positive effect on the environment and economy would be enormous," says Ran Maohe. He also emphasised his plans to additionally specialise in the production of waterproof substructure materials. "Relevant departments of the Chinese government have passed laws that require construction waste to be properly processed so that it can then be used as recycled building materials, mainly for substructure projects. This is our great opportunity to contribute to our land as owners of such an efficient, productive and cost effective crushing plant."





RSS-SERIES

ENORMOUS CUTTING POWER AND RAPID CYCLE TIMES GUARANTEE INCREDIBLE PRODUCTIVITY

- Power
 Improved hydraulic
 infrastructure, no power gets lost
- Material
 Built of high performance
 structural steel
- Convenience
 Unique pivot group and jaw alignment, longer lasting
- Modern

 Most productive shear with low fuel consumption available on the market





ShoreTrench expands with new Bobcat E45 mini excavator

ShoreTrench, the developer of the UK's first range of preassembled trench shoring systems and a subsidiary of Secure Ground Solutions Ltd, has purchased a new Bobcat E45 mini excavator, the first in the UK to be equipped with the Bobcat 'Depth Check' system.

With over 35 years' experience in the construction and groundworks industry, ShoreTrench founder and CEO, Glenn Molyneux, knows all too well the problems associated with trench excavations. Such experience led to the development of his company's revolutionary 'ShoreTrench' range of trench support and protection systems to enhance the safety and productivity of all aspects of trench shoring activity. Glenn Molyneux commented: "Our ShoreTrench systems are the UK's first preassembled trench shoring systems, providing an immediate support solution for an excavated trench

and removing the risk of collapse. We are continuously developing the ShoreTrench range to meet increasing sizes and complexities of trenches. We have used Bobcat E10z and E26 mini excavators in our early product development and the arrival of the new E45 model will help us to develop new and innovative products."

As well as demonstrating the latest generation of ShoreTrench systems, the new E45 mini excavator is the first Bobcat mini excavator in the UK to feature the company's Depth Check system. The latter provides an electronic depth gauge that allows the operator to dig to a depth without requiring an engineer with a laser setting the line, making site operations more efficient and reducing the need for additional personnel. The Depth Check system utilises three sensors, one on the bucket, one on the arm and one on the base of the boom. All

three sensors read the exact position of the attachment, boom and arm and constantly send and process data to the control panel that shows on the Bobcat 'Deluxe Display Screen' in the cab of the E45. The processed information gives the operator visual and audible signals to guide them to either sustain or achieve a desired dig depth or grade. The system is efficient and easy to use. It is a Bobcat dealer installed accessory for select Bobcat mini excavators (namely the E34 through E85 models) with 'deluxe' instrumentation. It is compatible with both the standard arm and long arm configurations of Bobcat mini excavators.

The many uses for the system include trenching utility lines; placing drainage ditches; digging basements; installing sewer lines and drain fields and preparing sites for footings or pads. Glenn Molyneux said: "Our ambition is to make all trench shoring activity safer, more productive and more efficient and using the Bobcat E45 will help us to achieve that. Working with Norwest Plant and Bobcat is helping us to continue to develop innovative solutions for the construction and engineering industry." Comprising of the 'Foundation Unit Trench Support', 'Drive Over Trench Support' and 'Personnel Access Trench Support', the products in the ShoreTrench range all include a patented interlocking mechanism, which is fast to position using a mini excavator, and requires no initial assembly and no manual lifting, as well as a variety of additional features.

Electro hydraulic solution improves fuel efficiency in construction equipment

Volvo Construction Equipment and Finland's Norrhydro have developed a digital hydraulic actuator that increases productivity while radically cutting fuel bills and CO2 emissions in construction applications. If widely adopted, it could help the industry meet its sustainability goals while at the same time improving machine performance.

Volvo Construction Equipment (Volvo CE) is committed to a sustainable future to be achieved through internal developments and external partnerships. As part of this strategy, Volvo CE, in cooperation with Finland's Norrhydro, is developing a new technology that is set to revolutionise machine hydraulic performance. When commercialised, the potential customer and climate benefits are expected to be radical, with machine fuel efficiency significantly increased and CO2 emissions being cut. While the full details of the revolutionary technology are closely guarded, the Norrhydro patented system, 'NorrDigi', uses a multi chamber digital hydraulic actuator that improves system efficiency meaning that much of a machine's hydraulic system can be discarded or downsized. It removes the need for a main control valve - the heart of a traditional hydraulic system - along with excessive pump capacity, piping and hoses. It also uses less energy and offers the prospect for downsizing the engine capacity.

Removing the need for a main control valve

The ongoing validations of the solution have demonstrated both efficiency improvement and increased machine productivity. With carbon dioxide emissions reduced, it makes a radical cut in the machine's carbon footprint. Volvo CE and Norrhydro have signed a multi-year agreement where Volvo CE will continue to develop the technology in partnership with Norrhydro, and subsequently aim for first mover advantage. Volvo CE has exclusive rights to its use in its products during the development process.

Smart cylinders

Unlike traditional cylinders with two chambers - one pushing, one pulling - the digital hydraulic actuator uses four chambers that can be connected in up to 16 different permutations, depending on the load required by the desired operation. "It's a bit like a 16 speed linear transmission," says Peter Stambro, vice president business development at Norrhydro. "Multi chamber cylinders have been around for a while, but what makes our ones exceptional is the way they have been combined with advanced electronic control systems, whose complex algorithms and computational speed allow for instant response, but using only a fraction of the energy for the same machine manoeuvre or action compared to a traditional system."

This is a prime example of how partnerships with outside experts can accelerate our own sustainability journey through technical innovation," says Thomas Bitter, head of technology at Volvo CE. "In research so far, the system shows greatest benefits in larger machines;



in the case of excavators, those 30t and above. However, in the future, the technology could also be used in electric machines, where its much greater hydraulic system efficiency would effectively extend the battery life and operating window," concludes Bitter.

Entering field test phase

With a Volvo EC300E 30t excavator as a test bed, the revolutionary technology has passed its initial proof of concept phase and durability tests, and is now moving to a field test period, where prototypes are used in real world applications by selected customer partners. It is forecast that the revolutionary system will be offered on the company's excavators by 2024 at the latest. "The ability to develop this radical technology in partnership with a leading player in the construction equipment industry offers many advantages, including accelerating the time to market for commercialised products," says Yrjö Trög, CEO of Norrhydro. "We will invest in a new multi-million euro world class manufacturing facility in support of the launch, and I look forward to the market introduction of the NorrDigi system together with Volvo CE."





DST 10-CA electric wall saw



DD 350/DD 500 coring system



DST 20-CA electric wall saw



DSW 1510-CA electric wire saw

CutAssist the electronic assistant raising your sawing productivity is now available for all sawing applications. The new DSW 1510-CA electric wire saw with automatic wire tension and power control brings you new found freedom thanks to wireless remote control.











DEMAREC BUILDS ON THE SUCCESS OF THE **DXS RANGE**

Following up on the success of the DXS-40 and DXS-50 models (over 40 units sold in Europe and North America so far), Netherlands based attachment specialist Demarec has added two new models to its DXS range of scrap shears. These comprise of the DXS-60 suitable for 30t-50t carriers (in boom mounted configuration) and 50t-70t (in stick mounted configuration); and the DXS-70 which fits 32t-65t and 60t-80t machines respectively. Featuring a 'Dema-Power' 2.0 cylinder with four pressure chambers, the shears boast a 25% increase in power while a double acting speed valve ensures very fast cycle times. Currently comprising four sizes, the DXS range will be further expanded in the short term to include the DXS-80 and DXS-90 models.

www.demarec.com

ROTAR UPDATES ITS

This year another Dutch major, Rotar, has updated its range of mobile scrap shears with a host of new features. The fully enclosed piercing tip has been redesigned into a three bolt assembly, whilst new blades have been positioned more securely. The replaceable piercing tip is now bolted, which is a significant improvement over the conventional welded type. After an extensive testing program that went on for over two years, Rotar is now absolutely convinced that the three bolt assembly is what demolition and scrap processing professionals prefer.

www.rotar.com





TREVI BENNE HAS 14 MARILYNS' TO OFFER

Trevi Benne is another Italian heavyweight that attaches great importance to the scrap recycling business. Its 'Marilyn' CS series of mobile shears includes 14 models, from the tiny 300kg CS 03R to the massive CS 200RS, weighing almost 20t. Such an extensive portfolio of attachments allows the Italian manufacturer to offer its customers a suitable model for any base machine in the range of 1.5t to 300t. All Marilyn models bear the classic hallmarks of a modern high performance shear: a cylinder completely protected by the frame, speed valve, pin adjustment system to prevent jamming and reversible and adjustable blades for highly productive and low maintenance operation.

www.trevibenne.it



HATCON (Hydraulic Attachment Tools Connectivity) enables next level fleet management by monitoring operating hours, location and service intervals of your tools. By logging in to My Epiroc, on either your computer or phone, you'll have access to all your data and get notifications when it's time for service. HATCON is available factory mounted or as a retrofit kit for premium range breakers and



drum cutters.



MANTOVANIBENNE'S SOARING 'EAGLE'

Mantovanibenne's proven Eagle series of rotating scrap shears currently includes 12 models, ranging from the smallest SH25R (380kg) all the way to the biggest SH200R, which weighs over 20t and can only be handled by 170t to 200t machines. The shears come packed with an array of special features for efficient scrap metal processing, including the reversed cylinder being shaped to maximise structural strength. The mouth's design allows the movable jaw to exert the maximum force on a reduced surface area, with the trapezoidal blades improving mechanical stress resistance and can be used on three sides before replacement. The piercing tip and frontal blade are interchangeable and ensure high piercing and penetration power while protecting the metal structure from wear. The dual adjustable guide makes it possible to maintain the correct alignment between the movable jaw and fixed body. The patented 'Manto-Autolube' system keeps the tool constantly lubricated, minimising the need for maintenance.

www.mantovanibenne.com

SMALL INDECO SHEAR DOING A GREAT JOB OUTSIDE BOLOGNA

An Indeco ISS 10/20 shear is being used to dismantle two turbo compressors at a major natural gas storage facility in Minerbio, just outside Bologna. The project is being carried out by Stogit, a subsidiary of the Snam Group - one of the world's leading energy infrastructure operators. Stogit manages nine natural gas facilities in Italy, placing particular importance on the safety and efficiency of its operations. When the Minerbio site came up for renovation, the project was divided into three stages: the first stage, which is currently underway, involves extensive site preparation work which, in turn, means the demolition of all aboveground structures, piping and the reinforced concrete foundations of the two turbo compressors that had reached the end of their service life. Stogit assigned the task of dismantling the compressors to Sicilsaldo/Nuova Ghizzoni, a contractor specialised in construction of gas pipelines and plants with a strong domestic and international track record.

Sicilsaldo/Nuova Ghizzoni is currently part of the consortium undertaking the construction of the TAP (Trans Adriatic Pipeline) pipeline that will cross the Adriatic to bring natural gas from the Caspian Sea to Italy. Sicilsaldo/Nuova Ghizzoni is renowned for its experience and highly skilled staff with a vast machinery fleet comprising of hundreds of units at its disposal. For this particular job, the contractor decided to augment its arsenal further with an Indeco ISS 10/20 shear. With an operating weight of 2.4t and maximum clamping force at the tip of 120t, the shear boasts an outstanding power to weight ratio. Construction site manager Luca Di Vita, who represents the company at Stogit, says that the size

and power of the attachment were decisive factors. "The choice of a relatively small shear was prompted by the need to operate within confined areas. A larger shear would have implied using a bigger excavator, which would have compromised the mobility and, eventually, the productivity. The high concentration of service roads and footpaths at the site also limited the space availability. Even though the ISS 10/20 appeared somewhat undersized compared to the massive structural elements it was cutting, the shear demonstrated an exceptional productivity. This allowed us to reduce the amount of manual labour, which significantly increased the speed and particularly the safety of the demolition process."

www.indeco.it





GENESIS ATTACHMENTS EXTENDS 'RAZER X' MULTI JAW DEMOLITION SERIES

At the end of 2020, US based Genesis Attachments announced the launch of the new GRX 295 - the second model in the award winning Razer X multi jaw demolition series. Designed for 30t excavators and featuring jaw change outs in under two minutes with the excavator operator staying in the cab, the GRX 295 is available with shear, cracker or pulveriser jaws. Jaw openings range from 510mm for the shear jaw to 970mm for the cracker and pulveriser. Jaw depths are 510mm, 810mm and 760mm for the shear, cracker and pulveriser jaws respectively. The GRX's short, flattop head with bolt on bracket shortens the centre of gravity, making it easy to change mounting for different carriers. The heavy duty pivot design is integral to the jaw set, providing a power curve to match each jaw's primary application and versatility for concrete and structural steel recycling, C&D processing, and general and bridge demolition.

www.genesisattachments.com





Flush cutting walls and roadside kerbs with the Lissmac 'Compactcut' 900 P/T

The technology used with the Compactcut 900 P/T optimises efficiency removing the problems of dealing with the extraction and cost intensive disposal of cutting slurries as the specially equipped floor saw works using the dry cutting process. It cuts ready to cast joints and has a highly efficient dust extraction system, being designed for cutting flush with walls and kerbs.

The Compactcut900 P/T is a special design for producing joints using dry cutting being able to cut ready cast joints with a depth of up to 125mm in one step. It is ideal for renovation tasks, for producing connection and expansion joints, and on construction sites where space is at a premium, the operator can control and guide it by easily adjusting the steering knuckle.

Vertical cutting in accordance with ZTV Fug-STB 15

A'flush cut' blade guard allows true vertical cutting, as prescribed in the ZTV Fug standard. This is enabled by the specially shaped suction blade guard, which is a central component of the integrated 'Vacuum-Dry'100 dry extraction system. This closed extraction system delivers dust free dry cutting, which not only saves time, but also promotes the occupational health and safety of the operator and of the entire team on the construction site. A clearly organised control panel and

height adjustable handles are likewise user friendly. The robust hydrostat is activated with a sensitive response drive lever that ensures uniform, controlled machine guidance. The ergonomically positioned steering wheel enables precise correction when cutting, as well as fast change of direction and prompt transfer manoeuvres without a major expenditure of force.

Extra hard

The torsion resistant sheet steel frame construction is designed for many years of demanding continuous use as well as accommodating practical daily use. Through the optimally placed drive unit, Lissmac designers have ensured easy access to the air and fuel filters, battery and oil, which facilitates daily inspection and maintenance tasks. All components are arranged to ensure a centre of gravity that is as low as possible enabling a precise saw cut. The Vanguard 2-cylinder gasoline motor provides 26kW and accelerates dry cutting blades up to 400mm in diameter to 2,130rpm. This rotational speed ensures optimal sawing progress. Seven robust high performance V-belts reliably transfer the motor power to the saw blade. The electro hydraulic cutting depth adjustment is easy on the tool, with cutting depth indication to a maximum 125mm. The Compactcut900P/T is also factory equipped with a parking brake and a freewheel.



Rammer releases new multi-processor

Rammer has introduced a new RMP24R multi-processor which weighs in at 2,550kg, has a cutting force of up to 350bar, a 360° rotation and is suitable for carriers between 22t to 27t.

The new multi-processor from Rammer has an oil flow of 180-220l/min, closing (at maximum oil flow) in 2.2 seconds and opening in 3.7 seconds. It has been constructed for use in different applications in primary and secondary demolition, and for use in recycling applications such as concrete crushing, cutting in heavily reinforced building structures and cutting iron. The tool is also suitable for scrap handling and the cutting of construction steel, being ideal for the rental market.

The RMP24R consists of several, easily interchangeable jaws such as crushing, pulverising, sheer and combination. The jaws and crushing jaw teeth can be replaced on site making any work incredibly flexible for the operator. The tool is equipped with a speed valve and the hydraulic rotation is equipped with a safety valve. The tool has so called 'upside-down' cylinders with protective covers which prevent dirt and dust from reaching its more sensitive parts, and is manufactured in HB400 steel.

Other attachments from Rammer include the proven 'RS' series of scrap sheers, which consists of a total of nine models for carriers between 4t to 90t.

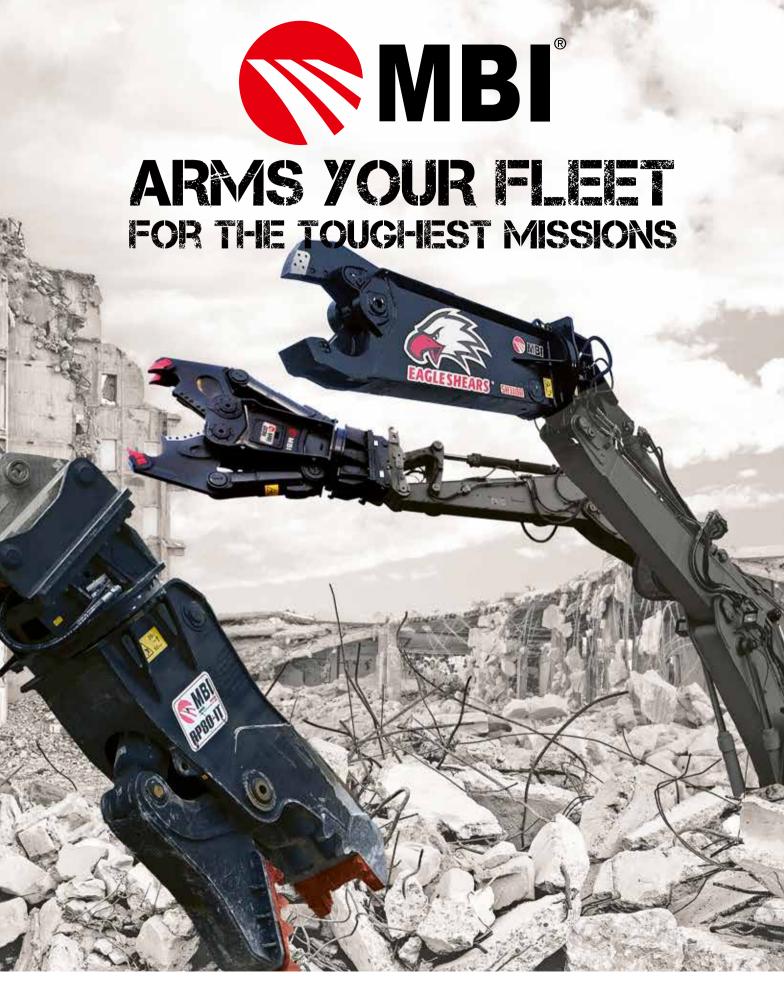
Evolution of the Mecalac MCR Series crawler skid excavators' transmission

The Mecalac 6MCR, 8MCR and 10MCR tracked skid excavators are now equipped as standard with the 'Speed Control' travel speed management system. This new feature allows the setting of a maximum travel speed, from the slowest to the fastest, regardless of the engine speed. For the comfort of operators this transmission

acts as a limiter, with 20 speed levels being available. The feature makes it easy to drive at very low speeds for applications such as mowing or planning, with the limiter enabling operators to free themselves from speed control for greater concentration on the task at hand and for greater safety. This development is part of the



manufacturer's approach to simplifying the lives of users without compromising performance.





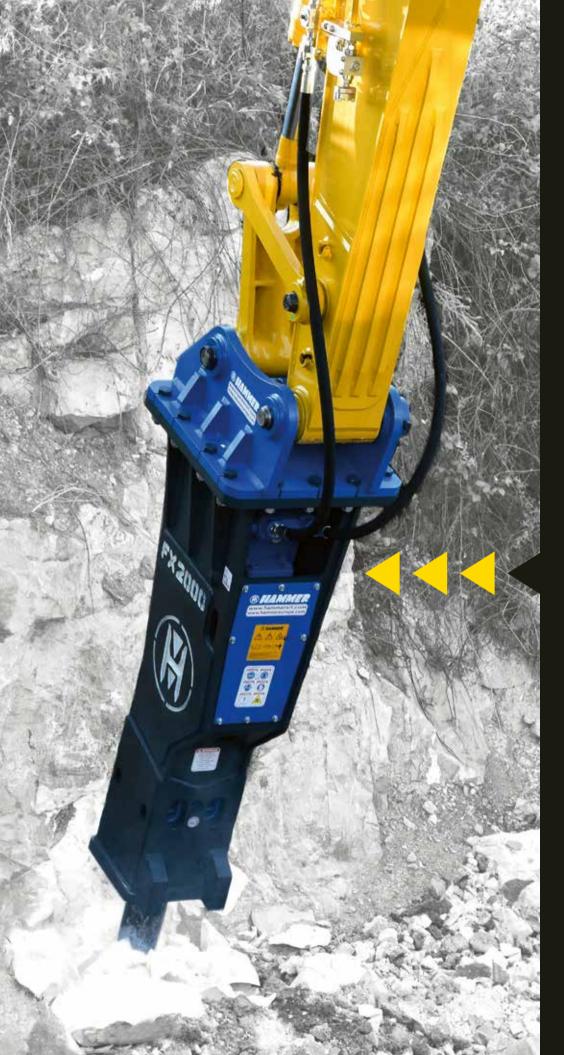














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