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Words from the IACDS President

A very different year has passed

Soon it will be time again to celebrate Christmas, a time for peace and a major festive period throughout the world. It also marks the time to look back on an incredible year, a year such that no one could have imagined. We started out last January with optimism and confidence but were suddenly caught up in cold reality. This meant we had to rethink, relearn and adjust to a new reality. But we did it.

Despite everything, the IACDS has not been idle this year either. Two attempts to organise and hold an annual general meeting and special anniversary celebration failed, with it being rescheduled twice and in the end there was no meeting in person and no celebration, although we did hold a virtual meeting in October. The Silver Anniversary could not be celebrated. neither in Willingen nor Stockholm, but despite everything, we have published a new anniversary yearbook. This relates stories from and about people from the past 25years who have accomplished a great in drilling and sawing concrete and for our industry in general. Since there will be no physical meetings at the moment or in the near future, I invite you to



Michael Findeis. President of IACDS

visit us at www.iacds.org, to look through the yearbook and to be inspired. In autumn we carried out a structural survey in all member countries with the support of the national associations, and the results may also be accessed online via the website.

What can we expect in the upcoming year? Firstly we will have to wait and be patient, but a very clear goal will be to be able to hold personal meetings again. In the meantime, we are working on webinars with the aim of making certain working methods accessible to a wider audience. If you are curious, please check out what's new at www.iacds.org from time to time.

At the beginning of March the CSDA will hold its annual general meeting in Bermuda; in April BeBoSa will take place in Willingen

and in autumn Demcon in Stockholm. Cooperation with FEPA is to be expanded and if face to face meetings should be possible again, we will use the opportunity to hold personal discussions. I hope we can meet and exchange ideas at one of these events.

Until then, I wish you and your families a Merry Christmas and, above all, for the New Year I wish you good health and good business.

Stay healthy.

Trevi Benne appoints new distributor for Australia

PDi business

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

With a proud history spanning almost three decades in the GET and wear parts industry. Fortus aims to set the standard in performance and reliability with a comprehensive range of GET system solutions for mining, quarrying and construction applications. The

Fortus warehouse and distribution network spans key locations in Perth, Kalgoorlie, Sydney, Brisbane and Mackay ensuring the continual supply and availability of essential parts to support GET systems across Australia. "We are sure that the combination of Trevi Benne equipment and global GET aftermarket support, together with the local knowledge and industry expertise of Fortus, will enable customers throughout Australia to benefit from a winning combination," said Fortus group sales manager Justin Dadd.

www.trevibenne.it

YANMAR INTRODUCES GLOBAL CUSTOMER SERVICE HUB

Global CS Co., Ltd. (YGCS), a subsidiary of Yanmar Holdings Co., Ltd. will operate as Yanmar Synergy Square (YSQ) and act as a global customer service centre. YSQ will also serve as the headquarters of YGCS, a Yanmar Group company that was established in April of this year.

As the name suggests, Yanmar will strive to derive synergy through marshalling the combined insights and knowhow of business partners all around the world in one place, to create new service solutions towards increasing Yanmar's global service capabilities. "YSQ represents every element related to our service including our DNA and spirit, our relationship with our stakeholders based on the trust, and

a new type of service achieved with advanced technologies," says Kengo Shibata, the president of YGCS. "I'm excited to create this new way of service together with our customers and stakeholders here at YSQ."

With its goal of keeping customers working with 'no downtime' and realising its vision of maximising customer's lifecycle value, YSQ will pursue the development and deployment of service solutions employing Yanmar's advanced technologies. It will further utilise analysis of remote monitoring data to predict machinery faults, support service staff in the field with technical information and provide a support desk to respond to customers' inquires on system operation.

The centre is established based on a set of floors comprising of 1st floor service exhibit area which contains numerous exhibits illustrating Yanmar's long history and spirit of service. The exhibits consist of videos etc. that show Yanmar's efforts to maximise the life-

cycle value of customers'

equipment as well as the future direction of service activities The 2nd floor is the heart of YSQ and acts as the remote support centre. The other floors comprise of offices, dining and meeting areas and an education centre.



Covid-19 impact not as serious as first feared

After a significant slowdown in business due to the Covid-19 pandemic, initial signs of recovery are emerging. Hilti has reported that its total sales for the January to August 2020 period decreased by 12.3% and by 7.3% in local currencies when compared to the previous year.

"Following the unprecedented slump in our business during the spring lockdown, our figures have gradually recovered since June. We are therefore weathering the crisis better than originally feared, albeit with very large regional differences. This makes us cautiously optimistic, even though the crisis is by no means over and uncertainty remains high," says Christoph Loos, CEO of the Hilti Group. While the year got off to a good start, business

in North Asia slumped sharply in February and from mid-March onwards there was a clear downward trend in all markets. However, after the low point experienced in the 2nd quarter, a gradual recovery has set in.

Regional sales developments were directly related to the intensity of the lockdown. While the construction industry in the Mediterranean region, or in some Asian markets, such as India and Singapore, was confronted with massive restrictions, sales in North Asia, North America and the rest of Europe fell less abruptly as construction activity in these regions saw no interruption. Over the entire year, the Hilti Group expects to see a decline in sales of approximately 5% and 10% in local currencies.



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PDi business

Wacker Neuson SE expan executive board

The supervisory board of Wacker Neuson tive 1 October, 2020, who will assume the officer (COO), with board expansion being in response to strong growth in recent years. "With our portfolio of innovative light and

We are delighted to win Mr. Bietenbeck to the Wacker Neuson Group, an experienced industry leader with proven operational expertise. This expansion of our executive board speaks to the growing number of leadership and organisational tasks required to make the most of emerging business opportunities," explains Hans Neunteufel, chairman of the supervisory board of Wacker Neuson SE

SE has appointed Felix Bietenbeck as a new member to the executive board effecnewly created position of chief operations compact equipment, we have experienced

dynamic growth over the past few years.



Covid-19 pandemic continues to have a significant impact in Q3

Wacker Neuson Group has reported that it has continued to feel the effects of the Covid-19 pandemic in the third quarter of 2020. The Group reported revenue of €390.8M, which is a decrease of 16.5% relative to the previous year. Revenue for the first nine months of the year amounted to €1,187.5M, which is a drop of 16.4%. "We again experienced a significant decline in revenue in the third quarter related to the coronavirus pandemic, albeit less pronounced than in the second quarter. However, we are also seeing positive changes in our industry that have been triggered or accelerated by the shift in circumstances. Through the crisis, our customers have become much more open to the possibilities of digitalisation and electro mobility in particular," explains Martin Lehner, CEO of the Wacker Neuson Group.

After reporting double digit growth rates for fiscal 2017, 2018 and 2019, the Wacker Neuson Group has clearly deviated from its tion rates, the executive board expects the coronavirus pandemic to continue to have a major impact into fiscal 2021. In light of this, the Group expects to achieve its medium term goals set out in March 2018 one to two years later than planned. "We have worked hard on consistently implementing our Strategy 2022 in recent years to ensure that our group is focused 100% on our customers' needs and together with our colleagues, we will remain committed to our current path.

growth path in 2020. In light of current infec-

"The long term trend towards compact equipment in the construction and agricultural sectors is unchanged and offers major opportunities. Eco friendly solutions and alternative drives are becoming increasingly important to our customers. As an innovation driver, we believe that we are ideally positioned to actively shape the key trends in our industries and create long term value for our customers as well as our shareholders," concludes Lehner.

Was Sweden's coronavirus policy right or wrong?

Sweden, where I am located, is right now in the middle of the second wave of the Corona pandemic. The number of people falling ill is increasing every day and there are no signs that the curve is flattening. Also, the number of deaths is increasing, ranging from between 10 to 30 deaths per day. It is far from as bad as it was during the spring though, with fewer people dying and in need of intensive care. So far, the health care system is coping with the situation, but it is very close to full reaching capacity.

The general restrictions in the country have been much sharper that previously and it is recommended that people in Sweden only socialise within the family group, with a maximum of eight people being able to meet together. But still our restaurants are open, although alcohol is only allowed to be served until 22.00hrs. Sweden has been criticised for having a too relaxed attitude when it comes to restrictions and critical voices say that it is the reason why the death toll now is over 6,200 people in a country with a population a little bit over 10M. Neighbouring countries such as Norway, Finland and Denmark have death tolls not exceeding 1,000 people. The Public Health Agency of Sweden has received both positive and negative criticism for how the pandemic has been handled. In my view there have been both good and bad decisions.

For instance, not completely shutting down the country has kept businesses running so far through the whole pandemic, although other things have been less good, like for instance the agency's rather stubborn position when it comes to not requiring facemasks be worn in public places. We are told that the masks don't provide much protection from the virus. But now however the agency is voicing concerns and is now recommending people wear facemasks, stating that they actually can limit the spread of the disease. Hence, whilst we are now seeing the infection curve start to flatten in many other European countries, it is believed that Sweden might have to wait until mid-December until we see a change for the better.

There are signs of 'light at the end of the tunnel' however with the planned start of distribution of a vaccine during the first quarter of 2021. If the vaccines can provide protection against the virus the world might come back to some sort of normal life in the second half of 2021. Let's keep our fingers crossed.

When it comes to business in the demolition and concrete cutting sectors, contractors seem to be rather busy anyway, but this situation varies from country to country. The sale of consumables has rather increased than decreased, but sales of machinery and equipment are down a bit. There is for sure a pent-up need to 'do business' both among contractors and suppliers. I think that when we have successfully dealt with the pandemic and the vaccine has been distributed globally, the world will see a financial upturn as a result of the 'lid' being removed. It should be remembered that the economic problems we are encountering are not due to a financial crisis or a downturn in the market, but due to the effects of the pandemic, resulting in one of the worse recessions the world has experienced.

Even though we as a trade magazine are affected severely by the pandemic advertising wise, there are still a lot of things to write about. This issue of PDi car-

ries, amongst other things, our annual feature on new concrete floor preparation equipment reporting on a great deal of new activity in the market. We have also our special hydrodemolition feature on new equipment and road saws. On top of that, there are a lot of other interesting news and stories. So frankly, the business is alive despite the pandemic. But whatever your activities, please take care out there!



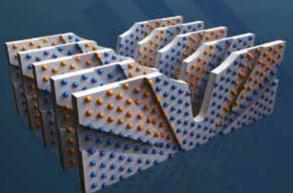
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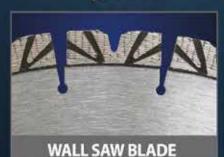




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Words from the EDA President

What matters always remains

truth, it has been a year from which we can learn a lot. We have adapted to a new way of greeting each other, of being in meetings and events, of making busirelearned) that what is really important always remains.

In the case of EDA, the important related activities. For this reason, this year we wanted to launch a new edition joy last year. The EDA Yearbook 2020 aims to be a reference document to get a feel of the state of the sector and know are involved in EDA.

Often questions arise such as how is the demolition industry in Europe? And in other countries of the world? How is waste management carried out? questions, we have had the collaboration of companies all over the world, national associations and entities of the construction sector that have given their vision on DDR (Demolition, Decontamination and Recycling).

From the association, we want to thank the participation of all these entities and companies: some of whom participated for the first time in the yearbook

2020 is perhaps a year that many people and others, like PDi, are already regular collaborators of this kind of publication. Also, we would like to highlight the support of 20 sponsors who have made this publication possible and who are increasing in numbers from year to year.

We invite you to visit www.europe-andemolition.org/yearbook and take a look at the publication.

About EDA

info@europeandemolition.org www.europeandemolition.org



Francisco Cobo, President of EDA, **European Demolition Association**



PDi business



Darda GmbH, the manufacturer of environmentally friendly hydraulic demolition equipment and a market leader in the field of rock and concrete splitting equipment, has grown steadily in recent years. The company is now taking advantage of the new requirements brought about by this positive development, undergoing a significant reorganisation.

A first step of the reorganisation saw the company Brokk DA GmbH being created at the beginning of this year. As an exclusive partner, it has taken over from Darda GmbH for the sales and customer service of Darda equipment and Brokk demolition robots in Germany and Austria. In addition, the management of the premium manufacturer Darda has also been reorganised. As of 1 July, Burkhard Darda has been the sole managing director responsible for the company's activities. In this role he has been supported by Bernd Ströbele, an experienced sales manager who joined the company at the start of the year and

who will continue to strategically expand the international markets and worldwide sales.

"The spin-off of Brokk DA GmbH provides us with free capacities and thereby enables us to focus even more on our core competencies: namely product development and production of special demolition equipment. With our strong resources bundled in this way, we are able to react to market changes and industry requirements and to optimise our products accordingly. This applies in particular to the quality of our equipment, which we are consistently developing further to offer our customers a strong service and benefit experience," explains Burkhard Darda.

Another strategic decision has been the reorganisation of the customer centre. "We analyse customer wishes and requirements very precisely and incorporate these findings directly into the development of our core products. This directly benefits our customers worldwide," adds Bernd Ströbele.

Lindner Recyclingtech strengthens international service and distribution network with new location

Lindner has been active business wise in Asia for over 20 years. In recent years in particular, a greater awareness of the need to manage resources responsibly and, above all, to recover waste materials, has grown in the world's most densely populated region leading to a new Lindner subsidiary based in Singapore.

The Asia-Pacific region has become one of the largest growth markets in the waste management sector. Lindner Recyclingtech. one of the world's leading suppliers of shredding technology and system solutions for recycling, is now strengthening its presence in the region with its new subsidiary in Singapore, thereby expanding its international service and distribution network. "We already have very strong partners with whom we successfully implemented numerous projects in countries such as China, Japan, Korea, Thailand, Malaysia, the Philippines and also Australia. With the new service and sales hub in Singapore, we've created a point of contact for partners and clients to better respond to individual local needs and also react quickly across time zones." explains Gerhard Gamper. sales director at Lindner Asia-Pacific.

Besides sales and logistics staff, and contacts to help with the supply of wear parts,

the site will also be home to highly qualified service technicians trained directly at Lindner's headquarters. These regional advantages, combined with the new hub, the subsidiary in the US and the European headquarters, mean the support team is now readily available to a much larger international customer base. "We set very high standards for our machines and in particular for our services worldwide. I am therefore delighted that we are now closing the loop with Lindner Asia-Pacific and will be even closer to our clients in future. That's exactly what our service strategy is about," summarises Gamper.



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EVENTS

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Nov 24-27, 2020 Shanghai, China

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SAMOTER 2021

3-7 March, 2021 Verona, Italy

www.samater.it

CSDA ANNUAL **CONVENTION & TECH FAIR**

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

www.csda.ora

NDA ANNUAL CONVENTION 2021

March, 4-7, 2021 New Orleans, Louisiana

Demolitionassociation.com

BEBOSA 2021

April. 15-17, 2021 Willingen, Hochsauerland,

www.bebosa.com

BAUMA CONEXPO INDIA

April 20-23, 2021 Gurugram, New Delhi, India

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

www.worldofconcrete.com

DEMCON 2021

September, 9-10, 2021 InfraCity, Stockholm, Sweden

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

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Berlin, Germany

www.deutscher-abbruchverband.de



Case announces new head of European Construction Equipment businesses

Case Construction Equipment has announced the appointment of Federico Bullo as the new head of Europe for its Construction Equipment businesses. Federico has held various positions in the company, most recently as vice

president and general manager of Naveco Ltd. in China. He takes over from Jose Cuadrado, who will retain his current responsibilities as global head of Aftermarket Solutions & Digital - Construction Equipment at CNH Industrial.

Cybersecurity important for the construction equipment business

Ritchie Bros. have a long established cybersecurity department to keep operations and customer data as safe as possible. This has seen the development of several procedures that customers can implement to reduce risk for their own organisations. The first step is to develop an anti-fraud and data protection strategy with systems and governance for handling detection, protection and response. At the same time, companies are advised to invest in software from a trusted provider and update it regularly as threats evolve.

Another important consideration, particularly with the impact of Covid-19, is team members working from home or from

multiple locations. As such, it is essential to educate colleagues in protecting the company from cyberattacks by, for example, ensuring WIFI is secure, trusted antivirus software is installed, avoiding the sharing of computers with children or others, and remain cautious about the information they share and with whom.

Transitioning to the digital world is opening new opportunities to construction companies. Good cybersecurity is like any other aspect of good business practice. It all starts with awareness and putting actions in place in order to safely use the powerful technology that's available today.

Concrete Show South East Asia 2021

The 8th edition of Concrete Show South East Asia will take place from 15 to 18 September, 2020 in Jakarta, Indonesia. The show organiser, PT. Pamerindo Indonesia will work alongside Merebo Messe International, based in Hamburg, Germany, which is responsible for the Europe, America & Australia/NZ Pavilion which is dedicated to companies, associations, chambers and the trade press from these regions. Concrete Show South East Asia 2021 features a wide range of products and technology, covering raw materials, reinforcement technology,

prefab techniques and construction related services. The last event in 2019 attracted 12.811 attendees and 366 exhibitors from 22 countries. Combining Concrete Show South East Asia with Construction Indonesia & Mining Indonesia will allow participants from the wider construction and infrastructure sectors enhanced access to the industries in the region. For more information please contact: Merebo GmbH in Hamburg, Germany. TEL: +49-40-3999905-0, Fax +49-40-3999905-25, E-mail: contact@merebo.com.

www.cssea.merebo.com



German Demolition Association Fachtagung Abbruch 2021 postponed

After careful consideration, the board of directors of Deutscher Abbruchverband - DA (German Demolition Association) has decided to cancel Fachtagung Abbruch which was scheduled for 5 March 2021 in Berlin.

A coronavirus compliant environment for Europe's largest industry meeting already existed and could have made hosting the Fachtagung Abbruch event possible. However, it was decided that the best and safest outcome for participants, exhibitors and other stakeholders was to cancel the event. "Fachtagung Abbruch thereby loses the character so cherished by all those present," said chairman Johann Ettengruber. The next scheduled event is already diarised for the March 2022 and it is hoped that the event will proceed in its usual format. Networking and meetings between attendees and exhibitors has made the event stand out for many years making it a special experience. This would not have been possible even with all the necessary protective measures being put in place. It was felt that for Fachtagung Abbruch to remain as the largest demolition conference in Europe, with its unique attributes, postponing until 2022 was the best outcome for one and all.

www.deutscher-abbruchverband.de

AGP becomes latest member of IACDS

The International Association of Concrete Drillers and Sawers, IACDS, has increased its presence in the world's industry with the addition of a new company, AGP.

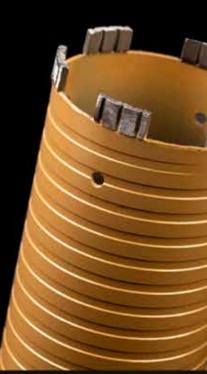
AGP is a manufacturer of electric motors and finished power tools, founded in mid-October 1989, by Mr. Hsieh, Pan-Chong, The company has as a main goal of letting clients maximise their profitability by providing tools with the highest possible value and performance. By continuously developing new tools and finding niche markets, AGP allows its clients to have a decisive competitive advantage in their respective markets.

AGP has always been a family owned company and now employs over 130 highly skilled employees, exporting over 70% of its tools to Europe. Right from the company's inception in 1989, AGP began to design and manufacture high quality motors which are at the very heart of its power tools, with this focus still being as true today as it was when the company was founded.



















Although the Corona pandemic has taken the edge off several business sectors in the construction industry, there is still continued progress at both the product and business end in floor preparation. Jan Hermansson reports.

he big story at the time of writing of this feature is that the editorial staff of PDi has received news that Husqvarna Construction Products will acquire Blastrac, with an agreement already being signed. Blastrac is one of the leading players in terms of surface preparation equipment for the global construction and decontamination industries.

Blastrac strengthens Husqvarna's organic growth

"The acquisition of Blastrac complements and strengthens our organic growth ambition by expanding into complementary surface treatment solutions. We can now offer customers a complete range of solutions for each individual assignment in surface treatment," says Henric Andersson, president and CEO, Husqvarna Group. Blastrac's product portfolio consists of high quality and efficient solutions for ball blasting, milling,

scraping, grinding and polishing as well as dust removal. Blastrac's net sales amounted to approximately €58,5M during the past 12 months, has 380 employees globally, with manufacturing and sales offices in North America, Europe and Asia, selling into over 80 countries. "The acquisition aims to expand and strengthen the offering to the surface treatment market. Blastrac's operations fit well into our growth strategy and enable expansion to existing as well as new customers. In addition, the team from Blastrac contributes extensive product and

marketing expertise for these complementary solutions," says Karin Falk, president of the Construction Division. The aim is to complete the acquisition by the end of 2020, which requires approval by the relevant competition authorities.

New shaver and stripper from Blastrac

At the same time as the imminent takeover of Blastrac, both Husqvarna and Blastrac are releasing several



and is also available in a remote controlled variant. It is equipped with a 15kW saw motor and an electric drive system that eliminates the need for the operator to have permanent contact with the machine's control handle. It is also ergonomically designed and features easy to adjust speed and tracking so that it can be easily operated up to 360°. The digital ammeter on the handle turns red when the maximum ampere is reached, which means that the working depth has to be adjusted. The drum housing, which is surrounded by dust seals, is mounted in the frame by torque bushes which lower the vibration level. Thanks to this system, the BMC-335ELITE has a vibration level lower than 2.5m/sec2, allowing the operators to work continuously for 8h.

Depending on the configuration of the sawing drum (numbers of blades and spacers), the BMC-335ELITE shaver can adapt to any situation and any need such as grooved patterns for the visually impaired and for anti-slip surfaces. Due to the specially designed dust extractor system inside the drum housing, the BMC-335ELITE shaver is dust free when connected to the appropriate Blastrac dust collector.

Blastrac has also released the fully electric ride on floor stripper BMS-150E which is ideally suited for medium and large sized applications. It is completely electrically powered, with an automatic power cable system with turning cable arm. It is highly manoeuvrable with a zero turn radius and non-marking tyres. It fits eas-





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80% of all floor failures due to inadequate surface preparation

Blastrac Europe marketing manager, Clément Charpentier, identifies what is important and explains the different techniques used for surface preparation based on the ICRI profiles standard.

urface preparation is defined as the complete removal of the laitance or 'cream coat' of the concrete, making it possible to open up the capillaries. This allows the material that is being installed to wick into the pours of the slab allowing it to establish a mechanical bond. "Nowadays, 80% of all industry floor failures can be directly attributed to inadequate surface preparation," says Charpentier.

According to Charpentier, there are three main surface preparation methods: grinding, shot blasting and scarifying. These three techniques require dust collectors equipped with endless bagging systems in order to protect operators from hazardous dust. Blastrac, as a specialist in surface preparation equipment, offers a wide range of shot blasters, single disc and triple disc grinders and scarifiers for the surface preparation industry.

Grinding, shot blasting and scarifying

Grinders use horizontal rotating diamond discs to perform a multitude of tasks, from light texturing to opening the pores of the surface. All Blastrac grinders are equipped with a local exhaust for dustless operations as it is important to protect both operators and the environment, (interested readers are advised to view Diamag tooling for more information), with the profile left behind being the depth of the grit size diamond used to grind the slab.

For shot blasting, Blastrac offers closed circuit media blasting machines that throw a large amount of steel abrasive media by centrifugal force at the surface. After the steel abrasive hits the surface, the shot blaster recycles the media. Dust and contaminants are removed by an air wash separator and are removed to a dedicated Blastrac dust collector. This makes the process almost dust free in operation. The profile left behind depends on the size of the steel shot, the speed of the machine and the amount of steel shots thrown on the surface. Multiple sizes of abrasion can be used to clean and profile in one step.

With scarifying, cutters are loosely fitted on lateral shafts which are then placed inside a drum housing. The rotating drum generates centripetal force which 'throws' the cutter at the surface, causing a mechanical cutting action. As with all Blastrac machines, the scarifiers are equipped with a local dust exhaust with dust and contaminants being moved to a dedicated Blastrac dust collector. The profile left behind depends on the type of tools (cutters or milling cutters) and the machine used. By selecting the correct type of cutter, a wide range of applications can be carried out with guaranteed success.

Concrete surface profiles (CSP)

The ICRI (International Concrete Restoration Institute) governing body has set a surface profile standard for the industry with the 'Concrete Profile Surfaces' or CSP for different preparation methods. These methods were given a rating system from 1 to 10, with some technologies being able to achieve multiple profiles while others only one. Depending on the coating to be applied, the manufacturer of that product will specify a desired concrete surface profile (CSP) which has to be adhered to. Every manufacturer in the industry has tied a CSP profile to all of its products, ensuring each system has the correct level of profile for proper adhesion to the slab. If the surface preparation has been carried out properly, the manufacturer will provide a warranty with the applicable product.

ily into elevators and comes equipped as standard with a dust hose connection of Ø76mm making it possible to connect a small or medium dust collector to prevent dust exposure in the working area. This special feature contributes to the protection of operators. Depending on the type of flooring material to be removed, a choice of a wide range of blades or chisels is available. The BMS-150E floor stripper has been designed to remove most (old) floor coverings such as linoleum, vinyl, carpet, adhesives and glue.

www.blastrac.com

Husqvarna launches an all-new range of floor grinders globally

Husqvarna is set to release its planetary grinder PG range globally following the initial launch at World of Concrete 2020 to the US market. The PG range consists of eight different models: PG 540 (1.2kW), PG 540 4.0kW), PG 690, PG 690 RC (remote control), PG 690 Propane, PG 830, PG 830 S and PG 830 RC (remote control). The new range starts with the compact PG 540 which has a split chassis design making it easy to handle and operate being designed for smaller jobs. Next up is the versatile PG 690, which is also available in remote control and propane driven versions. The top of the line PG 830 is the largest and most powerful model, which is also available as the PG 830 RC, with remote control and motorised drive for maximum performance. The PG 830 S, with single drive, is a straight forward and affordable workhorse. "The introduction of this range is a step change for the industry," says Mark Michaels, director of Product Management Husqvarna Construction North America. "Combined with our range of dust extractors, diamond tools, training and online connectivity services, this launch is one of our biggest in many years and a statement of our long term commitment to our customers and the development of the industry."

High and reliable performance

The new range uses the unique and proven 'Dual Drive Technology', but more powerful motor options have paved the way for even higher productivity. The top of the line PG 830 and PG 830 RC feature a 15kW motor which produces up to 36% more power than previous models. Integrated adjustable weights (optional) can be added for extra grinding pressure. Reliability is another key focus area for the new range. Worthy of note are the fully sealed grinding head, fully sealed electrical cabinets and the sealed Dual Drive transmission. This concept





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The new, compact design offers great perimeter visibility and the adjustable handlebars provide numerous positions, ensuring good operator ergonomics. Other details that make any workday easier are the optional LED lights, foldable kick-bar for easy tilting, robust suspension and large wheels for easy transportation. The control panel has been redesigned for better control and feedback, even when the operator wears gloves, whilst the intuitive, ergonomic remote options allow the operator to focus on the floor and the job.

www.husqvarnacp.com

Abujardar – a bush hammering specialist

Abujardar is a Spanish manufacturer of bush hammerings tools for natural stone, concrete and prefabricated material. The company has been in the business for nigh on 25 years and is located in Castellon on the Spanish east coast, south of Barcelona. Abujardar is renowned for its expertise in providing cutting edge solutions for the architectural, interior decoration, design and construction sectors internationally. It specialises in manufacturing quality tools for the preparation of surfaces, as well as decorative concrete to optimise cost/m² and minimise time wasted by unnecessary tool changes.

Each of Abujardar's 11 rollers has been designed and manufactured in house to the highest of standards with a process of continual improvement. One example of the company's ethos is demonstrated by its relaunched 'Micro Sandblast roller' which is set to revolutionise concrete surfaces in line with current and predicted trends. This unique and remarkable roller achieves a beautiful decorative micro sandblasted texture thanks to its high quality 600pt bushhammer micro tips which hardly causes any machine vibration. The company believes that the Micro Sandblast is set to be a market leader.

www.abuiardar.com

New floor grinder from Airtec

Swiss manufacturer Airtec is a well-known provider of floor grinding equipment. The company is now introducing its BS-310 'Amiga' floor grinder which is a small, easy to use and compact machine ideal for edge grinding. It is equipped with a brushless electric motor, has a unique design and is easy to operate due to its low weight of only 35kg. The brushless electric motor is very powerful and has an overload protection feature which makes it virtually maintenance free, whilst its easy to use system for quick tool changes allows fast changes directly on the jobsite. It has also a smart design and a solution for efficient dust suction with a dust hood with two openings, using a suction pipe for powerful industrial vacuum cleaners to create a safe

environment. The ergonomic eight cornered body of the machine has air slots for the electric motor, water level and flatness control. It has a solid protective rubber band to retain dust production with a special opening for edge grinding along vertical surfaces and walls. The working angle can be adjusted whilst the machine is also equipped with rubber wheels for a smooth roll even over rough surfaces. Finally, it is also easy to transport in the back of the car. Airtec also provides a wide variety of six different diamond tools including soft bond for hard surfaces, medium bond for medium surfaces, hard bond for soft surfaces, hard bond PCD-Split, soft bond PCD and fine PCD. As well as in Europe and the US, the model is also sold globally.









Are trowel services also being adopted by concrete prep contractors?

group of businesses was born, with many dedicated flooring and demolition contractors, as well as concrete cutters, adopting the new method for concrete floor grinding and polishing. Today the from newly poured concrete in new buildings. In Scandinavia, for instance, almost every concrete cutter and demolition contractor now provides concrete floor prep and polishing.

the trowelling machine business. Schwamborn and Husqvarna were probably the first ones, followed by several others such as Superabrasive and Scanmaskin. Some manufacturers offer only small



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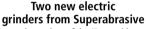






Endless power and six different new tools from Otto Baier

Baier has been producing high quality power tools for over 80 years. Located in Stuttgart, Germany, the company exports to over 60 countries, and considers itself to be a world leader in terms of quality and innovation. Amongst Baier's extensive offering are three machines for surface preparation. These comprise of two face milling machines - 'Dry' (BFF 222) and 'Wet' (BFN 250) - and a concrete milling machine (BDS 125), which have been proven to be highly efficient in face milling, polishing and concrete milling. It is reported that the BFF 222 has such a high torque that a 136kg person may stand on the machine without stopping it and that its high levels of power result in a long lifetime. Furthermore the counter turning wheels supports efficient dust suction, whilst glue, epoxy and other materials which hinder any diamonds working are dealt with due to the strength of the BFF 222. The BFN 250 has the ideal rpm for polishing any kind of surfaces whilst the BDS 125 has the ideal rpm for concrete grinding. The latter is said to have one of the strongest motors in the market.



Superabrasive, the maker of the 'Lavina' line, has added two smaller electric models to the Lavina grinder range, L14EU and L16EU, both designed for a variety of floor applications, including grinding and polishing. L14EU is a 335mm single head grinder (1 phase, 200-240V, 12A), that can be also used as an edger. It is lightweight, compact and can be folded for easy transportation and storage. The grinder frame can be detached from the head so that one person can load/unload the machine in/out of a vehicle and move it up and down stairs. The new L16EU is a 406mm electric grinding and polishing machine, featuring 2.2kW motor (1 phase, 200-240V, 12A) and planetary drive with three 178mm heads. It has variable speed enabling the adjustment of head rpm depending on the grinding and polishing steps. Weights may also be added for more grinding pressure when



needed. The frame can be detached from the head or folded, as with the L14EU. Superabrasive has also added new polishing ring tools to the diamond portfolio, featuring a thick layer of foam for high levels of flexibility. The rings have a magnetic quick change attachment and come with Superabrasive's proven resin formulas, such as 'Nato', 'V-Harr' and 'Waffel' for excellent polishing. www.superabrasive.com

Shining results with the new floor grinding tool assortment from Tyrolit

Tyrolit has four floor grinders, FGE250, FGE400, FGE450 and FGE530. Now the company has improved and enlarged its floor grinding tool assortment offering solutions for the grinding of concrete floors and for removing stubborn surface coatings. In order to deliver a high quality grinding result on any concrete floors, the range is offered for the specific hardness of concrete. Furthermore, Tyrolit provides a special product line for removing stubborn surface coatings as well as a polishing line, with the right tools for each application.



This includes surface preparation, cleaning formwork, removing coatings such as glue or compound as well as grinding and renovating floors. Its offering may also be used for fixing bumps and floor unevenness, surface grinding, renovating and polishing concrete, screed and stone floors.

Tyrolit has also announced a new tool assortment. These consist of metal bond diamond segments for extremely hard to soft concrete; Velcro attached segments; hybrid and resin bonded tools; PCD tools; grinding and PCD plates; grinding and polishing pads and an adapter tool holder. Thanks to the special tool changing system used, tools can be fitted or swapped easily and safely. The floor grinding tools can be used with all Tyrolit floor grinders and are available with 'EZchangeTM' tool change system for HTC floor grinders and the 'REDI Lock' change system for Husqvarna floor grinders and Schwamborn floor grinders.

In 2021, Tyrolit's floor grinders and offering is set for further expansion and development.

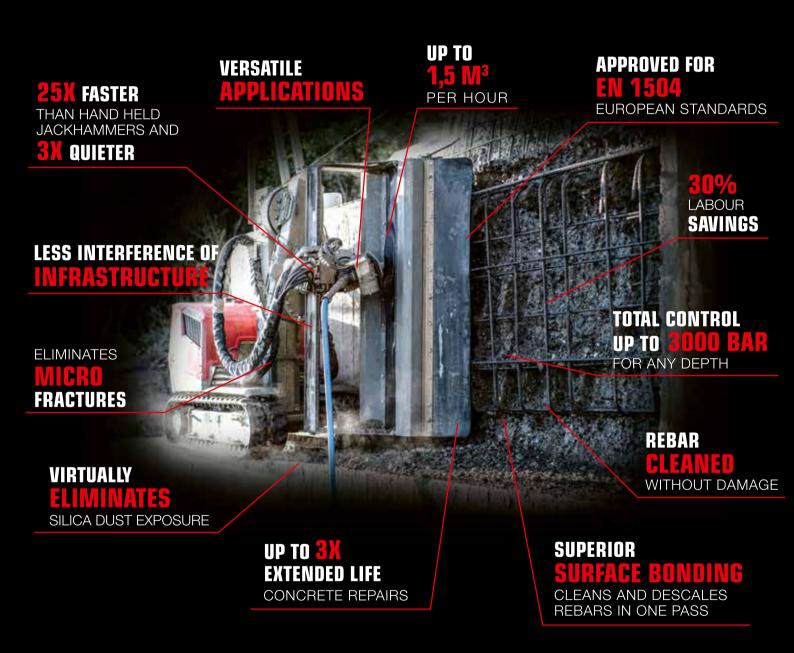


The Facebook group Concrete Floor Prep and Polishing – Global is increasing in popularity

The Facebook group Concrete Floor Prep and Polishing – Global was started in Los Angeles, USA back in 2017 and has strongly increased in popularity over the year. Currently the group has almost 2000 members which is steadily increasing, and a lot of topics are discussed in

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European regulations concerning exposure to crystalline silica dust have been tightening. "This concerns all manufacturers and users of floor preparation equipment," says Blastrac marketing manager Europe, Clements Charpentier.

harpentier is keen to point out the importance of respecting the European Directive concerning crystalline silica dust. "This issue concerns every manufacturer and every final user. It is already an issue in the US for quite a long time and it has now arrived in Europe. The regulations have been a little bit different from country to country in Europe where some countries have had very strict regulations long before the US OSHA regulation, and other countries not. Now the European Union has one directive that concerns all European countries."

What is crystalline silica dust and why is it dangerous?

Crystalline silica is a common material that is found in construction materials such as stone, concrete, bricks and mortar. When workers scarify, grind, cut, drill or crush material that contains crystalline silica very small dust particles are created. Typical crystalline silica concentrations include manufactured stone up to 90%; sandstone, gritstone, quartzite and flint more the 70%; concrete and mortar, 25% to 70%; shale 40% to 60%; china stone up to 50%; tiles 30% to 45%; slate up to 40% and granite up to 30%. Workers who inhale these very small crystalline silica particles are at increased risk of developing serious silica related diseases, including silicosis, lung cancer, chronic obstructive pulmonary disease or kidney disease. That is why manufacturers and management of contracting firms are obligated to protect and educate operators.

New European Directive

On 17 January 2020 the new European Directive 2017/2398 (amending 2004/37) came into effect regarding the protection of workers from the risk related to exposures

to carcinogens or mutagens at work. Member states are directed to bring into force laws, regulations and administrative provisions necessary to comply. In Article 18a, Annex I, which defines the list of substances, the following point has been added: '6. Work involving exposure to respirable crystalline silica dust generated by a work process'. Exposure to respirable crystalline silica (very small particles at least 100 times smaller than ordinary sand found on beaches and playgrounds) can occur during common construction tasks, such as using grinders, scarifiers, masonry saws, drills and handheld powered tools.

How can we help protect workers from silica dust?

In order to help protect workers, Charpentier made three points when it comes to choosing approved equipment. "Blastrac has always developed and built machines focusing on three things, mainly user friendliness, environ-



ment friendliness and health and safety." All Blastrac technologies are purely mechanical and therefore very clean. None of its technologies creates air pollution or uses chemical substances. With all its equipment, operators are able to work dust free thanks to local exhaust ventilation which are required characteristics to remove hazardous materials. Blastrac's latest machines and dust collectors are made to comply with NEPSI & OSHA's 'Respirable Crystalline Silica Standard' for construction. Blastrac's dust collection systems contain a filter cleaning mechanism and a high efficiency particulate air (HEPA) filter of at least 99.97% efficiency in removing monodispersed particles of 0.3microns in diameter.

Dust collectors and remote controlled systems

Whichever technique is selected for the removal of hazardous materials, using a performing dust collector specifically designed for decontamination jobs is a key factor in order to guarantee the operators safety and protect the environment. This includes a good bagging system and the right filters such as M-Class filters, H14 HEPA filters, Longopac system, pre separators, bib bag systems and screw conveyors. Another easy way for operators to avoid direct contact with hazardous dust is to use remote controlled machines. In this way, operators are able to use the machine from a safe distance. On most of the latest machines Blastrac has developed a remote controlled option is offered. This also applies with several other manufacturers.

Furthermore, all Blastrac machines can be equipped with a vacuum measurement system. The machine automatically stops when the vacuum inside the dust hose is too low. This device makes sure the dust collection system is sucking up all the dust, thus creating a safe and dust free environment.

Looking for Comprehensive Market Information?





Does your company need extensive and accurate market data for your business plan, expansion, business acquisitions, sub-manufacturing, etc? Or do you just want to know the size of the market you are working in or want to start focusing on? Who the other players are, their revenue, profit, etc? Riverbends Research, part of Riverbends Publishing, LLC, has a long experience from monitoring various industry segments globally and offers detailed studies for the following industries:

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HUSQVARNA SEES WIDE SCALE POTENTIAL

in the concrete surface and flooring segments

Husqvarna Construction is now taking a purposeful and massive grip of the global surface preparation industry. The company has gradually been increasing its presence in this area and now says its activities are at 'full throttle'. PDi Magazine's Jan Hermansson met with Husgvarna Construction's Vice-President Concrete Surfaces & Floors, Stijn Verherstraeten, to discuss these developments.

t first began way back when Husqvarna acquired Australian floor grinder manufacturer King Concepts; this was followed by the acquisition of Hagby. At this point Husqvarna did not take a leading role yet in the floor grinding and polishing sectors, which were mainly seen as complementary products to its existing product lines in the sawing and drilling segment. In the past years however, the focus on surface preparation intensified as Husqvarna acquired the dust extraction manufacturer Pullman Ermator in 2016, closely followed by the acquisition of the leading floor solutions manufacturer HTC in early 2017.

Widening the product and application spectrum

When PDi Magazine interviewed Husqvarna Group CEO Henric Andersson at Bauma in 2019, it was quite clear which path the manufacturer intended to take when it came to the surface preparation, floor grinding and polishing segments. Its strategy was to provide the whole surface preparation sector with suitable products and tools, both for the planning stage of new construction and to widen its renovation offering. That is also why the Atlas Copco's product lines for light compaction and concrete placement equipment were acquired in 2018 as well as the trowel series from Wacker Neuson in 2019. Husqvarna can now provide the entire value chain of products and services from compacting a soil, vibrating, levelling and surfacing freshly poured concrete as well as creating a finished floor by grinding and polishing it. The latest sign of Husqvarna's decisiveness in striving to lead and further develop the surface preparation, grinding and polishing industries is the recently announced intent to acquire the Blastrac Group.

In order to further expand its position in surface preparation and to enhance market focus, Husqvarna has created an own internal organisation dedicated to this business segment, called the "Concrete Surfaces & Floors category" which is headed up by Stijn Verherstraeten since early 2019. Verherstraeten joined Husqvarna Construction as part of Husqvarna's acquisition of the light compaction and concrete placement business from Atlas Copco. In Atlas Copco he gained a broad experience of working in different roles in distribution centres, sales companies and factories in several countries stretching a 12 years period. When transitioning from Atlas Copco to Husqvarna he was heading up the site in Bulgaria where a large part of the light compaction and concrete placement products are developed and assembled. Being a Belgian citizen he relocated to Gothenburg last year to take on his current role as Vice President for the Husqvarna Concrete Surface & Floors category, covering product management, product development and operations in this product area. Including the dedicated specialists in sales and service as well as the Blastrac employees which are expected to join by the end of the year - pending successful closing of the acquisition - Husqvarna Construction will have close to 800 employees working within the concrete surfaces & floors segment. "I find our work in this industry very exciting and I am happy to be part of leading Husqvarna into the future when it comes to new solutions for concrete surfaces and floors. It is a very competitive business though, so we can never lose sight of changing customer needs and preferences which we need to address with innovative product development in combination with operational excellence," says Verherstraeten.

The concrete surfaces and floors segment represents a huge market, which so far has literally only been scratched on the surface, so to speak. It is actually still a relatively new market. The founder and former owner of HTC Sweden, Håkan Thysell, knew that in the mid 1990s when he developed the planetary grinding technique and later on the system for creating polished concrete floors as a final flooring product. Almost 30



Stijn Verherstraeten.

years later Husqvarna Construction builds further on that legacy.

The same solution but with a new logo and colour change

In the last years, Husqvarna has intensified its efforts to streamline the product range, production and sales organisations and to reduce duplications. Gradually, the Pullman Ermator products were reshaped to fit the Husqvarna range, while the HTC product range largely remained the same still carrying the HTC brand name as well. After almost four years with the HTC and Husqvarna brands running side by side, Verherstraeten explains that "we have come to a point where we believe we can create higher customer value by a strong integrated surface preparation offering under the Husqvarna brand. It means that we can open up a broader variety of products to all customers while at the same time accelerating investment into product development and service.

Let me give you a concrete example: We have developed a tool selector app, allowing customers to enter specifications for a flooring job and getting a full recipe on how to take on the work, step by step, and the specific tools needed to carry out every step. This little app makes the planning process easier and more reliable for our customers. Instead of duplicating and maintaining two separate apps for two brands, we can with only one brand enhance the existing app and give customers access to a much larger portfolio of tools.

The decision to consolidate has been made for the HTC brand, yet, we are ready to offer products in different brands as long as there is a specific desire from customers or value to customers to do so", says

'Speaking about digitalisation, we are excited about the opportunities we can create for our customers, for example when it comes to managing a fleet of machines, getting intuitive feedback from the machine during operation or getting support in service matters. The goal is to make it easier to own a machine and to maintain it with a minimum of stops or breakdowns. Basically, more value to the customer," says Verherstraeten. "We also strive to offer multiple solutions to a wider variety of users. A good example of that is our Hipertrowel floor solution, allowing customers to polish a concrete floor with a ride-on trowel, simply by attaching special diamond pads instead of blades or pans. This method is very convenient for polishing of large surfaces and much faster than using traditional floor grinding machines,

for those jobs where flattening a floor and exposing aggregate is not required. We are very glad that our experience in developing and manufacturing our own surface preparation tools allowed us to adapt the technology for polishing with a trowel. Depending on the type of job, the floor attributes and the customer's preference we now offer solutions for polishing concrete both with a traditional floor grinder as well as with power trowels.

We strongly believe in the benefits of polished concrete floors and want to help our customers win interesting flooring projects – probably the best way to do this is by providing competitive solutions and by offering hands-on support of our application specialists before and during a project."

Creating new markets is the way to grow

Now Husqvarna is not only trying to grow by increasing market share and expanding the portfolio in established markets, but also wants to accelerate growth in markets where today it has no or limited representation. India is one such market where Verherstraeten sees great potential, as well as China and South America. "We are of course represented in many of these markets already, but we can grow much more. Besides having production plants in Europe and USA, we also have two plants in China and in 2021 we will inaugurate a new plant in India, in Nashik, North-East of Mumbai. We will colocate an own R&D department with the production unit there with a clear focus on developing products and solutions for the local Indian market." He further believes that in Europe and the USA the majority of

the growth in the industry will come from renovation projects while in markets like India and China, the installation of new concrete floors will still dominate. Here, the previously described polishing method with ride-on trowels also opens up new opportunities to grow the preference for polished floors as larger projects can now be completed in a shorter period and hence lower cost. "In the future, I also see that placement and renovation of large industrial floors will to a certain extent be done by automated grinding and polishing robots," says Verherstraeten.

Verherstraeten is excited by what is to come as there is so much opportunity ahead, both in the near and distant future. At the end of February 2021, the implementation of the HTC brand consolidation will be completed, but the majority of today's HTC offering will be kept under the Husqvarna brand. It is only the colour and the logo that will change. Both the HTC and the Husqvarna tool systems with their respective attachment systems will remain side by side, so there will not be any significant change for customers. In the more distant future, we will certainly see more change, as Verherstraeten hints that new products and concepts are in development. A particular focus lies on specifications for polished concrete and other floor solutions - ensuring that the attributes of a floor are clearly determined and the floor creation processes include surface texture measurements in each and every step to ensure that the desired end-result is achieved. Typical attributes are Ra (Roughness average), gloss, DOI (distinction of image) and slip resistance - just to name a few.

"We are also working to improve our sales and service organisation, both by strengthening our own organization as well as by adding more certified dealers. Service and support in the field is very important for us, as is easier maintenance and use of the machines. I would say that reliability and support is almost more important than the product itself," says Verherstraeten. He also adds that supporting the customer during projects is very important, but also developing competence through training and education. This is why Husqvarna has invested in its own academy for floor grinding and polishing.

The question arises how much Husqvarna can grow per year in this sector going forward? "It depends a little bit how it is calculated, but right now our Concrete Surfaces & Floors business is clearly smaller than Husqvarna's market leading sawing & drilling business. We have high expectations and I'm confident we can take market share in the surface preparation industry. Moreover Concrete Surface & Floors is a segment where we can grow by creating new markets instead of only developing existing ones. In a normal business cycle after the Covid-19 pandemic I believe this category can definitely grow above 10% per year while growth for other construction equipment would probably be less than half of that. Surface preparation is an industry where we will see a continuous tightening of regulations which plays into our hands as well, as we clearly intend to stay ahead of the regulations and help our customers complete their work in the most productive, sustainable and safe manner", concludes Verherstraeten.

www.husqvarnacp.com











Bobcat supplies 25 skid steer loaders

Bobcat Equipment South Africa has concluded a contract to supply 25 Bobcat skid steer loaders to a major Southern Africa leader in the hardware, home improvement, DIY and building materials sectors. The brand new machines were supplied direct from the Bobcat factory, reports Brian Rachman, Bobcat's national operations manager.

Delivering 25 units to one company acts as a huge reference when negotiating similar deals in the future, notes Rachman, who says: "Our machines will be delivered to the respective stores across the area." Bobcat will also provide a five year maintenance agreement to provide world class service and back up. "Arranging such a large order from the factory took some well-prepared negotiating with both the customer and the OEM, as well as having the units dispatched timeously within a confined time," adds Rachman.

"Our Bobcat skid steer loaders feature excellent performance, with a compact body size and power to

easily operate in confined spaces. This is due to the fact that, being a vertical lift machine, the load remains closer to the loader throughout the lift path. We believe our vertical path skid steer loader was the best option based on the client's requirements and needs, in addition to its low running costs, not to mention the extra lift height and bucket capacity resulting in quicker cycle times for both the client and its customers." Other advantages include low maintenance, increased lift for loading trucks, minimal electronics, a larger bucket capacity and a longer wheelbase for better machine stability.

"We will embark on an operator training programme for each of the customer's branches. We have also set up a dedicated call centre to handle all enquiries relating to service, parts and breakdowns to ensure minimal downtime for the client, with a rapid response team on call seven days a week," concludes Rachman.

www.bobcat.com

Tracimat latest member of the European Demolition Association

Tracimate VZW is a demolition management organisation and initiative of the Flemish Construction Confederation (VCB), the Confederation of Contractors of Demolition and Dismantling Works (CASO), the Federation of Producers of Recycling Granules (FPRG) and the Organisation of Consulting Engineers and Consultancy Firms (ORI). It certifies the selective demolition process and uses an elaborated traceability system to check what happens to the waste substances released during demolition and demolition works.

A strong chain integration is paramount here to help ensure the environmental risks during demolition and demolition works are limited, the spread of hazardous waste to the environment is avoided and purer waste streams are released that enable higher quality recycling. Tracimat's main activities therefore are assessing the pre-demolition audit and delivering the declaration of conformity, delivery of a processing permit and selective demolition certificate, training and advice.

In order to accomplish its goals, Tracimat has developed an application online tool which allows interested parties, such as contractors and building owners, to input materials identified in a building with its estimated quantities. The creating of a database that holds information about available quantities of various recyclable materials is of great value for investors to base decisions on what technologies to invest in and/or will help in dimensioning new recycling plants. Thus the database will enhance and stimulate the circular economy, with the new demolition management organisation offering an opportunity to facilitate the transition to circular earning models within the construction sector.



Doosan adds DX530DM to its demolition excavator range

Doosan has expanded the company's 'High Reach Demolition Excavator' series with the launch of the new top of the range DX530DM model, with its third machine, the DX380DM, set to be launched in the first half of 2021.

Increased flexibility

Like the Doosan DX235DM demolition excavator, the first model in the range launched earlier in 2020, the DX530DM provides increased flexibility with a modular boom design and hydraulic lock mechanism. This innovative design facilitates an easy change between a demolition boom and an earthmoving boom to accomplish different types of work on the same project, using the same machine.

The DX530DM also retains a hydraulically adjustable undercarriage, which extends to a maximum width of 4.37m to provide optimum stability when working on demolition sites. The width of the undercarriage can be retracted hydraulically to 2.97m in the narrow width position, for transporting the machine. The adjusting mechanism is based on a permanently lubricated, internal cylinder design which minimises resistance during the movement and helps to prevent damage to the components.

The maximum pin height of the demolition boom on the DX530DM is 27.5m, compared to 18m on the DX235DM. The impressive working range on the DX530DM allows the machine to provide a maximum reach of 16.5m with a 3t tool. These features are again combined on the DX530DM with a high visibility, tiltable cab particularly suited to high reach demolition applications and offering a 30° tilting angle.

Three different configurations

The multi boom design allows the earthmoving boom to be mounted in two different ways, which with the demolition boom, provides further flexibility with a total of three different configurations for the same base machine. When equipped with the digging boom in the straight configuration, the DX530DM can work to a maximum height of 13 5m. Using the digging boom

can work with an attachment to a maximum height o just over 11m.

A special stand is provided to facilitate the boom changing operation, which is based on quick change hydraulic and mechanical coupler connections. A cylinder based system is used to push the locking pins into place to help complete the procedure. As with all Doosan demolition excavators, the new machine has standard safety features including a FOGS cabin guard, safety valves for the boom, intermediate boom and arm cylinders and a stability warning system.

World of Concrete 2021 announces new show dates

After discussions with key stakeholders and feedback from industry leading concrete and masonry associations, World of Concrete has made the proactive decision to reschedule WOC 2021 from January to June. The decision to move the dates back several months was not easily reached; however, it was felt it was the right choice for all involved. WOC will now take place 8 to 10 June with educational offerings being scheduled for 7 to 10 June, all at the Las Vegas Convention Center.

"We have a commitment to our exhibitors and attendees to provide a valuable and productive face to face experience at WOC each year," said Jackie James, group director, World of Concrete. "This is the first time in our 46 year history we have been faced with circumstances that have caused us to reschedule the event. We feel the new June dates will provide everyone with the necessary time to plan effectively and allow us to reimagine WOC for a different time of the year. Moving the event from winter to late spring in 2021 will allow for additional outdoor activities everyone can enjoy in the great city of Las Vegas, including top notch exhibits, new product demos and exciting spectator events."

The Las Vegas Convention Center (LVCC) has been awarded the Global Biorisk Advisory Council (GBAC) Star facility accreditation by ISSA, the World-wide cleaning industry association. The GBAC program is considered the gold standard for safe facilities and was designed to control the risks associated with infectious agents, including Covid-19. World of Concrete is set to be one of the first large scale events to occupy The Las Vegas Convention Center's €830M West Hall expansion in June, which will add 130,000m² of space to the existing 300,000m² campus. In addition to the exhibit hall, the expansion will feature a striking outdoor plaza, a

grand atrium and state of the art design and technology.

The World of Concrete organisers look forward to continuing its role in driving the industry forward, connecting communities and supporting businesses. They further look forward to seeing attendees in Las Vegas in June 2021 and will continue to post updates to its website as soon as they become available.

Registration for WOC 2021 will open online in early 2021

Due to Covid-19, all Informa events will continue to prioritise the health and safety of colleagues and customers and will be run in accordance with official government and local authority guidance, as well as any venue or location specific regulations. Informa 'AllSecure' adds a further layer of best practice standards and guidelines. This comprehensive set of enhanced measures has been designed to provide colleagues and customers with confidence when attending any Informa event around the world, from an international exhibition to a local conference, with the company striving to provide the highest standards of safety, hygiene, cleanliness and quality.

More than 2,800 exhibitors at bauma China

More than 2,800 exhibitors participated in Asia's leading trade fair for the construction and mining machinery industry, bauma China. Despite the challenges faced due to Covid-19, the show filled all 17 halls and the outdoor area of the Shanghai New International Expo Centre (SNIEC).

Despite the challenging circumstances, many international companies exhibited again this year to a Chinese audience of around 130,000 visitors. Companies with subsidiaries or dealers in China relied on their Chinese operations due to travel constraints. Some examples of the exhibiting companies were Allu Group, Aquajet Systems, Bauer Maschinen GmbH, Brokk, Bosch Rexroth Hydraulics & Automation, Caterpillar, Dynaset, Herrenknecht, Husqvarna Construction Products, Idromeccanica, Indeco, Kinshofer, Liebherr, MB Crusher, Sany, SSAB, Rubble Master and Volvo Construction Equipment to mention a few.

In addition, there were three international joint stands from Germany, Italy, and Spain. Together they accounted for 73 exhibitors and an exhibition area of over 1,800m². Here exhibitors presented products to meet tomorrow's challenges with a focus on smart and low emission machinery, electro-mobility and remote control technology.

Strict rules at the exhibition grounds

The health and safety of exhibitors, visitors and partners were of top priority for the exhibition organisers. The Shanghai Municipal Commission of Commerce and the Shanghai Convention & Exhibition Industries Association published regulations and guidelines on the prevention and control of the epidemic, and these were strictly observed during the show. To ensure a safe and orderly event, various control and security measures and venue sanitation regulations were effectively implemented, appropriate on site medical services were provided and all participants were required to register online.

Chinese government strengthens economic activity

bauma China comes on the back of measures taken by the Chinese government to strengthen economic development with initial successes becoming apparent. According to the government, China's gross domestic product grew 3.2% in the second quarter after the coronavirus related upheavals experienced in the first quarter. A relaxed monetary policy and strong investment in infrastructure, consumption and healthcare are aimed at strengthening economic activity for the rest of the year.

Strong imperative to relaunch business

As far as construction is concerned, according to the latest report by Off Highway Research, stimulus spending in China is expected to drive a 14% increase in construction equipment sales in the country in 2020. This makes China the only major country to see growth in equipment sales this year. Therefore, there is a strong imperative for the construction and mining machinery industry to relaunch business in China. In addition, there is a desire among industry players to meet again in person, to exchange information and network, with bauma China once again playing its role in business activities.

QMJ launch new Hillhead digital event

Taking place exclusively online from 9 to 10 March 2021, Hillhead Digital will combine a multi-stream conference with an innovative exhibition platform that will allow the industry to connect and engage like

Titled 'New Horizons - Building the Recovery', the event will feature 40 free to attend seminars and panel sessions providing insights into the themes that will shape the extractives and construction industry over the next decade, namely digitalisation, decarbonisation and infrastructure. These will be complemented by a dedicated stream run by The Institute of Quarrying exploring the technical and leadership skills that the people delivering this transformational change will

Visitors will also be able to browse 500 virtual booths, sourcing the latest equipment and service solutions in the industry. Functionality will allow them to pre-arrange meetings; chat or zoom live; download brochures, place conference handouts and other useful information into their virtual basket; view exclusive new product videos and much more.

Richard Bradbury, managing director of The QMJ Group, explained: "With exhibitors unable to showcase their products and services at physical exhibitions over the last year, Hillhead Digital will provide a safe and dynamic platform for the community to reconnect and share all of the positive developments that will help shape the construction recovery. Our digital format event will extend Hillhead's international reach and increase its coverage of the technology sector and younger demographic groups and provide an exciting prelude to the physical event we look forward to delivering from 22 to 24 June 2021."



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More flexible organisation of the construction site with mobile stackers

Today modern crushing and screening plants regulate material streams to a large extent automatically. Nevertheless, machine operators still have a strong influence on the final product quality and the daily output as they coordinate the final products by means of building up stockpiles, intermediate storage areas and loading. With the new 'Mobibelt' stackers from Kleemann, logistics can now be organised flexibly and adapted to the respective situation.

The Mobibelt stackers are available in three sizes and designs. The MBT 20 has a crawler chassis and a belt length of 20m, whilst the MBT 24 also offers a further stacker with a crawler chassis and a length of 24m. With a conveyor belt length of 15m, the MBW 15 is the smallest in the portfolio and can be moved with a tractor to any work site. Depending on the construction

site, the matching stacker can be used and the logistics can thus be optimised on site.

In order show how the Mobibelt stackers optimise construction site logistics, three examples illustrate the advantages. In example one, the material is loaded by a wheel loader and then cleared away by a mobile stacker. This set up is often used in natural stone applications with homogeneous feed material, but it is also suitable for the processing of demolished or cut asphalt. If work is carried out with a wheel loader and mobile stacker, only one operator is required and trucks do not need to be loaded directly after the crushing and screening process. This makes a very lean construction site process possible.

The second example is found when material is loaded by a backhoe excavator and then cleared away by a mobile stacker. This process can achieve very high daily outputs in recycling and natural stone applications because clearing of the stockpiles is not required. Provided that no pre-screened material has to be discharged, and that no trucks are to be loaded directly downstream of the crushing and screening process, this is the most cost effective variant.

In the third application example, a backhoe excavator loads the material, mobile stackers clear it and a wheel loader loads the processed product. This is one of the most popular variants in recycling and natural stone applications because it makes the highest daily output possible. This process is recommended, in particular, if trucks directly downstream of the crushing and screening process are to be loaded.



Operation with wheel loaders and mobile stacker.



Operation with excavator and mobile stacker

NEW L 586 XPOV for Meyer Erdbau GmbH & Co. KG Meyer Recycling GmbH recently acquired a special wheel loader for its internal operations. The L 586 XPower, with just joystick steering, is now being used recycling building materials. At the company's recycling site in the west of Ber-The new L 586 XPower loads a lorry with recycled mater that is reused for construction projects. lin, the subsidiary of Meyer Erdbau GmbH & Co.KG

recycles building materials for use in construction projects. Here, the new emission stage V-compliant L 586 XPower is in operation filling screening plants and loading trucks with processed material. "Around 30 trucks arrive at our recycling site every hour. With the L 586 XPower, our machine operator only needs two loading cycles to fill a truck," explains the company's founder and managing director, Dipl.-Ing. (FH) Thomas Meyer.

In addition to its power split travel drive, standard in all XPower wheel loaders, the new wheel loader uses the new joystick steering for Liebherr wheel loaders. It allows the machine operator to comfortably steer using short movements on the ergonomic joystick. The position of the joystick always corresponds to the respective articulation angle of the wheel loader. The force feedback on the joystick ensures the best possible driving and operating experience.

In addition to the new excavator, the company has a modern fleet of around 60 construction machines at its disposal for recycling building materials, including numerous Liebherr machines. "The high level of service quality from Liebherr is an important reason for us to regularly invest in products from Liebherr," says Thomas Meyer.

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FLOOR STRIPPERS
FOR THE REMOVAL OF FLOOR
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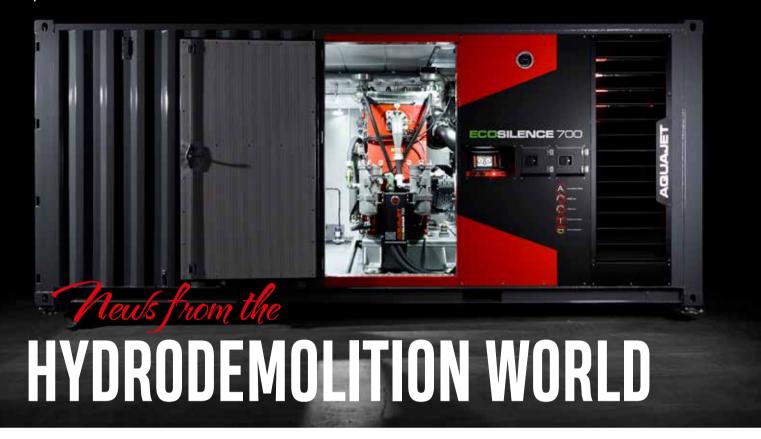




DUST COLLECTORS
TO WORK IN A SAFE & DUST FREE
ENVIRONMENT

PDi special feature

Aquajet has also recently introduced the new Aqua Power Pack Ecosilence 3.0.



The two Swedish manufacturers of hydrodemolition machinery and equipment have continued their efforts to raise the profile of their concrete removal technology.

quajet has announced that its new 'Aqua Cutter' 410V hydrodemolition robot is now an even safer and more efficient alternative to manual industrial cleaning methods. The model combines the compact size of the Aqua Cutter 410A with the innovative mast system of the Aqua Cutter 710V for unrivalled performance when working in tight spaces such as boilers, tanks, pipes and other industrial containers and conduits. With a free standing reach of up to 4m, the 410V gives operators the ability to work horizontally, vertically or overhead, while the remote operation keeps them out of harm's way during hazardous cleaning applications. The 410V's design also makes it suitable for a wide variety of industrial cleaning tasks in oil, gas, petrochemical, refractory, nuclear and other industries where it can increase efficiency up to 80%.

The 1,250kg Aqua Cutter 410V uses 1,000 to 2,750bar (approx.) water jets and a range of attachments for efficient concrete removal or surface preparation. Users are also able to adjust the robot's stroke to control removal depth and vary water pressure to match the application, increasing precision and efficiency over hand lances and other manual methods. This can significantly increase efficiency for applications such as tank and large diameter pipe cleaning, reducing the time and personnel required while still producing high

quality results. The 410V features electric power and is compatible with Aquajet's line of accessories, such as the 'LT' extension kit and 'Rotolance 2500 LT', as well as spines and frames.

Another choice available for users is the Aqua Cutter 410V 'Tunnel Kit', specifically designed for cleaning

Aguajet has launched its new Agua Cutter

and surface preparation in applications such as steel or concrete pipes and tunnels up to 3m in diameter. The kit uses a rotolance and features automatic detection and the ability to adjust the distance to the tunnel surface. This makes it very easy to operate in uneven tunnel shapes or oval tunnels.

Ecosilence 3.0

Aquaiet has also recently introduced the new 'Aqua Power Pack Ecosilence 3.0' that reduces noise and allows





PDi special feature



With a free standing reach of up to 4m, the 410V gives operators the ability to work horizontally, vertically or overhead, while its remote operation keeps them out of harm's way during hazardous cleaning applications.

for a more compact jobsite, while enhancing environmental stewardship and lowering overall operating costs. The new Ecosilence features integrated auto start/stop technology that improves fuel consumption, which saves as much as 25l/day of fuel for a smaller carbon footprint. The re-engineered Ecosilence is also more compact with the entire self-contained system now fitting in a standard 6m shipping container. It also produces less noise while in operation, making it ideal for use in urban areas with limited space and strict noise restrictions.

The new unit also has dramatically improved pumping pressure, operating as high as 3,000bar and providing ample power for hydrodemolition applications such as concrete renovation and road and bridge repair. Like all previous Aqua Power Packs, the Ecosilence 3.0 is easy to transport and set up, measuring 6.1m x 2.4m x 2.6m while maintaining innovative sound absorbing design features. The latter includes insulated walls and doors, as well as seals on all doors and hatches. Despite the shorter overall length, the container still provides ample storage for the company's Aqua Cutter robots, accessories and tools. Additional options are available to customise this work area, such as a built-in workbench with a vice that provides a space for jobsite maintenance and a place to store spare parts. The Ecosilence 3.0 is available in several pressure and flow combinations, allowing operators to scale equipment to meet their specific needs.

www.aquajet.se



The Ecosilence 3.0 measures 6.1m x 2.4m x 2.6m while maintaining Aquajet's innovative sound absorbing design features.



Despite the shorter overall length, the container still provides ample storage for the company's Agua Cutter robots, accessories and tools.

Conjet

Conjet AB has recently launched a new graphical user interface for all '7-series' robots. The new interface has been developed for working at a safe distance through the use of an interface on the robot or on the identical remote control box. The interface consists of two separate parts, one focused on operation and the other focused on service. The settings are easy to reach with just a push of a button with the interface also giving the operator instant feedback on the set parameter. Another important update is the ability to manoeuvre between controls and options using a rotary encoder.

The display located on the robot is a 178mm colour screen with an 800 x 480 pixel resolution which will be available on all Conjet 7-series robots. The colour display on the remote control box is a 109mm LCD, 480 x 272 pixels, with 2mm thick protective Gorilla glass which utilises the surrounding light to give a sharp and clear image in more difficult environments such as bright sunlight. With this display the user is able to steer and control every aspect of hydrodemolition at a safe distance, resulting in no need for the operator to be close to the robot during operation. Should a fault arise, a comprehensive trouble shooting guide is available to the operator, with all existing robots in the 7-series being so equipped with the new interface.

Applications wise, Conjet has also moved away to a degree from only using the word 'hydrodemolition' to define its services and offering. Instead the company has released a new concept termed, 'Automated Concrete Removal', which covers more uses in terms of applica-

tions where high pressure water can used as an efficient concrete removal method.

Recently Conjet participated in the virtual trade show DEM-CON hightlighting the latest novelities from Conjet including the new interphase. Lars-Göran Nilsson, one of the founder and and former owners of the company explain online the background of the company. Conjet's news CEO Robert Kreicberg talked about Conjet today and in what direction

the company is aiming. Service manager Conny Tångring described the advantages with the new graphical user interface on the Conjet 7-series.

To watch the presentation go to https://www.youtube.com/watch?v=QNPutlx6jCU&feature=emb_logo

www.conjet.com



Robert Kreicberg, Conjet's new CEO since a year back, talking about where Conjet stands today and in which direction the company is aiming.





Conjet AB recently launched a new graphical user interface for all its 7-series robots.

Roger Simonsson, managing director of Aquajet, outlines some of the benefits of

BLASTING

Traditionally, sandblasting has been the method of choice for rust and paint removal as well as concrete surface preparation applications. However, changing standards in safety and increased levels of environmental protection are causing many to question whether it's still the best option when compared to other methods, such as robotic water blasting.

ver the last 30 years, advances in hydrodemolition technology have led to water blasting equipment that produces better results, more efficiently and often with reduced environmental impact than sandblasting. These benefits have encouraged many organisations and contractors to now use robotic water blasting techniques. Another major reason has of course been increased safety as sandblasting requires a lot of physical exertion as operators must constantly resist back thrust. Although equipped with breathing equipment and protective clothing, operators are also subject to high levels of fatigue and strain during prolonged operations with the toll on workers often being significant. With robotic water blasting, or hydro blasting however, any heavy lifting is left to the machines while crew members stand safely out of the way.

The water blasting machines are also available with a number of attachments that enable operation over large areas - vertical, horizontal and overhead - while allowing workers to remain safely on the ground. Furthermore, and depending on the system and the area to be covered, robotic water blasting equipment might include a basic

scaffolding system, but it is a feature of the machine, not a concern for workers. In other cases, the robots reach can be extended with additional tower sections or attachments, eliminating the need for scaffolding altogether and increasing productivity. Additionally, robotic water blasting is ideal for confined space operations. In all applications, the use of water eliminates the risk of silica dust exposure.

In addition to safer operation, robotic water blasting offers a level of precision and productivity far above traditional sandblasting. Reapplication of paint or other material is not the final goal of all sandblasting and water blasting applications, but in cases where it is, ensuring uniform abrasion across the entire surface provides a superior bonding surface for longer lasting, high quality results. This is thanks in part to the high pressure available from industry leading water blasting equipment.

Environmental benefits

The last few decades has seen government agencies increase regulations on dealing with waste resulting from removal and cleaning applications, especially when

there is the possibility of contaminating nearby water. While robotic water blasting waste requires treatment, the process is much easier and more cost effective. This is mainly due to the fact that water blasting's primary by product is water. Although both sand and water contain contaminants following application, there is no effective way to remove small particles from sand which is not a problem with waste water where particles are easily removed.

Making the switch to robotic water blasting might seem daunting at first, but an operation employing the right system will quickly benefit. For best results, working with a reputable OEM to provide a system tailored to fit the operation's specific needs is suggested.







A Conjet robot 557 is being used to remove concrete from the spillway on the Alcova Dam in Wyoming, USA, which is owned by the Bureau of Reclamation. The job is being performed by Penn Hydro, Inc., a hydrodemolition contractor located in Pittsburgh, Pennsylvania, on behalf of the general contractor NW Construction.

enn Hydro, Inc.'s scope of work on the repair project for the Bureau of Reclamation consists of the removal of deteriorated concrete from the spillway floor and walls of an earth-fill dam that is utilised for water storage and hydroelectric power generation. Penn Hydro is also responsible for the collection, treatment and disposal of the hydrodemolition wastewater. Brad Beaudry, project superintendent for NW Construction, stated that he chose Penn Hydro as the subcontractor because of its prior experience and expertise with complex dam projects. Brad also noted that compared to other concrete removal methods he evaluated when planning this project, hydrodemolition was 'much faster' and other removal methods 'could not touch hydrodemolition in terms of speed.'

Before commencing the project, Penn Hydro carefully examined and serviced a Hammelmann pump





Overview from the Dam in Wyoming USA.



Conjet Robot 557 removes the concrete from the spillway.

and a Conjet Robot 557 prior to the mobilisation from the East Coast of the United States to the Great Plains region. This is roughly a 2,400km trip so it was imperative that Penn Hydro's operators had functioning equipment as well as additional spare parts and materials to ensure successful execution. Conjet assisted with the preparations by sending its customer success manager, Tim Best, to visit Penn Hydro's East Coast headquarters prior to mobilisation to ensure that Conjet's Robot 557 was working properly. Tim also visited the Wyoming jobsite to ensure the robot was running to Conjet and Penn Hydro's operational standards.

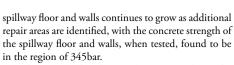
The Bureau of Reclamation performed a second survey just prior to Penn Hydro's commencement. This second survey uncovered additional areas for repair along the floor of the spillway. The decision of the Bureau of Reclamation was to proceed with hydrodemolition on the newly discovered repair areas. Penn Hydro's equipment versatility and production rates were considered crucial in the efforts to expedite the schedule given the expanded scope. Mr. Beaudry stated that he has been 'impressed with the Conjet Robot 557' based on its production rates, and also because of the 557's versatility in being able to quickly switch from horizontal to vertical removal using the robot's standard arm.

The volume of concrete removal is estimated at 160m³ on the spillway floor and walls for an average depth of 150mm, and 107m³ of removal on the spillway wall caps for an average depth of 380mm. However, and according to Penn Hydro, the quantity of removal on the

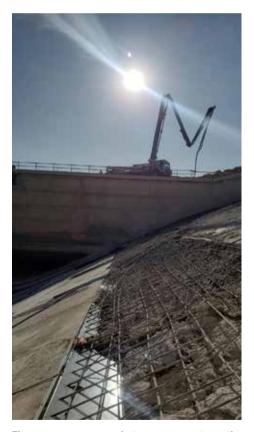




Structural joint being opened up by hydrodemolition.



The Bureau of Reclamation's recommendation for commencement of work on the spillway was October, as at this time of year this yields the lowest water levels and



The concrete pump ready to pour concrete on the removed area.

safest conditions for all involved. A later start could also prove to be difficult given the cold that Wyoming experiences at that time of year. Penn Hydro's initial scope of work is estimated to be in the region of 10 weeks, with anticipated completion set for early December. As additional repair areas were also identified, further time has been allocated accordingly to the project schedule.



the benefits of hydrodemolition in noise restricted areas

Sound is an important, yet an often overlooked part of our daily lives, with its negative effects on employees and the general public now becoming a growing concern in certain industries. with construction and demolition being particularly worthy of note. The excessive noise produced by erecting, remodelling or demolishing structures contributes to a number of health concerns, including stress, hearing loss, cardiovascular disease and cognitive impairment.

ith construction and demolition operations taking centre stage in noise pollution discussions, it's no surprise significant restrictions are being put on contractors by government agencies to protect workers and the public. There is no denying that demolition and surface preparation applications are noisy. The amount of noise depends on a variety of factors, such as whether the project is taking place in an open or enclosed environment and the condition of the material being removed. However, when taken alone, these machines operate at the same or only slightly higher levels than many common, everyday noises. For example, handheld pneumatic devices and concrete saws operating as part of a road or bridge repair project register around 100dB, which is about the same as a lawnmower or snowblower.

Hydrodemolition robots, on the other hand, typically operate about 10dB lower, greatly reducing overall noise pollution. Given the same road and bridge application, this would be about as loud as a passing motorcycle or subway train. The quieter operation is thanks in part to a heavy rubber hood over the demolition area that helps protect workers from flying debris but also dampens sound. While it doesn't decrease the overall decibel level the machine produces, remote operation increases sound safety by keeping workers at a distance.

Sound engineering

Even if a piece of equipment is quiet, its support equipment may not be. The high pressure pump that powers hydrodemolition robots is a perfect example and one that needs to be considered carefully. This can jeopardize contractors' ability to meet sound regulations in urban environments and negate the benefits of the quieter hydrodemolition equipment. As a result, it's important to evaluate features that can allow equipment to run silently and meet even the most stringent noise restrictions.

One of the more common methods for reducing jobsite noise is to add temporary solid barriers - referred to as hoarding - around the work area or in a tight perimeter around the loudest equipment. The resulting physical shield helps to limit how much jobsite noise escapes to the surrounding area.

While hoarding works well, it takes extra time and resources to set up and often needs to be moved with the machinery, limiting productivity. This is even truer on crowded jobsites where even stationary equipment might need to be moved frequently. Some of today's innovative high pressure pump designs solve this problem by incorporating hoarding into the equipment itself for a self-contained system designed to reduce decibel levels.

These sound limiting pump systems often include a skid mounted combination engine and high pressure pump contained within a shipping container built with advanced sound absorbing cassettes. Though enclosed designs like this require a muffler to vent exhaust to the outside, engineers are able to incorporate exhaust silencers to limit low frequency engine sound. Continually running engines are another aspect of high pressure

pumps that can increase noise pollution. In addition to isolating engine sound within a container, some designs also employ advanced stop-start technology, similar to that employed in automobiles, to temporarily shut down the engine when not in operation. This method not only cuts down on noise levels, it reduces idling and can save as much as 20l/day to 25l/day of fuel. It also achieves these noise and fuel reduction features without limiting productivity, as these systems are capable of running at full pressure at lower rpms as a result of a flat torque curve.

Enclosed high pressure pump designs do require careful consideration for how the sound limiting features affect other areas of equipment operation, such as cooling systems. Placing the engine and pump within a container also isolates heat, which can be detrimental to the machinery if not properly separated. However, modern designs can combat this by incorporating new cooling technology like innovative liquid to air cooling systems allowing for efficient heat transfer with less noise. Electric speed controlled fans can circulate external air through sound absorbing vents as part of a heat exchanger that covers the entire front of the container. These innovations allow operators of enclosed systems to run the unit with doors and air vents closed, further limiting external sound. This also prevents debris or outside air from entering the engine chamber during operation, permitting use in harsh environments such as harbours or cold weather.

Silent partner

Designing equipment with a focus on one feature or solving one challenge has long resulted in sacrifices in other areas of the system. However, today's advanced engineering considerations allow for more well balanced designs. Enclosed high pressure pump systems reduce noise, but also offer a number of other benefits for today's urban jobsites as a silent running high pressure pump system provides more flexibility when it comes to where it can be set up.

Advanced systems require little to no direct oversight during operation, allowing crews to focus on the job at hand, rather than the support equipment. This also limits worker exposure to the machine's loudest components. Some have state of the art remote control systems that command primary operation, as well as provide detailed information on systems and status. External lighting systems can visually communicate both information and warnings. These features allow workers to perform almost all necessary adjustments during operation from outside the container and even from a great distance.

Peace and quiet

As part of a well-designed sound abatement plan, hydrodemolition and the latest silent running high pressure pump systems allows contractors to protect workers and the public from dangerous noise levels, while providing productivity above and beyond that of traditional handheld equipment. These benefits open up a wealth of new bidding opportunities for contractors by granting them access to even the most sound restrictive jobsites. meaning that it is now time to turn down the volume on concrete removal and surface preparation applications. Noise restrictions will only continue to increase as jobsites move further and further into heavily populated urban environments. Investing in quieter methods not only ensures contractors meet current regulations, but promises long term options as the construction and demolition landscape continues to evolve.



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More than 640k north of Winnipeg, the Keeyask Generation Project is underway. During the seventh year of construction, a problem occurred when water in a pipe in the intake froze, damaging a concrete pier. Keeyask managers opted to use hydrodemolition to remove the damaged section using a specialised contractor to overcome environmental and logistical challenges, while delivering quality results. Water Blasting & Vacuum Services Inc., a Canadian industrial cleaning specialist, secured the contract based on a plan that provided not only the efficiency to complete the 140m³ removal work on time, but recycled nearly 80% of the water.

ater Blasting & Vacuum Services first hydrodemolition machines were bought used and converted in-house to meet the cleaning challenges of mills and other industrial facilities. The company quickly realised the benefits of working with an original equipment manufacturer to increase precision, safety and efficiency. "Our old equipment kept the team safe and got the job done, but with most plants slowing down for routine maintenance during the same few months, we needed to find a way to maximise efficiency," said Luc Laforge, president and owner of Water Blasting & Vacuum Services. With one piece of Aquajet equipment, an Aqua Cutter 410A, Laforge saw an 80% increase in efficiency when dealing with a routine scrubber cleaning application.

The power and efficiency of the 410A and additional Aquajet equipment, including a 710V, allowed the company to branch out into hydrodemolition, hydromilling and other applications, greatly increasing the company's service offerings. Over time, a reputation for delivering creative solutions and timely, high quality results with minimal environmental impact propelled the company to the forefront of the Canadian hydrodemolition industry.

The hard won reputation saw Water Blasting & Vacuum Services win the contract to provide specialist hydrodemolition work at the Keeyask Generation



Over the course of the project, the EcoClear processed more than 6M/I of water.

Project that would test the company and its equipment. "The project had a lot of challenges to overcome," said Maurice Lavoie, general manager at Water Blasting and Vacuum Services and site manager for the project. "The remote location left us with no access to technicians or spare parts if something were to go wrong. On top of that, we would be dealing with sub-zero temperatures. You had to have a lot of confidence in your team and your equipment to even submit a bid." Strict environmental controls also limited contractors' application choices. The project partners, the Keeyask Hydropower Limited Partnership, had made environmental protection a cornerstone of the overall project. So, while the original brief specified hydrodemolition as an acceptable process, the contractors would need to ensure all wastewater was properly collected and treated.

"Whatever technique we used, we had to ensure there would be no negative impact on the surrounding environment," Lavoie said. "Limiting environmental impact is always an important part of any project for our company, but, when combined with this project's remote location, we knew there would be additional challenges. From previous experience on a jobsite in Labrador, we knew hauling water in and out was an option, but it





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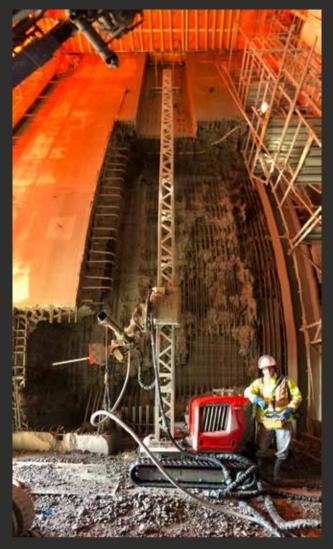
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- High-pressure water- and rotating tools (selfpropelled or externally driven)
- Ergonomic and safe tools for surface treatment
- High-Pressure guns widened by different foot valves and rotating gun lances
- Rotating nozzles for gun operation and manipulator / self-propelled / pneumatically driven
- Rotating joints (3200 bar / 46,400 psi)
- Rotating joints especially designed for mounting on surface cleaners
- Combining up to five rotating joints suitable for surface cleaning like runway cleaning
- Less abrasive wear and easy to maintain equipment
- Long life time due to maintenance free gear drive, no oil no grease is needed
- Custom made products



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PDi site report



Water Blasting & Vacuum Services Inc. pushed the boundaries of hydrodemolition.



The EcoClear water filtration system allowed Water Blasting & Vacuum Services to present a revolutionary solution to project managers.



The Water Blasting & Vacuum Services team operated the Aqua Cutter daily.

was costly and inefficient. Treating the water onsite and reusing was the most economical and environmentally friendly solution. And with the Aquajet EcoClear we already had the right machine to make it work."

Filtration solution

The EcoClear water filtration system, in combination with Water Blasting & Vacuum Services' extensive experience and expert logistics, allowed the contractor to present a revolutionary solution to project managers. Water Blasting & Vacuum Services purchased the EcoClear system in 2017 as a more efficient and cost effective alternative to hauling wastewater with vacuum trucks for offsite treatment. The system neutralises water pH and reduces turbidity to allow safe release back into the environment. For the hydroelectric power project, rather than treating and releasing the water, Water Blasting & Vacuum Services proposed using the EcoClear as part of a closed loop system that would recycle the water back to its Aqua Cutter 710V. It would be the company's first time using the EcoClear to recycle water on such a large scale, but Lavoie and his team were confident the EcoClear and 710V would make the perfect pairing to tackle the challenging application. "This project put our people and equipment to the test. There were a lot of firsts, but we knew we had the experience and the support of the Aquajet team to take our plan from theory to reality," Lavoie said

Clearing a Path

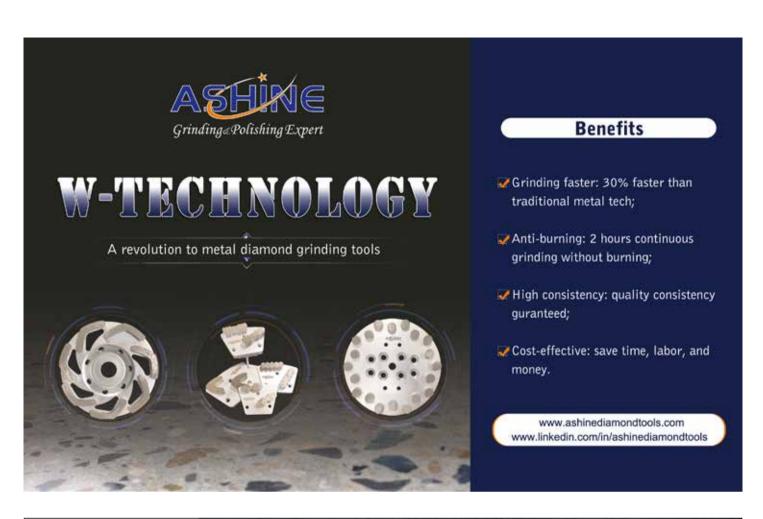
Water Blasting & Vacuum Services arrived at the jobsite in March 2018. With temperatures averaging -29° a hoarding system and heaters had to be set up around the demolition site to provide shelter and keep the pumps operating. In addition to the EcoClear system and 710V, the contractor used a spreader bar and additional tower sections to maximise the hydrodemolition robot's reach. The enhancements greatly reduced the downtime that frequent repositioning would have required with additional lance sections used to increase efficiency.

Steve Ouellette, lead supervisor at Water Blasting &Vacuum Services, was put in charge of the closed loop system with two 95,000l tanks providing water to the Aqua Cutter 710V. Wastewater was directed to a low point then pumped to the EcoClear. Once the water was treated, it was pumped back to the holding tanks for reuse. In a 12h shift, Water Blasting & Vacuum Services removed an average of 4m3 of concrete and used an estimated 181,000l of water. Of this, roughly 20% of the water was lost during the hydrodemolition process due to evaporation and absorption into the concrete. However, Water Blasting & Vacuum Services was able to collect and recycle the remaining 80% with the EcoClear system. Over the course of the project, the EcoClear processed roughly 6M/l of water.

Water Blasting & Vacuum Services worked with project managers to integrate demolition into the complex timeline of the overall project, completing the work in two multi week phases. Lavoie and his team operated the Aqua Cutter daily for almost an entire 12h shift, working in 3.6m wide sections to completely demolish the wall. A separate crew would come on at night to remove rebar and debris. The process was repeated for approximately 41 days of blasting and a total of 53 days onsite.

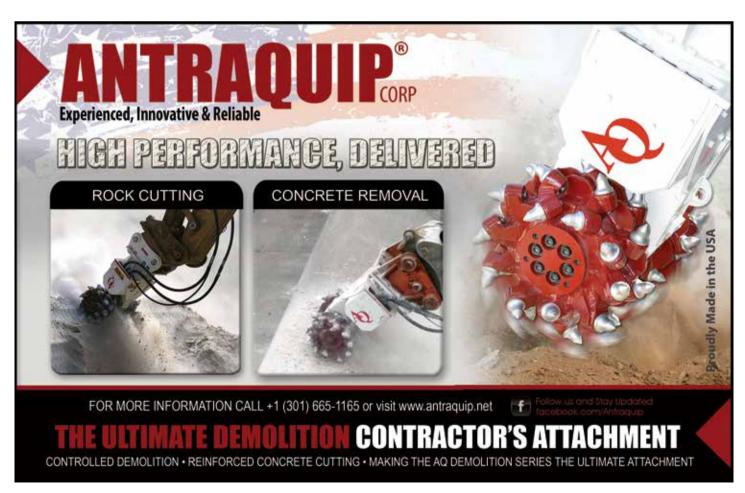
Powering through

Water Blasting & Vacuum Services completed demolition in May 2018. Thanks to a revolutionary and expertly executed plan, as well as innovative equipment, the removal did not disrupt the timeline of the overall project. "Projects like that are once in a lifetime," Laforge said. "Thanks to a dedicated team with the experience and daring to take on the impossible and innovative equipment, we were able to find a unique solution that allowed us to push the boundaries of hydrodemolition and be part of such an important construction."











Treasures for the steel industry are often hidden away in scrap yards around the world. Scrap is often considered to be the new gold, as the steel can be mostly reused and is frequently recycled worldwide. The Swiss steelworks company Stahl Gerlafingen AG leverages this very potential, processing scrap, melting it down and thus making a significant contribution to CO2 reduction in steel production. Helping it, the company's latest addition is a mobile Sennebogen 840 E which takes care of the scrap logistics when filling wagons.

Urban mining' is an important, resource and environmentally friendly way of returning steel scrap from the urban environment to the material cycle through targeted recycling and generating new steel products from it. Thinking of the many tons of steel used in buildings and bridges for stabilisation purposes alone, such as reinforcing bars for fixing foundations, a real treasure can be retrieved when selectively dismantling structures.

The Swiss steelworks Stahl Gerlafingen AG has also adopted this principle. By processing and smelting old scrap, the 520 employees on site produce 668,000t of reinforcement and sectional steel for the construction industry every year. Furthermore, and according to the Swiss Construction Index, the industry has been showing a continuous positive trend in this area for 20 years. Playing a part in the process, from the installation of steel products to recycling, now sees a powerful, mobile Sennebogen 840 E series material handler, which is exclusively responsible for loading production wagons for the company. Drivers flexibly switch between a Sennebogen 800 l orange peel grab and a magnet to fill the rail wagons or sort the scrap, after which the wagons move to the smelter.

Resource saving and environmentally friendly operations

The current spirit of innovation in the steel industry is on the rise with the first projects having already been launched with the aim of reducing CO2 emissions in steel production in order to achieve European climate targets. Part of this is, among other things, the use of hydrogen in blast furnace processes which is an essential reducing agent instead of injection coal, or the switch to 'green' generated electricity in the energy intensive operation of electric arc furnaces. The melting of old scrap also contributes significantly to reducing CO2 emissions in steel production as steel does not have to be produced from scratch in costly, energy and raw material intensive processes. It can now be obtained almost entirely from recyclable scrap, meaning that it is now possible to avoid up to 20Mt of CO2 annually in Germany alone, and up to 950Mt of CO2 worldwide (as of 2017).

The steelworks in Gerlafingen obtains its material via short, environmentally friendly transport routes, with almost 90 % of it being from Switzerland and, on average, less than 90k away. Due to the large per capita scrap volume in Switzerland (about 190kg per year), it is also necessary for Stahl Gerlafingen to process the scrap masses quickly in fast handling cycles. "With the 840 from Sennebogen, we have found a unique machine that is faster and has more lifting power than anything comparable in its class on the market. Four to five drivers alternate in three shift operation, which is why we placed great value on simple, controllable technology," says Rainer Sommer, subcontractor manager at

Stahl Gerlafingen. According to Sommer, the engine configuration also played a major role in the purchase of the material handler and together with sales and service partner Kuhn Schweiz, the choice was made to go with the 231kW fuel efficient and emission reduced diesel version of the 840 Mobile. The emission rates achieved by the latest generation of stage V diesel engines reveals that thanks to sophisticated technology for exhaust gas after treatment, far fewer emissions are released into the environment today. With 97% less soot particles and 96% less nitrogen oxide emissions, modern diesel powered machines are clearly more environmentally friendly than in previous years.

Always ready for action

It was particularly important for Stahl Gerlafingen that the key safety factors of maintaining operations on the one hand, and the safety of the drivers on the other, were always ensured. "We work in a continuous cycle, from scrap to steel, delivery, loading, charging the furnace, smelting, pressing, finishing. If one single wheel stops turning, production comes to a standstill! We have to avoid this wherever possible," explains Rainer Sommer, emphasising the outstanding role that reliable service plays for him. He concludes, "And as long as I don't hear anything from my operators, that's great praise, and they feel very comfortable in the machine."



Tuytel Group continues to rely on Lindner mobile shredding technology

When it comes to hiring first class machines, Oud-Alblas in the Netherlands, about 25km from Rotterdam, is said to be a good place to visit. That's where the Tuytel Group is based and where it has been renting out heavy construction machinery and offering transport solutions as well as recycling machines in the Netherlands and all across Europe since 1999. For processing waste wood, the company relies on Lindner's robust solutions, supplied and supported by Dutch sales partner Van der Spek Vianen B.V.

At the beginning of 2020, a solution consisting of the 'Urraco' 95DK shredder and a 'Zeta Star' 95DK star screen were added to the fleet of the Urraco 75 series. "As a heavy equipment rental company we focus specifically on premium machines from top European brands. We have to offer our clients solutions with maximum reliability and the lowest possible maintenance costs," explains Jan Arie van der Meijden, responsible for Tuytel

Group's recycling division. He adds: "When purchasing a new waste wood processing solution, we looked at different technical equipment on the market. In the end we came back to Lindner. Our experiences with our two Urracos have been fantastic, but the sturdy welded cutting system and the exact output size were the deciding factors. With a throughput of approximately 65t/h, the shredding unit endures high loads. We do not want our customers to have to retighten or even replace the knives every 80h. The Urraco 95DK shredder easily operates 600h to 700h without intervention and does so with a clean output and no great anomalies."

Tuytel processes waste wood of the Dutch grades A, B and C, but mainly category B waste wood, i.e. waste wood that is not contaminated by wood preservatives or organohalogen substances. The company offers its customers the Urraco 95DK as a single step processing

solution for particle sizes of 0-180mm. The machine is equipped with Lindner's patented 'LW' cutting system, which was specifically developed for waste wood processing. Furthermore, by using Lindner's Zeta Star 95DK star screen, finer fractions can be produced up to a particle size of P100 according to ISO standard 17225-1. As we as a hire option, Tuytel also provides the facility of renting the machines with an operator.

The majority of the processed waste wood is shipped and ultimately used for energy recovery. "In addition to the precisely defined output, it is extremely important to our clients that the rented solution can also be operated at high productivity. That's where our Lindner machines give us a crucial advantage with their ease of operation and very long maintenance intervals. This means the operator can focus on feeding the machine and the shredder takes care of the rest," summarises van der Meijden.

About the Tuytel Group

Tuytel is an international rental and trading company supplying a variety of first class heavy construction machinery. The company rents, sells, services, maintains and distributes numerous premium brands. Its knowledge and expertise enables Tuytel to support companies across Europe, advising them on the best solutions for different applications. Lindner is a family business and has been offering innovative, tried and tested shredding solutions for decades. From planning, development, design and production to service, everything comes from a single source. At its production facilities in Spittal/Drau and Feistritz/Drau in Austria, Lindner manufactures machines and system components that are exported to almost 100 countries. In addition to stationary and mobile shredders for waste processing, the portfolio also includes complete systems for plastic recycling, SRF and waste wood processing. The shredders can be used, for among other things, MSW, C&I waste, waste wood, plastics, packaging material, paper and light scrap.

www.lindner.com

New VZ 850 shredder from Arjes

Since the German manufacturer Arjes began production in 2007, it has made a major impact in the demolition and recycling market. Its compact and mobile recycling plants have become a popular tool on the jobsites of many demolition and recycling firms. The primary shredders, 'Impaktor 250', 'EVO', 'VZ 750', 'VZ850' and 'VZ 950 Titan', are able to handle and recycle all kinds of waste material including construction and demolition debris, waste wood, biomass and green waste, stem wood and roots, scrap metal and cars, waste and plastic.

New VZ 850

Arjes is now introducing its latest model, the VZ 850, which is a dual shaft shredder and was developed by Arjes technical director, Norbert Hammel. It incorporates innovative technologies based on decades of experience in the recycling industry, combined into one powerful machine. Due to its hydraulic drive, this shredder is suitable for almost any material, even when composed of large pieces. Different configurations such as stationary, semi mobile and mobile are offered. It uses the patented 'T-blade' to deliver a precise cutting process with energy savings of up to 15%. The machine has two



tilting hoppers for optimal feeding of the material to the tool shafts and has an automatic reverse function which protects against fracture of the cutting tools. The noise level of the machine is low due to effective sound insulation and low engine speed, whilst wear and maintenance costs are also low due to its maintenance friendly modular design.

Three different versions

There are three different versions available of the new shredder. For most applications the 'Diesel Drive' (D) version with a diesel engine and a wheel axle is suitable. Due to the sturdy hook lift base frame, the machine can be transported to different locations without any problems. With the help of a wheel loader or forklift truck, it can also be repositioned quickly and easily on the job site by the integrated drawbar.

For mobile use, Arjes offers a version with a track system, 'Diesel Track' (DK), which is designed to be moved to a new location independently without any other equipment. This model is also designed for use in rough terrain. In addition, the chassis can be equipped with rubber track shoes to protect the surface. It is controlled by a 21 channel radio remote control unit. For situations where there are special requirements for exhaust and noise emissions, Arjes also provides a version with an electric engine, 'Electric Drive' (E). It is also possible to divide the shredder into several components in order to meet structurally relevant specifications.

Easy exchange of shafts

On the Arjes shedders it is very easy to exchange shafts if different types of material are to be shredded at the same jobsite. The exchange of the shafts can be done directly on the jobsite and takes a maximum of an hour with no need to bring the machine to a workshop.

www.arjes.de





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Doosan has expanded the company's material handler range with the launch of the new 23t DX230WMH-5 model, which joins the recently introduced DX250WMH-5 25t machine.

Both new models are aimed at material handling duties in the solid waste, recycling, demolition and forestry industries. Like the existing larger model, the DX230WMH-5 has two arm cylinders for extra balance providing more stability and lesser movement when using attachments such as grapples. The maximum pin height in the DX-230WMH-5 is 11.7m, the maximum operating reach is 10.1m and the maximum working depth is 4.2m.

Elevating cab provides excellent visibility

Another special feature which is standard on the DX230WMH-5 is the elevating cab, which provides excellent visibility and high flexibility for the operator. Easily accessed from ground level, the cab height can be adjusted to a maximum elevated height of 2.5m to give the operator the best view of the work in hand, especially when combined with the rear view camera display in the cab. The operator can adjust the cab height from the position inside the cab, with an emergency lowering lever installed at the rear of the seat.

In the cab, a standard colour LCD display (approx. 178mm) provides helpful maintenance history and machine monitoring information. It also displays a video feed from the standard rear view and side view cameras, which are uniquely placed to give even better visibility. A split screen mode displays a camera view and vital machine information at the same time. The feed from the side view camera can be reviewed independently or in a split screen mode.

Designed to carry out the toughest tasks, the DX230WMH-5 is built with front and rear stabilisers, and a boom and arm specifically designed for material handling tasks. The DX230WMH-5 is easy to operate with ergonomic joysticks and a steering wheel. The ma-

chine comes equipped with two way auxiliary and rotate circuit hydraulics to improve efficiency. The operator can use buttons on the joysticks or an optional foot pedal to control auxiliary attachments.

Options

Doosan can also provide a range of options such as gooseneck and straight arms, solid tyres and FOGS, as well as different attachments to match customers' applications and to enhance productivity for a wide range of material sorting and handling applications such as those in the scrap metal and other solid waste and recycling industries, as well as logging. There are a number of factory installed options for the new material handler, including additional work lamps, cab guarding, frame guards, fuel filter pump, rotating beacon and an air compressor. An optional generator is available as a turnkey solution without requiring additional modification. For added durability, an optional 'V-guard' protects the machine sides and components behind the doors.

The new DX230WMH-5 material handler is powered by the six cylinder, turbocharged Doosan DL06PA water cooled diesel engine, providing an output (SAE J1995) of 129.4kW. The DL06PA engine offers convenience and lower costs by meeting Stage IV emission regulations without the need for a diesel particulate filter through the use of cooled exhaust gas recirculation and selective catalyst reduction after treatment technologies.

Power modes to match the application

A special Doosan developed system, 'Smart Power Control' (SPC), improves machine efficiency while maintaining productivity through variable speed control and pump torque control, automatically adjusting

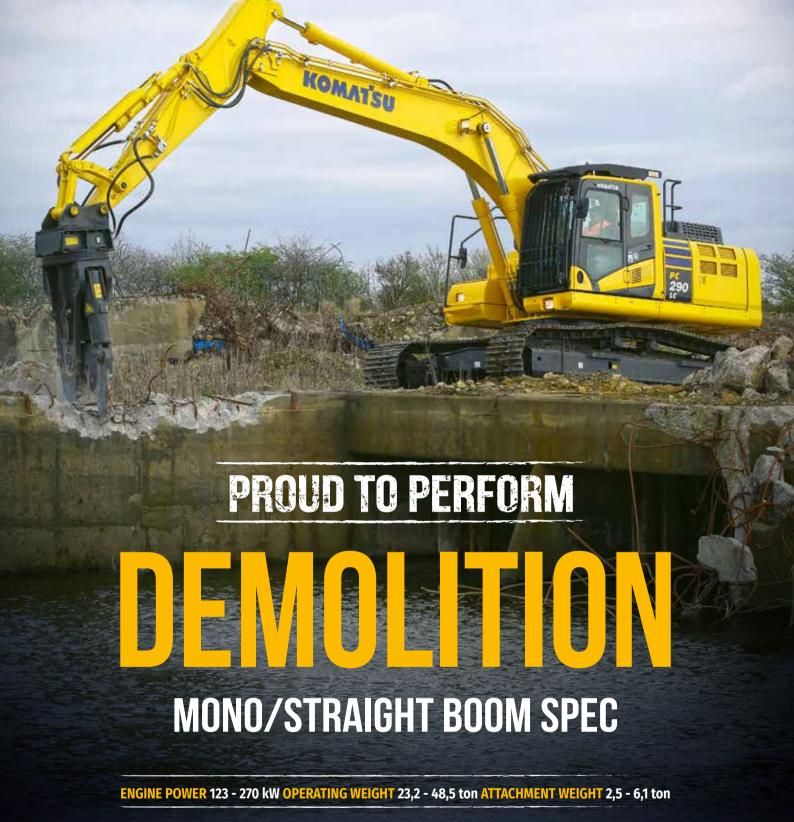
the rpm according to the load being handled. With the gooseneck arm, the SPC can be used with all four work modes available on the DX230WMH-5. These power modes help the operator to manage the balance of fuel consumption and machine power to the working conditions. The four selectable power modes include: 'Power+'(P+) mode which delivers the fastest work group speeds and greater power for those high demanding material moving applications whilst 'Power' (P) mode provides exceptional power and superior performance for tough heavy lifting, quick truck loading and fast travel speed.

'Standard' (S) power mode enhances the machine's fuel consumption while delivering high performance in everyday lifting and moving of materials whereas 'Economy' (E) mode helps reduce fuel consumption for low demand applications and slows down machine movement for conditions that require more precise movements. In addition to the four power modes, the DX230WMH-5 includes a lifting work mode, which provides increased pump torque, low engine rpm and an automatic power boost.

'DoosanCONNECT' Telematics

DoosanCONNECT telematics is standard on the DX-230WMH-5 and comes with a three year subscription. This system provides location information and a full range of machine operational information to owners, dealers and Doosan. Information is provided through a simple user interface, accessible online via a web enabled computer or smartphone. The goal of telematics is to help owners monitor their Doosan equipment and manage maintenance to reduce operating costs.

www.eu.doosanequipment.com



Demolition is a business for experts. From bare steel, Komatsu's demolition excavators are designed and manufactured as fully-specified demolition machines, and all key components thoroughly tested so you can work safely and efficiently. With Komatsu's experience and unrivalled quality, our service packages and worldwide support infrastructure, you can have total confidence in the operation and long term ownership of your Komatsu demolition machine.

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New Elite series diamond drill bit and wall saws for professional demolishers from Solga

This year's strange situation, caused by Covid-19, has given players in the demolition and concrete cutting industries a chance to think deeply about the actual situation of the market today and in the near future. Future market demands tools that make cutting and drilling easier, but without losing focus on profitability. Solga's goal has been to develop a new range of high performance diamond drill bits and wall saws, and believes that the new Elite series will help solve its customers' needs and position Solga one step ahead of its competitors.

The objective of the Elite drill bits is to provide drill bits that are capable of drilling in any circumstances, that are easy to use, operate at high speed but give high performance thanks to their new metallurgical and dimensional configuration. According to Solga, the Elite series is offering drilling speeds of up to 30% above competitors delivering up to 50% more performance. After years of development and numerous designs, Solga believes that it has finally developed a high performance drill bit for dry drilling to be used with micro percussion machines, believing that this type of drilling will become more popular year by year due to the global lack of water. Additionally, it allows working indoors without any trouble as it doesn't generate any mud; it furthermore reduces the cost of operation, as it removes the need for one operator to use the drill and another to pump water.

The new characteristics of electrical wall saw machines led Solga to develop new alloys and configurations to adapt to the new features offered by these high rpm machines, with blades that provide ease of cutting at very high speed. Solga is convinced that the vision and future of European manufacturers is based on constancy, quality and service. Even in times as experienced in a difficult as year 2020, taking advantage of adverse situations to create new products that help customers, is what makes Solga grow as a company.

www.solgadiamant.com



New Doosan excavators at EIS Waste Services Ltd

EIS Waste Services Ltd. based in Aberdeen in Scotland, has purchased two new Doosan DX180LC-5 18t crawler excavators from Balgownie, the local authorised Doosan dealer, which has its headquarters in Inverurie in Aberdeenshire.

With roots dating back over 45 years ago, EIS Waste Services is an independent waste management provider specialising in bespoke waste collection, recycling and disposal services. It works on behalf of a wide range of public and private sector clients in the industrial, commercial, construction and domestic sectors in the city of Aberdeen and across the county of Aberdeenshire. This has seen the company to grow steadily over the last three decades and now handles in excess of 100,000t of waste materials every year.

The new DX180LC-5 excavators are the first Doosan machines purchased by EIS Waste Services and are part of continuing investment being made to further increase capacity at the company's Gallowhill Waste Recycling Facility. This includes a new €1.12M processing plant, one of three now installed at the Gallowhill site, which is Aberdeen's largest purpose built waste transfer and recycling facility, with plans to further expand operations. The increased capacity will allow EIS Waste Services to divert even more waste from landfill, providing clients with more environmentally friendly and sustainable disposal and recycling solutions.

Supplying waste to the operations at the Gallowhill site, EIS Waste Services runs a fuel efficient, state of the art fleet of specialist vehicles featuring the latest GPS satellite tracking and communications technology, providing complete operational control and real time job status. As part of the company's zero waste to landfill package, monthly environmental reports demonstrate performance with statistical data derived on accurate weights using the latest dynamic on board truck weighing technology. The fleet now comprises of over 35 collection vehicles and a container fleet in excess of 4,500 units, all run by the company's 105 full time employees. This now means that EIS Waste Services has grown to become Aberdeen's largest dry waste collection and recycling provider, successfully managing in excess of 1,500 planned waste and recycling collections per day during the busiest periods.

The new Doosan DX180LC-5 excavators have been equipped by Balgownie with raised cabs, hydraulic grabs and several other features to meet the specifications required by EIS Waste Services. The raised cabs, rear/side cameras and side mirrors on the excavators provide excellent visibility for the operators to sort and pick through the many piles of waste arriving at the site. Here large items made of wood, metal, plastic and other materials are removed before feeding the remaining waste into the processing plants at the Gallowhill facility.

Neil Sharp, managing director at EIS Waste Services, said: "The new DX180LC-5 excavators meet our requirements in terms of the size of machine we prefer, providing the nimbleness and quick hydraulics we need to move quickly in and around waste piles, initially sorting and picking out materials that cannot be loaded into the processing plants. Our excavators need to be very dependable as they work continuously 11h per day, clocking up to 3,500h a year, so the five year/10,000h warranty that Balgownie has provided with the machines is a key element for us, showing real confidence in the performance and durability of the Doosan machines."

Optimal fuel efficiency

The DX180LC-5 is driven by a Perkins 1204F diesel engine providing 97.9kW of power at 2,000rpm. Like all Doosan crawler excavators, the DX180LC-5 has innovative and exclusive features that lead to huge reductions in fuel consumption amounting to an average of 10% when compared to the previous generation machines. Among these features is the 'trip meter setting' screen which allows operators to check fuel consumption daily (or over a desired period) directly from the control panel. 'Auto shut-off' provides an automatic shut down for the engine after a pre-set time when the machine has been idling for a specified period (3min to 60min configurable by the operator). To save even more fuel, there is a special Doosan developed system, SPC ('Smart Power Control'), to optimise the balance between the pumps' output and the diesel engine.

www.eu.doosanequipment.com





DIAMOND TOOLS MANUFACTURER









SaMoTer Day completed and looks optimistically towards 2021

Analysis by Unacea and Cer presented reported that Italian sales of construction equipment fell by 20% between January and June this year. However, the data showed a partial bounce-back with sales in the second half of the year being down by 8.7%.

Covid-19 has not spared the construction machinery industry as due to lockdown measures, between January and June 2020 Italian construction and site vehicle sales fell by 20%, falling back to 2017 levels. Data analysed by Unacea (Italian Construction Machinery Union) and Cer (European Research Centre) was presented at the Veronafiere during 'SaMoTer Day', an event organised to mark the run up to the international construction machinery exhibition which has been scheduled for 3 to 7 March 2021.

The figures presented are in line with similar reported figures from around the world, with some positive signs also being reported. The Unacea / Cer study indicates that things will improve in Italy during the second half of the year. The data does however look at a worst case scenario where sales could also be dramatically reduced. On a more positive note, from July this year onwards, Italy seems to have a bounce-back due to the (then) end of the lockdown and the stabilising effects of economic policies implemented, with the situation being expected to further stabilise in 2021. The construction equipment industry in Italy is estimated to be worth more than €3.5B with sales of 19,500 units.

As well as reporting the performance of the construction equipment industry in Italy, SaMoTer Day also saw the presentation of a paper titled: 'Construction machinery: a strategic component of the circular economy'.

Here, Unacea summarised a series of environmental proposals concerning the role of machinery in tenders and the input that demolition and recycling equipment can provide regards reducing construction waste.

SaMoTer 2021 eagerly looked forward to, being set to be an opportunity for manufacturers and companies to capitalise on any recovery in the industry. Hosted at Veronafiere, it will be held together with the 9th Asphaltica, Siteb (Italian Road Asphalt Bitumen Association's for the bitumen and road infrastructure sector), and, for the first time, LETExpo. The latter will focus on transport, logistics and sustainable intermodal services organised by Alis (Sustainable Intermodal Logistics Association).

"Veronafiere and SaMoTer are playing their part in supporting and promoting the construction and earthmoving world," said Giovanni Mantovani, CEO of Veronafiere. "It will continue to do the same today, together with companies, partners and stakeholders in response to the new challenges posed by Covid-19. We are developing an exhibition in 2021 that will combine maximum safety with the business, innovation and international needs of companies through an integrated format where online events will back up the conventionally attended trade fair to create even more new opportunities."

"The construction machinery sector is experiencing unprecedented events," added Mirco Risi, president of Unacea. "We have demonstrated immense resilience and dynamism. Today, if the recovery plan includes a focus promoting cutting edge technologies capable of ensuring significant improvements in efficiency, safety and environmental compatibility, then this would be an investment in the future of the country as a whole."



The European Demolition Association increases its presence in Europe

With over 25 years of industry experience, Priestly Demolition Inc. is one of the largest and best known demolition contractors in Canada. The company is a trusted partner of many international companies and government agencies across North America and abroad, with offices in both Canada and the US, with future plans to expand even further. Over the past few years the company has made large investments in its team, new technology, in house engineering capabilities, health and safety department and COR Certification.

Priestly Demolition Inc. possesses the expertise and in house resources to handle complex projects, while providing the personalised service of a family owned and operated organisation. Its highly trained team of professionals, along with its top of the line fleet of equipment help prepare to build for a better future. The company is able to now dive deeper into the logistics of the project, helping to ensure that its clients are getting the best results from their investment.

With real time production values and cross platform technology, Priestly Demolition Inc.is able to stay on target, improve efficiency and adjust as needed. The company can identify sustainable opportunities to reduce the carbon footprint and help its clients with long term financial goals.

Larger scale projects can take the Priestly Demolition Inc. team many months to plan and careful consideration reduces the financial risk for clients, and ensures key measures are in place before the initial phase of the plan is rolled out.

Demaclenko and WLP form WLP Systems

Demaclenko has continued its differentiation strategy creating WLP Systems in conjunction with WLP.

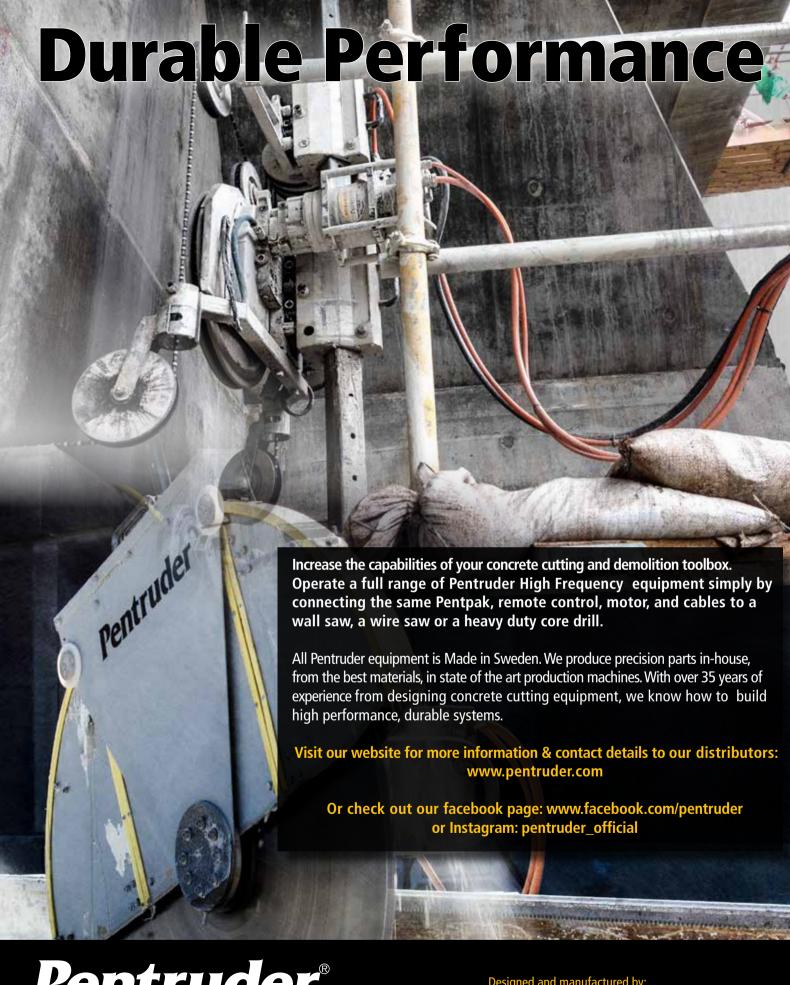
Demaclenko, a HTI Group company, along with WLP, formed WLP Systems in order to gain a foothold in new sectors (WLP has already made a name for itself in the sale of dust and odour suppression systems which ensure rapid and effective binding of dust in the work environment). The products are used, for example, in construction sites, production halls, tunnel building and landfill sites. In addition, WLP Systems' location in Castelnuovo in Valsugana will also become the new Demaclenko snow making service location.

"WLP Systems' location is very important to us strategically, because we will be even closer to our customers in Trentino," said Martin Leitner, president of Demaclenko. "In addition, synergies and expertise from various business fields will combine and strengthen the areas of research and development." It is hoped that new lines of business will open doors to additional sectors and make it possible to extend the number of customers and access to market segments, which has been the case in recent months.

Collaboration between Demaclenko and WLP had already begun at the start of the coronavirus crisis with the development of an efficient, fully automatic disinfection system with a special fan. This was produced as quickly as possible, which ensured fully automatic and comprehensive disinfection of gondolas. In parallel with this, an innovative firefighting turbine was developed, which can be fitted for fire protection in many sectors.

WLP has been in operation for over 15 years and company managing director Mario Passeri looks forward to the future and the new venture: "We have years of reliability behind us and have experience of establishing a market that didn't exist before. With Demaclenko 's international orientation and worldwide distribution network, many new opportunities are opening up. Our new enterprise with Demaclenko strengthens us and together we can offer a wide range of products and services able to guarantee successful projects."

'The new company WLP Systems is a further example of our group's pursuit of innovation and diversification. Both are important features of our strategy to remain competitive worldwide in the long term," explains Anton Seeber, president of the HTI Group.







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PDi site report



Dismantling a gigantic dragline in South Africa

The largest and one of the most complex engineering undertakings ever on the African continent has been completed in South Africa with the dismantling of a giant dragline at a coal mine for reassembly at another site about 60k away.

It took nearly 18 months to complete the relocation of the 4,000t behemoth which had been in place doing its vital work to clear the soil to expose the vast coal reserves of the Optimum Mine in South Africa's eastern province of Mpumalanga. The dragline was purchased by one of the world's largest diversified mining players and had operated at its old site since the late 1980s. It is self-propelling in situ, and under normal circumstances, the limited mobility of draglines has enabled relocation by itself. Here the distance was too great from point to point and there were issues with overhead powerlines. Ironically the Optimum Mine supplies coal for power generation directly to the nearby Hendrina Power Station with extended lengths of conveyor belts.

Cardinal to the dismantling effort was to get three dimensional drawings of its various components to establish where any cutting could be undertaken to make the dragline transportable to its new site on multiple flatbed extra heavy load vehicles. Norbert Plate of IQ laser, who oversaw the acquisition of the 'as build dimension', as well as the reassembly according to original drawing specifications for South African company Lucient Engineering (which also has operations in neighbouring Botswana) said: "We had to use a complex mix of cameras and laser based measurement equipment to get accurate drawings of parts of the structure and mechanical components, such as position of gearboxes, etc. for the dismantling team's engineers so that they could decide where the dismantling and cutting could be undertaken.

They had a team of about 200 people actively involved in the dismantling and relocation. The project was set back by Covid-19 for about a month and then we had other delays because nothing of this magnitude had been attempted in Africa before, although we believe it has in Australia and America." Reassembled and soon to be tested, the dragline will be recommissioned and operational at its new site by the end of 2020.



ROCKSTER CRUSHER at work in Morocco

Since February 2020, a R1100D impactor with screen box and return belt has been creating valuable aggregate for CSB Mobile in Morocco. The easy handling, transportability and performance of the crusher were key criteria for the purchase.

CSB Mobile S.A.R.L. headquartered in Casablanca, is a specialist in earthworks contractor with the company also providing services ranging from roadbed preparation all the way to quarry stone mining. CSB wished to also undertake demolition and recycling work, requiring a crusher with large inlet opening and good performance. The company was recommended the track mounted Rockster R1100D impact crusher with hydrostatic drive which was subsequently acquired. As well as the features mentioned, another reason why CSB Mobile chose the Rockster crusher was the patented Duplex system which enables the R1100D to be quickly modified from an impact to a jaw crusher and vice versa. This allows the user to achieve maximum machine utilisation and rapidly adapt to different job requirements.

One such application was crushing heavily compressed sand which is excavated with a vibro-ripper from an extremely strong quarry wall. "This ripper produces solid lumps of sand. Then the excavator loads lumps into the crusher with a 5mm screen, and we get great sand," says CSB owner Lurii Lisnichenko. With the screening system mounted onto the crusher it is easy to produce an accurately defined final grain size in one pass. The mobility of the machine is also a very important factor in Morocco, most importantly for working directly on a jobsite or where a material extraction takes place.

POWER WITHOUT NOISE

Servisa, a major demolition company located in the Berlin/Brandenburg region, recently purchased a number of Indeco attachments and immediately put them to work on several of job sites. The attachments include an IRP 18 X pulveriser, which was used on the demolition of an eight storey building located on Meierotto Strasse in Berlin. Since this was a residential neighbourhood, using a hydraulic hammer was not considered due to the inevitable noise and vibration which would have caused a disturbance for nearby residents. Thanks to its power in proportion to size (maximum jaw opening of



820mm, maximum force at tip of 65t, maximum force at cutters of 210t with the ability to cut reinforcements up to 40mm), the IRP 18 X proved up to the task and successfully completed the project.





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DM62

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Brokk appoints Jeff Keeling North American sales and marketing manager

Brokk, the leading manufacturer of remote controlled demolition machines, has appointed Jeff Keeling as its North American sales and marketing manager. In his new role, Keeling is responsible for growing the Brokk brand in key segments across the United States and Canada, including demolition, processing and mining. He previously served as Brokk's business development manager for North America.

"Brokk's demolition robots are all about having the right tool for the job," said Lars Lindgren, president of Brokk Inc. "The same is true for our staff. Jeff is the perfect candidate to help us spur growth in North America. A lifetime of first hand application and sales experience in a number of our core industries gives him a unique perspective on how best to support our customers."

Keeling joined Brokk in 2013 as the Midwestern regional sales manager. He brought extensive experience in the concrete cutting and demolition industry to the position, including stints with Husqvarna, Volvo Construc-

tion Equipment, and Hilti. He also served as executive vice president for Magnum Diamond & Machinery, his family's concrete saw and diamond blade manufacturing business. Keeling, who resides in Olathe, Kansas with his family, also holds a bachelor's degree in personnel administration from the University of Kansas.

"I have been around demolition equipment my entire life," Keeling said. "I know robotic options like Brokk are not just the wave of the future; they are increasing productivity and safety on jobsites in the here and now. I'm excited to take on this new role and continue serving markets where Brokk machines are so invaluable, such as cement and other processing industries, concrete drilling and sawing, construction, demolition, tunnelling and mining."

Ecomondo digital edition major success

Over 5,000 business opportunities were generated in the two weeks' activity of the Italian Exhibition Group's digital platform, with 73,000 views of the profiles of the 400 companies actively using the digital space registered.

Ecomondo and Key Energy Digital Edition 2020 proved to be a valid driving force for business and qualified networking for new models of sustainable development and climate change. This was established before a scheduled return to the 'live' expos in November 2021 set to be held in Rimini, Italy. The digital editions were held on an online platform from 3 to 15 November. This provided a rapid response to the cancellation of the original expos due to the ongoing fight against the pandemic which was announced by the Italian Government just a few days before the scheduled opening.

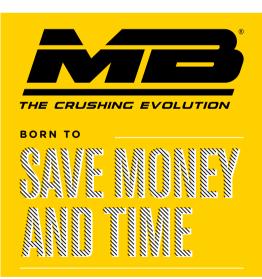
400 companies (out of a total of 735 scheduled to

participate at the expos) used the digital platform. Over 5,000 business opportunities were generated during the time period, with an overall total of 73,479 views of the exhibitors' pages, from over 21,000 users, with a further 33,897 participating in the conferences. Media interest was also high with approximately 5,620 press and web reports, comprising of 109 on TV and radio, providing a total reach of 416,873,154. Non Italian media also showed high levels of interest.

Exhibitors' have shown their loyalty to the expos by recommitting to attend and are said to be eagerly awaiting the return of the 'live' shows in 2021, but this time with an extra tool. The Italian Exhibition Group has stated it will reactivate the digital platform for the most significant national and international events, such as the European week for waste prevention, the World Environment Day and other such events. This will enable green economy companies to promote themselves and cover related issues with a regulatory and application slant. With the support of the Technical Scientific Committee and the various world associations, a venerable 'road map' of announcements will accompany exhibitors, buyers and institutions at the 2021 event in Rimini.

During the digital events, both Ecomondo and Key Energy were able to reaffirm their roles as true 'think tanks' for the industry. Topics connected with the European Green Deal were discussed, such as proposals to accelerate the green transition in Italy which were well received by the States General of the Green Economy and the ANEV manifesto for wind power. Moreover, the participation of the Italian Government and European Commission was also welcomed, being seen as an important facet of the digital expos.

www.ecomondo.com



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DEMCON VIRTUAL ROAD TRIP 2020

he global exhibition industry has had to rethink and adjust, with all industry shows, bar bauma China, having been cancelled and moved forward to either 2021 or 2022, with the usual 'physical' trade shows this year being moved to a digital platform. The decisions to do this are justified as the second wave of the pandemic is now raging across Europe, whilst in North and South America, one can hardly talk about a second wave yet. Some trade fairs that should have been held this year have been moved to 2021 and again to 2022. Swedish show Nordbygg is an example of this. The Italian trade fair SaMoTer is now to be held in 2021, likewise Ecomondo. Intermat in Paris is still scheduled for April 2021 depending on the coronavirus. World of Concrete has been moved from January to June 2021, but is probably in peril even with the new date.

Virtual shows

When the question arose about changing show dates many trade fair organisers and equipment manufacturers began to plan 'virtually'. Seminars began to be held online to provide information on developments. An example of this was the Demcon trade fair for the Nordic demolition industry. Demcon should have been held at Infracity north of Stockholm 24 to 25 September this year. In June, the decision was made to move the fair to 9 to 10 September 2021 and as an alternative, Demcon Virtual Road Trip was created. 14 companies seized on the idea that a film crew from S.C.O.P. AB would travel to their site and create company focused films. The participating companies were Hilti, MilwauWhen the Demcon 2020 tradeshow was cancelled in September due to the spread of the coronavirus, the organisers of the show instead created the digital platform 'Demcon Virtual Road Trip 2020'. During September and October, 14 suppliers were visited and the results premiered online from the end of October to mid-November. All the films are now available for viewing at www. demcon.se until September 2021.

kee, Rototilt, Husqvarna Construction Products, HTC Floorsystems, Thovo, SDC - Swedish Diamondtool Consulting, Drome, Sila, AGP, Cardi, Starmix, Andersen Contractor and Conjet.

When the films were produced and approved, they were uploaded according to a special schedule on the demcon.se site with the first airing being on 21 October. They are still available on there and Demcon's channel on Youtube where they will be shown until the 'physical fair' is held in 2021. By the 20 November, when all the participating films had premiered, 1,900 different IP addresses had watched the films. This is of course a figure that is constantly increasing as the virtual road trip is continuously being promoted via the industry magazines Professional Demolition, PDi Magazine and Svensk Rental Tidning, as well as via a number of different social media portals.

Industry news from Hilti

The first company visited was the manufacturer Hilti which presented its exoskeleton 'EXO 01' that facili-











tates and relieves the operator when working above shoulder height. Hilti also showed its 'connected' products that make work smarter as well as a new water management system for wet drilling. The latter system is 'closed' which means that it does not have access to running water. The water binds the dust, sucks up the sludge in the wet suction and releases the purified water, hence cooling the drill. Hilti also showed the new 'DRS', which is a dust reduction system that

can be applied to most types of tools and machines in Hilti's range and connected to its vacuum cleaner. The difference with and without DRS is striking. Also shown was the latest in vibration technology called 'Hilti AVR' and 'ATR' (Active Torque Control) and the new 'TE70 ATC skewer' for heavy duty demolition. The high frequency wall saw 'DST 20-CA', which was launched at bauma last year was also featured along with the company's industry adapted health and safety educational programmes.

Revolutionary battery powered machines from Milwaukee

When Milwaukee recently launched its new battery powered 'MX Fuel series' it entered a new paradigm for drilling and demolition. The MX Fuel series are equipped with compact and very quickly rechargeable batteries being today comprised of battery powered power cutters, drilling systems, skewers and a battery powered sewage cleaner. Milwaukee also introduced a range of new diamond tools for its drills and cutting machines.

Award winning fully automatic quick release system from Rototilt Rototilt featured its award winning fully automatic

quick release system, 'Rototilt QuickChange'. Quick-Change possesses a number of advantages such as that it is fast, safe, efficient and environmentally friendly, but above all that, the demolition operator can quickly change hydraulic tools without having to leave the cabin of the machine.

Husqvarna struck a blow for safety and showed its service centre and new products

Husqvarna took the opportunity to present its 'Safety Tour', which despite the coronavirus, travels Sweden providing information on Husqvarna's various safety solutions that minimise the risk of injury due to incorrect handling. In particular, features were highlighted that increase safety when using the manufacturer's power cutters. New diamond tools were also shown that clearly indicate when they are used up as well as 'SmartGuard' and 'SmartBlade', among others. Also highlighted was the new service centre in Stockholm. The new drilling machine DM430, which replaces DM 340, was shown, being a drilling machine that is easier to use, maintain and service, with the company's 'Prime series' being updated from K6500 to K7000. It was also announced that Husqvarna is launching new tools for its 'Hyper Trowels' line and that it will release eight new models of the 'PG grinding' series in November.



THE NEWS FILMS WILL REMAIN ON THE INTERNET UNTIL SEPTEMBER 2021

Demcon's virtual trade fair with all the news films will remain on the Demcon website (www.demcon.se) at least until September next year so that as many as possible will have as many opportunities as possible to

watch. Unfortunately for countries outside Scandinavia, all presentations are in Swedish except the one from Conjet which is in English.

www.demcon.se

PDi reports



















HTC Academy providing education for competitive advantages

The virtual road trip also visited HTC Floorsystems in Söderköping to discuss the value of training at the HTC Academy. HTC Academy covers sanding wood and concrete floors as well as polishing. The most effective way to learn is of course to train on site at the training centre, but due to these trying times, web based training is now provided.

Environmentally friendly and smart unloading from Thovo

Thovo AB in Särö is a supplier in Sweden with a focus on smart and efficient unloading equipment that consciously thinks sustainably. The product focus is electric construction machines, primarily for indoor use, but today the range also includes battery powered skid steer loaders.

Tyrolit's long and extensive tradition

Tyrolit was visited in Hisings Backa north of Gothenburg. The company is a major manufacturer of professional drilling and demolition equipment as well as various types of diamond tools and has been operating since the 1960s. The company's sales manager for the Nordic region, Walter Sund, introduces in the film the latest products, such as high frequency powered wall saws, ring cutters, drilling systems and wire saws, among other things.

SDC - a strong partner for professional 'punchers'

From the Gothenburg area, the road trip went to Nora to visit the Swedish company's head office and manufacturing centre in Nora as well as its sales office and service workshop in Stockholm. ISDC - Swedish Diamondtool Consulting - acts as dealers for a wide range such as diamond tools from Arix, drilling equipment from Pentruder, drilling motors from Weka and is the licensed manufacturer of Savi floor saws and more. It also undertakes production of rock drilling diamond tools and a wide range of its own diamond tools.

Drome a supplier with ambition

Drome has its head office, warehouse and service workshop in Dalstorp, as well as a sales office, warehouse and service and repair workshop in Stockholm. Drome made a strong impression during the virtual road trip



with the company producing separate films for all the brands it represents. These included its own diamond tools under the Drome brand, Silas air cleaners, AGP Power Tools, Cardi drills from Italy and the German Starmix vacuum cleaners.

Andersen Contractor shows news from Trevi Benne and Arjes

Andersen Contractor is a dealer that has been active in the Swedish market since the late 1980s. Over the years, it has been involved in introducing a number of major brands in demolition, recycling, scrapping, waste management and much more. The company has been the dealer for Trevi Benne demolition and recycling tools in Sweden for many years, as well as the versatile mobile shredders and crushers from Arjes.

Automated concrete removal from Conjet

Last but not least, Demcon Virtual Road Trip visited the manufacturer Conjet which has been developing hydrodemolition technology since the 1980s, including a certified method for removing damaged concrete with high pressure water. The Conjet film focuses on the different applications that are offered for effective removal of damaged concrete without creating micro cracks in the concrete. Conjet's equipment provides a clean and perfect surface for adhering new concrete. Conjet is also launching 'Automated Concrete Removal', which is a broader concept than just hydrodemolition or water jetting.



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THE GLOBAL CRISIS

Despite this truly horrendous year, the concrete cutting industry refuses to give up. Having proven its resilience many times over in past decades, it will undoubtedly find a way to get over this unprecedented calamity. Closed borders and disrupted supply chains notwithstanding, manufacturers of sawing and drilling equipment still manage to launch new products onto the market, albeit at a much slower pace. PDi's Andrei Bushmarin focuses on the latest innovations in the floor sawing segment.

Another happy user of Cuts Inc. skid steer saws

A family owned contractor and manufacturer of bespoke sawing and drilling equipment based in Knoxville, Tennessee, Cuts Inc. is storming the global market with its mobile sawing solution. Mounted on a skid steer, the saw allows making multiple cuts on even or sloped surfaces within a short time period. The three basic models - SS2600, SS3600 and SS4200 - provide a cutting depth of up to 460mm, while custom builds can go as deep as 510mm. Most customers use Cuts Inc. machines for cutting asphalt, concrete roads and highways, but the solution is also applicable for cutting stone, concrete panels, sewer and drainage pipes, fibreglass panels and aluminium. The founder, Matt Hephner, says that the skid saw has now become an internet sensation, with enquiries flooding in from every corner of the world. The latest customer testimonial is from Peterson Chase General Engineering, a general contractor based in Irvine, California, that extols the efficiency and time saving benefits of the Cuts Inc. approach. According to fleet manager Dwayne Knoll, it takes time to train personnel on a floor saw while the Cuts Inc. system allows a skilled skid steer driver to successfully operate the saw without special training. Impressed by the machine's performance, the Californian contractor has recently taken delivery of another skid steer saw from Cuts Inc.

www.cutsinc.org



Egun's wire sawing robot shines on a chimney demolition project

South Korea based Egun System is another example of a manufacturer that has its roots in the contracting business. Its founder, Sungjun Lee, started out as a concrete cutting and demolition contractor back in the early 1990s. He designed his first track mounted wire saw G100 in 2010 and three years later established Egun System that began offering mobile sawing solutions to both domestic and overseas contractors. The latest addition to the Korean manufacturer's portfolio is the G-200E robotic wire saw. Powered by a 220hp diesel engine, the G-200E is designed for large scale cutting jobs such as dismantling of bridges, industrial stacks and other building structures made from reinforced concrete. Thanks to the reduced weight of 4.3t and its compact dimensions of 5m x 1.8m x 2m (length, width, height), the machine is also a good choice for working in confined spaces or underwater. The most recent example of the wire saw's capabilities involved using a G-200E on a chimney demolition project in the city of Pyeongtaek, Gyeonggi province, South Korea. It took just nine cuts to dismantle the 60m stack, with a

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wall thickness of 800mm at the bottom and 600mm at the top. The cut off sections of the stack were hoisted away by a 500t crane. The job, which was subcontracted to Egun System by Jungheung Construction, a major player in the Korean building industry, was completed within only 11 days.

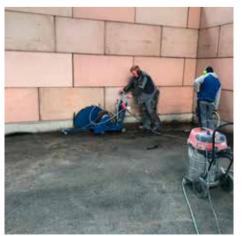
www.equnsystem.com

Lissmac's knack for flush cutting saves the day for a German contractor

When Diamant Technik Harz, a specialist sawing and drilling contractor based in Drübeck, Germany, took delivery of a 'Compactcut' 401E electric floor saw from Lissmac, its choice was based on the saw's unique selling point: namely the ability to make flush cuts efficiently. With the blade fastened with six countersunk screws rather than a conventional flange, the Compactcut 401E is capable of making cuts within just 15mm off a wall. The challenge Diamant Technik Harz was facing was to cut a 400m long and 50mm deep joint in the asphalt floor of a warehouse. The job was specified by the recycling and decontamination specialist RST Thale GmbH whose new warehouse for contaminated material required a 30mm seal between the asphalt floor and the concrete wall to prevent any seepage into the ground. A regular floor saw couldn't reach any closer than 50mm to the wall and was therefore unsuitable for the task. "The Compactcut's flush cutting capabilities were the decisive factor for us. We couldn't have been able to complete this job so quickly and accurately as we did with any other machine. The customer is satisfied and that is what matters to us most," says Reinhard Strohmeyer, managing director of Diamant Technik Harz. "It only requires an

optional flush blade to make full use of this characteristic. It takes just one to two minutes to exchange the blade guards, since we don't use this versatile machine for flush cutting exclusively," further comments Strohmeyer. Driven by a 7.5kW 400V electric motor, Compactcut 401E reaches a speed of 1,250rpm and accommodates diamond blades of up to 800mm in diameter. Thanks to the low noise and emissions free electric drive, the machine is particularly suited to indoor applications. It can be easily converted from left hand side to right hand side operation. The height adjustable ergonomic handles can be fixed at different levels to help prevent operator fatigue.

www.lissmac.com





Kern-Deudiam expands electric portfolio

Another German heavyweight, Kern-Deudiam, is expanding its range of electric floor cutters with the addition of the brand new KDF1200-E model. Featuring an intelligent control system, the cordless self-propelled saw boasts a power of 15kW (32A) and a cutting depth of 510mm. The user friendly control panel ensures reliable and intuitive operation via a joystick and a selector switch. Visual indicators (permanent or flashing lights) ensure accurate operation and help error detection. Additionally, the KDF1200-E offers a number of smart features such as interchangeable flanges (25.4mm and 60mm) and stepless variable blade speed. Kern-Deudiam prides itself on the fact that the KDF1200-E (like every other machine in the range) has been designed and manufactured in house at its facilities in Hövelhof, Germany.

www.kern-deudiam.de

Fast Verdini focuses on microtrenching

With a track record of over 60 years in floor sawing equipment, Italy based Fast Verdini offers a comprehensive range of floor cutters that includes petrol, diesel and electric driven models. Responding to the ever growing demand for fibre optics, the Italian company has recently developed a special series tailored to microtrenching applications. Powered by a 13hp Honda GX390 engine, the hand propelled floor cutter 'LM/F FIBRA' comes with two diamond blades measuring 500mm in diameter to cut 10mm to 12mm wide joints to a depth of up to 185mm. The self-propelled 'NC24M/F FIBRA', driven by a 27hp Honda GX690 engine, features electric start and up to three 600mm diamond blades to cut 15mm, 20mm or 24mm wide microtrenches to a depth of 220mm. An electric pump for cooling water and mechanical drive corrector are optionally available for this model. The 'NC26M/F FIBRA' model boasts the same characteristics as the NC24M/F FIBRA, but with electric pump and drive corrector included in the scope of delivery as standard.

www.fastverdini.it



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EPIROC HYDRAULIC BREAKER HB 7000 DP

a successful solution for a Mallorca quarry

The Son Amat quarry is located on the Spanish island of Mallorca, with a long history and deep roots in the region. With an emphasis on safety, the quarry now uses the Epiroc HB 7000 DP hydraulic breaker, purchased from Epiroc's official specialist dealer Cohimaop.

Son Amat is a major and important aggregate supplier for the construction industry on Mallorca. The quarry is located in the Porreras area, near Palma de Mallorca, and is one of the largest and most important on the island. It was founded back in 1875, with the company's long history being a clear indication of its forward looking management.

Son Amat needed a different solution due to the geographical location of the Balearic Islands and the problems associated with drilling and blasting in quarries there. Fault free processes and optimal utilisation of the quarry were the goals the Epiroc Iberia team and its dealer were set. After a thorough analysis of the conditions in the quarry, it was concluded that the HB 7000 DP hydraulic breaker was the best solution for material extraction, as it is more flexible to use than drilling and blasting at the quarry. "We were very careful when it came to putting together the right setup for this particular application, as we want to achieve the best possible result. The HB 7000 DP is impressive when dealing with the toughest rock and is undoubtedly the best tool for this project," says Manuel Morcillo, managing director of Cohimaop A.G.

Among other things, the HB 7000 hydraulic breaker opens up previously unused areas in the quarry requiring the machine to handle both limestone and its natural weathering. The HB 7000 has not disappointed and has met all expectations with its high impact force and the optimal per/min impact rate, which increases productivity as well as working comparatively quietly and with low vibration levels.

IPS system and other features

The HB range of Epiroc hydraulic breaker offers models suitable for carriers from 22t to 140t. They use the exclusive 'Intelligent Protection System' (IPS) that combines Epiroc's well known 'AutoControl' and 'StartSelect' functions, automatically adapting the working method of the breaker to any working conditions. Thanks to the IPS system, the hydraulic breaker can be positioned in the fastest and most precise way. Ineffective blows, which could damage the attachment, can also be prevented. Thanks to the IPS system, which does not require any manual intervention, the operating time of the equipment is optimised with no interruptions in the workflow.

Epiroc HB breakers also include the 'Contilube II' auto greasing system, the 'PowerAdapt' integrated pressure control valve, and the 'Vibrosilenced-Plus' system, which reduces noise and vibration. The 'Energy-Recovery' system also uses the recoil force of the piston for energy recovery, whilst 'DustProtector II' provides additional protection against dust and rock particles.



Next year will see the demolition of Newlands Rugby Stadium, the oldest rugby stadium in South Africa and the second oldest rugby stadium in the world. PDi's Africa editor, Kevin Mayhew, reports.

Nestled below the towering Table Mountain, one of the natural wonders of the world, the iconic Newlands Stadium will be no more. Rugby will henceforth be played at the new Cape Town Stadium, built to meet the needs of the Soccer World Cup staged in South Africa in 2010. Newlands Rugby Stadium is to be demolished in 2021 to make way for residential and retail developments in a multimillion euro deal between the Western Province Rugby Football Union (WPRFU) and a local bank. However, everything is shrouded in secrecy and confirmation of anything relating to the deal is not forthcoming. The nature of the demolition, implosion or mechanical, is also unknown.

The 50,000 seater stadium was built in 1888 but has not kept pace with modern standards according to reports. The Cape Town Stadium, viewed by some as a white elephant, does host major sporting events and musical events. These include a World Rugby Sevens Series pool and football matches involving Cape Town City FC, Stellenbosch FC and others.

In December 2014 WPRFU rejected a proposed move away from Newlands, but the consensus was that it was only a matter of time before the shift transpired. For the rugby fans of Cape Town Newlands (which lies alongside the equally famous Newlands cricket ground) it is a highly emotional issue. To give some perspective of its legacy, the first official match at Newlands kicked off on 31 May 1890 when Stellenbosch Rugby Club defeated Villagers RFC in front of a crowd of about 2,400 people. In 1891 the stadium hosted its first rugby test match when the British Lions (British and Irish combined team) toured South Africa.

After 1990 the stadium underwent a string of renovations, adding technology, increasing capacity and upgrading facilities in a three phase redevelopment plan in anticipation of the 1995 Rugby World Cup. This saw Newlands hosting the opening match of the tournament between the Springboks (South Africa) and Wallabies (Australia). South Africa won to start its path to lifting the Webb Ellis Trophy as world champions.

Newlands has been traditionally regarded as among the best rugby grounds in the world, combining intimate seating, a beautiful view of Table Mountain, and a great atmosphere, both inside and outside of the ground.





ACDE Europe in the attachment business since 1994

ACDE Europe has been active in the European demolition attachment world since 1994. Today the company specialises in the development and manufacture of hydraulic breakers, grapples and demolition and recycling attachments for all kinds of demolition and recycling applications. The manufacturer produces attachments from 75 to 8,000 kg with integrated and/or internal hose connected quick hitch adaptors for all manufacturers, with customised grapples being a specialty. In mid-2020, the company Beilite Europe was formed to distribute its range of 75 to 8,000 kg hydraulic breakers from a logistics centre in the Netherlands throughout Europe. A parts and service centre was also set up in Germany to support the company's European dealer network.

ACDE Europe continuously develops its full range of demolition and recycling attachments. The vast array now consists of the ACC series of primary demolition shears, 185-11,000kg; ACK series of combi cutters, 770 - 4,000kg; AMT series of multi utility tools, 275 - 4,000kg; ARC series of rotating pulverisers, 630 -9,000kg; ARP rail cutter series, 2,500kg; ASC series of rigid pulverisers, 1,350 - 5,550kg; ASC - B series of rigid pulverisers, 1,350 - 4,000kg; ASS series of scrap shears, 315 - 20,900kg; AS-CC series of combi cutters, 1,900 - 3,100kg; ATC series of tank cutters, 2,200 -6,500kg; BLTB hydraulic hammer, 75 – 8,000kg; CC series combi cutters, 290 -725kg; SD series rotating demolition sorting grapples, 75-8,000kg; MU series of rotating multi grapples, 335- 2,700kg and the ZD series of non-rotating demolition sorting grapples, 50 - 2,100kg.

www.acde-europe.com



Lecco based company benefits from 'VSE' from Simex

Cazzaniga & Fumagalli srl, a well-known earthmoving company located in Lecco in the north of Italy, has successfully used a VSE 30 bucket for screening wet 'vegetable' soil and materials from demolition and construction sites. Provided by Simex's local dealer Coccoli Renato from Cirimido (Como), the attachment proved to be exactly what the Lecco based company needed for profitable working.

Mounted on a Fiat Hitachi EX215, the VSE 30 screening bucket, 5-line hydraulic version, was equipped with an array of tools. The customer required the bucket to screen wet soil and vegetable matter for use in agriculture and by private individuals. Furthermore, through recycling, demolition and excavation material could be used as backfill. In the first case, the average time for a complete cycle (bucket loading, screening and material unloading) varied between 45sec and one minute. The output size of the screened material was around 0-20mm, for an average hourly production of 40-45m³/h. In the second case, the size was increased to 60mm thanks to the patented quick adjustment system available on the VSE screening bucket, with an average hourly production of 30-35m3/h.

Thanks to the rapid adjustment of output size,

with simple controls located in the cabin, the operator was able to screen the material according to the required operating needs. Hydraulic operation meant that the operator was able to considerably reduce downtime due to lengthy mechanical changes, increasing profitability and hourly productivity. Furthermore, the choice of equipping the bucket with mixed array of different tools proved successful, with the blades providing a satisfactory performance even in the presence of wet material.

Simex VSE screening buckets have been designed to be easy loading, simple to use and deliver high productivity. Their shafts are composed of elements with varying sized disks that produce an intense whirling of the material to be screened which as shown, is highly effective even when working with wet material.

bauma Conexpo India postponed until April 2021

bauma Conexpo India, the international trade fair for construction machinery, building material machines, mining machines and construction vehicles will now

take place from 20 to 23 April 2021 at the India Expo Centre (IEC), Greater Noida, Delhi NCR. North India's leading trade fair for the construction industry

has had to be rescheduled due to the ongoing effects of the coronavirus pandemic.

www.bcindia.com



VSE SCREENING BUCKET

The only one with adjustable output size in a few seconds from the operator cabin



Designed for separating different-sized materials on the work site, Simex VSE screening buckets are unique for their easy loading, very simple operation and high productivity. The exclusive Simex patent allows rapid adjustment of output size of the screened material in only seconds via a control in the operator cabin.

- **✓ QUICK ADJUSTMENT OF OUTPUT SIZE**
- **✓ EFFECTIVE WITH WET MATERIAL**
- **✓** HIGH PRODUCTIVITY
- **✓ EASY LOADING**
- **✓ EASILY REPLACEABLE SCREENING TOOLS**

PDi site report



P&L Barton Ltd started out in 1972 when Peter Barton invested in his first digger and established P Barton Plant Hire. Based in Carnforth, Lancashire, UK, the company has evolved and expanded now working on a vast array of projects with clients ranging from private households and businesses, to local councils and large multinationals. The company provides plant and services on a sub contract or hire only basis, offering a wide range of services to the construction, groundwork, civil engineering, quarrying, recycling and haulage industries.

P&L Barton provide a wide selection of modern equipment to ensure its clients are supplied with reliable and efficient hire solutions. EvoQuip is now part of the fleet, with the first EvoQuip Colt 1000 being supplied by Blue Central in June. Since then the machine has been on hire contracts in multiple configurations to suit the required job sites. One recent application has been producing limestone walling stone for a regular client where space was limited. P&L Barton set about reconfiguring the Colt 1000 so that both conveyors discharged out the same side into segregated areas, maximising the area available, eliminating double handling and demonstrating versatility.

Commenting on the Colt's performance, Richard Barton, plant manager at P&L Barton said: "The Colt 1000 is the perfect machine for us due to its flexibility. Being suited to scalping and fine screening and the ability to quickly convert from three way to two way split and to swap conveyor configurations means it's suitable for many applications and job sites." In the short time that P&L Barton has owned the Colt 1000, the machine has been out working on various projects. "We have been able to run the machine in two way split on one project then convert it so that mids and fines are discharged on the same side on a really compact site and in standard set up on another site. With the range of media options available, I don't think there is any job she can't do," continued Richard.

Gabrielle Stewart, EvoQuip product manager said; "The Colt 1000 is one of our best selling products; customers regularly comment on being impressed by the performance of the aggressive screen box and have found it to be excellent in multiple applications." The highly adaptable Colt 1000 Scalping screen is able to operate in both heavy duty scalping and precision screening applications, being able to manage the most difficult of materials. The Colt 1000 achieves a compact footprint, maintaining the ethos of the EvoQuip range while achieving versatility and mobility. Flexibility is enhanced with configurable conveyor options and two way split conversion. Featuring an aggressive double deck screen, variable screening angle with numerous screen media options, broad fines conveyor, quick set up time and tall discharge heights ensures the Colt 1000 distinguishes itself amongst its competition.



LARGEST FLEET OF EPIROC HB 10000

hydraulic breakers in Indian limestone quarry

Birla Cements is home to the world's largest fleet of giant HB 10000 heavy breakers. The company operates its 17 strong fleet at its limestone mining operations in Western India, with a comprehensive Epiroc maintenance contract and extensive spare parts inventory, ensuring that Birla's breakers are up and running 24/7.

Headquartered in Kolkata, Birla Cements is part of the M.P. Birla Group, producing cement at seven locations in India with an annual total capacity of 15.5M/t. The company's limestone mining operation is located in the state of Rajasthan, near the city of Chittogarh, which is home to the historic Chittor Fort. Since the Chittor Fort is a UNESCO World Heritage site, no conventional mining activities are allowed within a radius of 10k. Therefore, Birla Cements opted for blast free mining using rig mounted heavy hydraulic breakers for primary rock excavation. For this purpose, it invested in 17 Epiroc HB 10000 heavy breakers with a further five on order.

Improvements make HB 10000 the ultimate choice for the job

In 2015 Birla Cements was looking for a reliable breaker which could work for 3,500h without major breakdowns. Epiroc introduced the company to the HB 10000, a machine known for its sheer breaking power which is generated in a single impact between piston and working tool corresponding to a weight force of around 760t, and with an impact frequency up to 380b/min. However, to optimise the HB 10000 for the specific task of primary rock excavation, the Birla Cements discussed certain upgrades with Epiroc's design engineers. These included features such as double 'ContiLube II' for enhanced lubrication, easy to fix split wear bushings and modified flange seals to withstand

operating high temperatures. In addition, Epiroc's patented 'Intelligent Protection System' (IPS), was also used to equip the breakers.

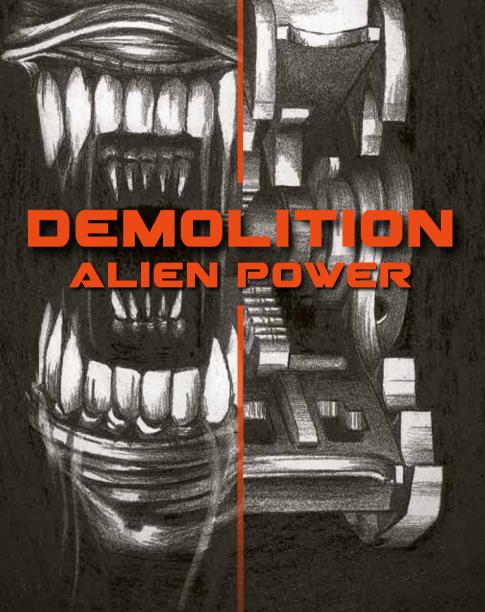
Working 24/7

The terrain at the Chittogarh site comprises of compact strata, with compressive strength of 100-160mpa. The rig mounted hydraulic breakers work three shifts continuously with production at more than 15,000t/day. Within the scope of Birla Cements' comprehensive maintenance and spare parts contract, Epiroc is on hand around the clock to ensure trouble free operation. The contract includes repair and maintenance support to ensure availability and maintain productivity. Extensive aftermarket inventories are maintained at both the Birla site and at an Epiroc warehouse located nearby.

True potential recognised

Jerry Andersson, general manager of Epiroc Mining India Limited said: "Our thanks to Birla Cements for recognising the true potential of our HB 10000 in their application. They were looking for blast free mining operations and the technical team here at Epiroc were happy to respond to their suggestions for optimising our equipment for the task. Excellent results are being achieved with our heavy hydraulic breakers, and we have developed a strong partnership with the customer. We will continue to monitor the pulse of their operations and adapt to their needs."

PLUS LINE



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"As for the future, your task is not to foresee it, but to enable it."

Antoine de Saint-Exupéry (1900 – 1944)

For the turn of the year, our "little prince" wishes you on behalf of his big brothers and sisters and the IMPACTS TEAM a few good hours, days with your loved ones, and enough time to gather your thoughts and collect your strength to be able to make the future possible.





Simex's TFC 400 passes the test in Ascoli Piceno

Costruzioni Alfredo La Posta, based in Sora, Italy, successfully used Simex's TFC 400 cutter head for continuous cutting at a construction site located in Venarotta, in the province of Ascoli Piceno.

The company, which has been operating for more than 30 years in the construction and renovation sector, was commissioned to consolidate a rock face and create a new sewer line below it. The rock face was mainly composed of a compact and abrasive rock with silica veins inside it. The TFC 400 provided high levels of performance and, to the great satisfaction of the operator, after 50h of work the teeth still showed no signs of wear.

The work itself was twofold: on the one hand it consisted of the excavation of a trench approximately 1.6m wide by 1.2m deep for the subsequent laying of sewers; secondly, milling the vertical rock wall for consolidation purposes (micro support poles had already been positioned). The TFC 400 drum cutter thus showed all its versatility with the operator reportedly being 'delighted' with it performance. "With this cutter head, we have solved many problems," said Daniele Frate, from Alfredo La Posta.

"It was impossible to work with the hydraulic hammer as the tip got stuck in the rock. We also tried with a small drum cutter but the work was irrelevant, too much time was lost. The Simex TFC 400, actually, works really well. In one day, we extracted two and a half trucks of material." The hourly daily production has been recorded as up to $10 \, \mathrm{m}^3 / \mathrm{h}$, depending on the milling point, achieving the goals the operator and the company set to achieve.



SYNTEC DIAMOND TOOLS

a key player in the industry for over 25 years

Australia's largest diamond tool manufacturer, Syntec Diamond Tools, has been developing, manufacturing and supplying the latest designs and innovative products for over 25 year. The company now offers a wide range of diamond saw blades, core bits and surface preparation tools.

Syntec owners Paul Freer and Dennis Clift have always been proud of their Australian heritage and pride themselves on manufacturing their goods locally. In 2016 Syntec was certified with the Australian Made logo. "Not only are the superior quality of our raw materials and Australian workmanship verified with this, but it is also a lot easier for the consumer to identify our brand's authenticity and build trust," says Paul. "Many companies outsource their manufacturing to cheaper countries to cut costs, we, however, believe that quality should always be the number one priority and so it is important to us to actually oversee the production process and ensure our high standards are being met each day."

"My business partner, Dennis, and I, have both been working in the diamond tool business for over 40 years now and many of our customers are astounded by how competitive our pricing still is even though we have stuck to our guns and kept the manufacturing in Australia, right where we grew up."

Besides its 26,000m² manufacturing site and offices in South Australia, the company also runs a full service facility and office in California. Exporting diamond tools globally, Syntec's directors made the decision early in the company history to open an office in the Northern Hemisphere to allow the better serving of customers. Paul explains, "Our customer base in the US was growing and growing and Southern California seemed like the perfect spot. We are now able to provide excellent customer service from two opposing time zones. This was important to us as we work closely with customers to identify their needs. With each product, our goal is to add performance and value to our customers - all our diamond tools are manufactured with job applications in mind."

Syntec's product designers and the technical team find out specifically what is required and manufacture custom made products for most applications. US sales manager Jason Root gives an example, "Over the past few years, an increasing number of customers have been requesting softer and softer bond tooling to grind extremely hard concrete. This concrete is typically hard

trowelled, making it very smooth, and typically finished with various water or solvent based curing agents, which can cause diamonds to heat up, glaze over and stop grinding after only 15mins."

"During the curing process, the curing agents form a membrane over the top of the concrete slab which stops the water near the surface of the slab from evaporating too quickly; the idea is to reduce cracking and increase the strength of the concrete cap. The chemistry of these curing agents is increasingly improving, making that top layer of the concrete harder and therefore causing serious problems for contractors who have bid on a job to grind this type of floor but then very quickly realise that their diamonds have stopped grinding."

Initially, segments are 'dressed', meaning the individual diamond crystals in the segment are exposed. These diamonds are locked in place by a metal alloy, the so-called bond, and over time the diamonds fracture or are pulled out of the bond and as the bond wears away it exposes new diamonds, making the choice of bond highly important. "After coming into contact with an extremely hard surface, diamonds can gradually lose their cutting edge," Jason points out. "If the metal bond around them is too hard, it will not wear away fast enough and the tooling is no longer productive. When that is the case, contractors usually try to mist water, throw some sand down, add weight or change the rpm. These, however, are typically not the proper fix."

"Getting a softer bond diamond can help but it seemed we kept getting requests for softer and softer bond tooling up to the point where the bonds were so soft the diamond actually would have pushed back into the segment and no longer produced. Our metallurgist was presented with this issue in the industry and moved quickly to develop a new revolutionary bond which now is incorporated in our so-called 'Rapida' segments. Rapida segments are specifically made for these types of grinding applications, allowing for powerful grinding of even the hardest concrete and are available on a variety of different grinding shoes to fit any machine on the market."





RM Group launches new product philosophy into series production

Following the presentation of a prototype at bauma in Munich in 2019, RM Group is now launching production based on its new product philosophy in October. The RM 120X is the first crusher to be implemented in the series. with a screener set to follow in 2021.

"With this philosophy we are once again setting standards in user friendliness," says Gerald Hanisch, founder and owner of Rubble Master. As the first 'Next' philosophy crusher, the RM 120X combines enhanced safety with maximum performance and flexibility. However, the company will remain true to its proven service and intuitive 'RM GO!' operation concept, which it will continue to expand.

Four point product philosophy

RM Next focusses on four elements including extended service, which includes both the standard five year warranty and annual service. Simplicity is ensured with equipment options and configurations being developed based on customer requirements. "Operating an RM 120X still involves only a few buttons. The built in screen is only used to display information and has no sub menus. We have received valuable input for this operating concept from our customers around the world," says Hanisch.

Placing a continued emphasis on safety, the RM Next has a comprehensive operator-machine interface, meaning that the operator no longer has to enter the 'danger zone' while operating. An additional focus is on the optimisation of material throughput with job specific crushing equipment for respective materials and real time analysis. This reduces running costs and increases turnover. Optimisation starts with the machine configuration, with five main application cases having been developed with the necessary

equipment options as well as a performance indicator on the machine and the 'RM GO! Smart' to detect and implement any improvements.

Future developments

"When we started developing RM Next, we always had our entire product range in mind. In future, an important role will be played by networking different products in operation at the same job site. However, we can only make this happen if all the products work according to the same philosophy," explains Hanisch. This means intensive work is currently underway to network RM machines that work together with screen throughput being able to be adjusted in future to match the utilisation of the crusher. Machines 'downstream' from the crusher can also stop automatically if the crusher is currently not processing any material. These optimisations are designed to increase efficiency and save running costs.





The new 'Actimo Evolution' super seat is now a standard feature of the Atlas rail/road excavators 1604 ZW and 1404 7W

Atlas facilitates ergonomic work environment

With immediate effect, Atlas will feature 'Grammer Actimo Evolution' operator seats in its rail/road excavator models 1604 ZW and 1404 ZW as a standard feature. The premise behind this qualitative improvement in the operator cabin has been to help in the prevention of operator back problems. For this reason, Atlas engineers integrated the seat development for excavators into the 21t and 19t models.

Secure and comfortable

The latest developments include foldable armrests with height and angle being adjustable. Active seat temperature control assures a comfortable working environment inside the excavator which is especially welcome during cold and wet weather. Pneumatic lumbar support facilitates security and personal comfort, whilst the seat cushion depth and angle can be adjusted.

Permanent electronic weight adjustment

The seat suspension is, of course, of the greatest importance. In this case, the compressor operated pneumatic suspension imparts the impression that the seat is 'floating in the air'. The low frequency suspension stroke is 70/30mm with active weight adjustment for the suspension of the current operator which creates optimal ergonomic conditions for the operator. All this and other features and functions ensure that working in the 1604 ZW and 1404 ZW is not a strain for the operator, who is seated in the best possible way for working on an extremely comfortable seat. That way continuous work is easy on the back and reduces fatigue. The seat is in fact recommended by health insurance companies for operators with back problems.





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.









Pilsen in the Czech Republic, offering services in recycling, demolition and the sale and extraction of construction aggregates. The latter is an important part of the business and takes place at the company's Mítov quarry, where Fast Cargo has reported a great return on investment on its new Doosan DX300LC-5 30t crawler excavator.

There are substantial demands placed on machinery at the Mítov quarry, with over 150,000t of stone extracted annually with 900t of material moved every day. After the previous excavator broke down irreparably, around five brands were shortlisted for the competitive tender to replace the machine with a DX300LC-5 being chosen. This was supplied by Garnea, the Doosan dealer in the Czech Republic. According to Fast Cargo, the Doosan DX300LC-5 has provided the higher capacity and efficiency the company was hoping for.

"Since we bought the machine, it has worked for over 1,400h without a single problem," says Lukáš Kindl, CEO of Fast Cargo. He adds: "Aspects such as the service provided by Garnea, the dealer's excellent approach, the low fuel consumption and fast delivery were all important in the purchase decision for the Doosan machine." Fast Cargo highlighted other advantages including the 1.8m3 quarrying bucket; this has enabled an increase in the hourly extraction rate of between 20% to 30% when compared to the excavator replaced by the



DX300LC-5. Furthermore, the DX300LC-5 has low fuel consumption, even in the heavy operations found at the Mítov Quarry, of 11l/ph to 12l/ph. Drivers also report that inside the DX300LC-5 it is very comfortable and quiet to operate.

The good service provided and the dealer's approach are seen by Fast Cargo as essential to the successful cooperation between the companies. Optimum customer satisfaction is the top priority at Doosan and is complemented by the onsite support provided by Doosan experts, including Stephane Dieu, product manager for Doosan Infracore Europe, who is a regular visitor to the Mítov Quarry. Commenting on the Doosan range,

Stephane Dieu said: "The DX300LC-5 is a 30t excavator offering an impressive 270HP of engine power and a hydraulic flow of 500l/ph. It is part of the wide range of excavators from Doosan from 1t to 80t.

"We offer some of the lowest costs per ton and highest productivity, based on the cost of the machine and the fuel and maintenance costs. As shown by the high performance of the DX300LC-5 at Mítov Quarry, I believe Fast Cargo made the right choice of machine." Lukáš Kindl, CEO of Fast Cargo, concurs: "I agree that it was a good decision to choose the Doosan machine. We are very satisfied and we will definitely continue to work closely with Garnea and Doosan."



Liebherr-France SAS development and production has launched a successor to the R 944 C, the R 940 Demolition, which complements its product range that already includes the R 950 Demolition and the R 960 Demolition.

Liebherr has more than 50 years of experience in the development and production of demolition excavators, with the company stating that its demolition excavators have set new standards in terms of efficiency and

profitability. Thanks to the wide range of models and equipment, a machine is said to be available for every application, with the new R 940 Demolition complementing the existing range of R 950 and R 960 demolition excavators. Equipped with a Liebherr engine, which complies with exhaust emissions standard Stage V, an output of 200kW is reached. It also features a diesel oxidation catalyst (DOC), SCR system, particulate filter and does not have an EGR valve, thus ensuring lower

fuel consumption and higher productivity. The machine is also available in a Tier 4 Final version for less regulated markets with a corresponding engine.

Liebherr demolition control

The Liebherr 'Demolition Control System' (LDC), which received the Intermat Innovation Award, shows the driver the position of the demolition tool, thus ensuring the stability of the excavator. In this way, it has been possible to reduce to a minimum the probability of an operating error that could impair the stability of the machine. With the active safety components of the LDC, the driver has real time information in the field of vision on the tilt angle of the machine and the tool position. If a critical value is exceeded, the LDC automatically triggers electronic range information. The safety system also informs the driver about every movement of the equipment which could impact the stability of the excavator.

Equipment adapted to the application

Like the other representatives in the range, the R 940 Demolition also features optimal properties for selective deconstruction. Apart from the LDC, a 30° tiltable cab ensures an optimal view of the working area. The hydraulically adjustable undercarriage with variable track gauge facilitates transport and the counterweight can be removed. A cab air filtration system for a healthy work environment and a spray system for reducing dust in the working area are available as optional equipment. The machine may also be equipped with an air compressor for cleaning the radiator and cab.

Quality and Performance that Makes Sense to Invest





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Hammer reshapes its brand and updates its technology

The history of Hammer srl. is 40 years of evolving skills that have transformed it from a family business into a large global player. Now in 2020, the need to develop new business has translated into the creation of a new brand.

New logo, brand guidelines and technology

A new logo has been created to represent the physicality of the product with a design that balances modernity, simplicity and impressiveness. In addition, the use of new graphics has redefined the boundaries of a brand that is increasingly projected towards recognisability. The brand and new technology is aimed at demonstrating efficient performance capable of reducing working time on site. For this reason Hammer's research team has looked at new perspectives in order to raise its product standards. This has seen its 'SB' and 'FX' series of hydraulic breakers provide powerful components that withstand ever higher levels of stress, especially in difficult situations. High performing alloy steels and the best heat treatment techniques have been used for the production of these lines. The quality and types of materials have been designed to create the correct relationship between speed and pressure variables providing long levels of durability.

High standards and performance

The SB and FX series are designed to operate with nitrogen to provide high power distribution over a greater number of blow/min, thus resisting high counter pressures up to 25bar. Moreover, the hammer used is structured in a very compact way to reduce stress on the excavator arm and ensure the longer life of the attachment and its components. Another important feature of the breakers is their adaptability: they can work on any type of excavator and on any hydraulic system, even high back pressure. Last but not least, special polyurethane shock absorbers are used that absorb vibrations and protect the excavator arm and workers in the field by reducing noise emissions in accordance with Directive 2000/14 / EC. The SB series mono bloc hydraulic breakers without membrane and tie rods comprise of eight models suitable for mini excavators, mini loaders, backhoes, demolition robots. The FX series hydraulic breakers consists of 14 models suitable for medium and large tracked and wheeled excavators.

Smart demolition

Hammer demolition grapples are seen by the company as a new milestone for the business in recycling and demolition. The new GR series multi-purpose grapple has nine models for excavators with an operating weight from 1.5t to 80t for high levels of performance in handling, recycling and small scale demolition. The features of the demolition grapples include exchangeable wear plates, robust and fully integrated rotation, built in relief valve, a completely protected cylinder (prevents debris entering during demolition), high quality wear blades and three different types of jaws depending on operation (only standard jaws are available from GR200 to GR600).

KSP 3000 spray gun operated with electrical remote control connection (without mechanical valve) along with the KSP 1500



Kamat high pressure gun KSP 1200 renamed KSP 1500

For more than 40 years Kamat has been developing and producing a wide range of technical accessories for high pressure applications up to 3,500bar. The company has acquired experience based on thousands of applications worldwide, serving as the basis for the in house development of accessories and any kind of water and rotating tools, self-propelled or externally driven.

Kamat's high pressure array includes smaller parts, such as rotating nozzles for gun operation and manipulators (self-propelled or pneumatically driven), rotating joints (3,200bar) especially designed for mounting on surface cleaners or whole systems, such as the remote controlled 'Ship Hull Crawler' for the cleaning of large surfaces. Developing accessories alongside full practical testing has resulted in high functionality with accessories that are ergonomic and safe providing efficient and fatigue free work. Amongst these are KSP 1200 and KSP 3000 high pressure guns, which have been recently standardised. The result of the standardisation is that there is the same range of functions with 50% less variants and an extended pressure range. This has led directly to the KSP 1200 now being termed the KSP 1500 being suitable for high pressure up to 1,500bar, whereas the KSP 3000 is suited for maximum pressure up to 3,000bar.

Fatigue free work

The high pressure cleaning and processing of surfaces with water requires the precise management of the water jet. This is needed to ensure that the required result is achieved within an adequate time, but safe and fatigue free for the operator. With this objective, Kamat offers the specially developed, in house produced, high pressure guns KSP 1500 / KSP 3000 with electrical or mechanical control, completed by different versions of foot valves and rotating gun lances. The ergonomics of these devices has been developed with innovative solutions such as a special pivoting grip which does not transmit any torque to the wrist. In addition, the optimal hose routing for all work situations is easily done as the

gun's hose connection can branch off in all directions when pivoting. This special 360° pivoting grip not only avoids any torque in the wrist, it also provides fatigue free work, with the handle being highly shock resistant, solid and extremely robust. A problem with many high pressure guns is that the control cables break easily and that changing the cable is time consuming. This problem has been solved by designing the gun in a different way, with the electric proximity switch being only plugged in and not glued, making it easy to be exchanged immediately after a cable failure. Furthermore the high pressure hose connection points backwards, thus the forces caused by the hose are reduced.

Safe technology

Kamat follows the philosophy that machine safety is of outmost importance in order to provide safe operations. The company always keeps in mind that all technical solutions and new developments follow this philosophy. With regard to safety aspects, the high pressure guns are therefore said to be the safest guns on the market. The range is also extended by different versions of foot valves, rotating gun lances, rotating nozzles and further accessories for different applications including the cleaning of surfaces and pipes, removal of paint and coatings, removal of concrete, uncovering reinforcement bars, abrasion and washing of concrete and stone. All products for surface cleaning can be fitted to guns and electrically guided equipment. The guns are suitable for manual surface cleaning with all type of forms and materials of nozzles.

www.kamat.de



OilQuick reacts to Open-S

In PDi 4-2020 the magazine wrote about the new 'Open-S' which is a new open standard for fully automatic quick couplers. Open-S is owned and managed by an independent organisation, Open-S Alliance, which in its turn is led by a council of engineers from the member companies, currently tiltrotator manufacturers Steelwrist and Rototilt.

Open letter from OilQuick

Åke Sonerud, the chairman of OilQuick, a well-known manufacturer of automatic quick couplers, has now in an open letter to the machinery contracting market and the trade press commented on Open-S's intensions. Below you can read the full open letter from Åke Sonerud. On the right hand side of the page you will find a clarification and reply to Åke Sonerud's open letter from Open-S's Anders Jonsson, Rototilt, and Stefan Stockhaus from Steelwrist.

Open letter to the machinery contracting market

Open-S - The emperor's new clothes?

You have probably noticed the adverts and articles in the trade press and on social media about the launch of Open-S for fully automatic quick coupler systems for excavators. What is this all about you ask yourself? In short, it is the emperor's new clothes - with borrowed feathers. Both tiltrotator manufacturers, Rototilt and Steelwrist, have the ambition to create an open world standard for fully automatic quick couplers based on the S-standard for symmetrical frame couplers established by the Swedish trade association for suppliers of mobile machines.

What is a world standard?

To achieve an international standard, across Europe to begin with, requires an established standardised product solution, a wide consensus and acceptance in the machinery industry, as well as an approval process in the European Committee for Standardisation, CEN. None of which is in place, as I understand it.

Open-S is a company standard for Steelwrist and Rototilt

It also gives the appearance of Open-S being an established part of the Swedish independent S-standard for symmetrical frame couplers which was introduced twenty years ago, on my initiative, under the auspices of the machine suppliers. This Nordic de-facto S-standard regulates, as it is well known, the interface between S-couplers and mechanical attachments. There are now a number of fully automatic company solutions based on the S-standard: OilQuick's OQ system, Engcon's EC-Oil, German Kinshofer and Lehnhoff's variants and most recently Steelwrist and Rototilt with their OilQuick like solutions. I have noted with great interest that even the world's leading manufacturer of tiltrotators, Engcon, also says no to Open-S. When it comes to Steelwrist and Rototilt, their fully automatic solutions are very much a matter of 'borrowed feathers'. It is important to note that Open-S is only a company standard for Rototilt and Steelwrist, and can be compared with OilQuick's partner program 'Clean Systems', even if Open-S has been placed in an independent organisation to give it more legitimacy.

OilQuick is not against standards

I want to be very clear that we at OilQuick are not against standardisation to simplify and make things easier for equipment dealers and users, but we see great danger and huge problems in the current situation with this so called standardisation and the subsequent mixing of products and suppliers.

Lack of compatibility between different systems

I think that it is very difficult to get an open standard with many different suppliers of couplers and attachments, as well as a free mix of products, to work fully without problems, especially if product changes and policy decisions are to be taken in an independent organisation consisting of competitors. After having done this for over thirty years and having sold more than 33,000 OilQuick systems globally, we at OilQuick have long experience of this problem. Managing a mechanical system with mixed suppli-

ers is generally OK. A loose bucket or attachment caused by poor quality and fit may last for several months, maybe even years, but if a fully automatic system fails or leaks oil it must be remedied more or less immediately. Two completely different worlds. My father John always said that you do not know who you are dealing with until you have to deal with them about a complaint. Who do I call in the event of a problem and have a mix of fully automatic couplers and attachments from different suppliers?

Different electrical and oil connection configurations

Different applications and system solutions require different electrical and oil connection configurations. Several different suppliers require a clear standardisation of how electrical, grease and oil connections are used. Standardisation is desirable but not always possible to achieve without making too many compromises and concessions. I see many obstacles when it comes to agreeing on this. Product knowledge, advice and system overview will be even more important in the future.

Huge safety risks with mixed systems

Safety is very important when it comes to using quick coupler systems on excavators, especially on fully automatic quick coupler systems in combination with tiltrotators where a number of mechanical and hydraulic attachments can be changed 50-100 times per working day. Mixing couplers, attachment adapters and control systems from different suppliers then creates uncertainty and poses a large unchecked risk of accidents. Many manufacturers currently use sensors to monitor their attachment locks. Poor quality, poor fit and incorrect tolerances in the system can then have catastrophic consequences. The same applies to electrical contacts and their different uses. We do not believe that mixed systems are the solution to these obstacles.

Responsibility and system support

It is difficult to have clear and unambiguous system responsibility with a lot of different companies involved. We believe in clear and defined system responsibility which allows good system advice, as well as fast and painless handling of warranties and malfunctions (meaning) one company that takes full system responsibility. We believe in homogeneous coupler systems and one system supplier that takes full system responsibility.

Åke Sonerud
Founder and chairman of OilQuick AB



Reply from the initiative takers' of Open-S

Open-S: a good solution for the machine owner and the industry

We would like to make some important clarifications about Open-S and respond to the open letter from Åke Sonerud, OilQuick AB.

The Swedish construction industry faced a big challenge in the nineties as different manufacturers of quick coupler systems drifted apart more and more and tools and couplers of different makes did not fit together. At that stage an initiative was taken by the Swedish trade association for suppliers of mobile machines to develop the 'Symmetrical Standard'

(S-Standard), in order to create compatibility between tools, quick couplers and tiltrotators. Today the industry faces basically the same challenge when different fully automatic systems are not compatible and the customer suffers the consequences.

Open-S builds on the established and open S-Standard and is not a company specific or closed partner program. In the latest revision of the S-Standard, in 2011, it is also stated that one of the purposes of the standard is to, 'create a design that allows for future installation of fully automated systems for hydraulic couplings and electrical cables'. Open-S is thus completely in line with the original ideas behind the original S-Standard.

Open-S has been developed with dealers and machine owners in mind. Customers have different needs and we think it is important that the customer has the option to choose and is not locked into a company specific solution. This is the reason why Open-S is open and we already have other manufacturers who have applied for membership.

As we have agreed on how the products should be connected with each other, the customers can choose freely from the product offering by manufacturers that are in compliance with the standard. It becomes clearer for the customer what fits together and what warranty commitments apply. We continue to take full responsibility for our respective products, but by collaborating we can focus on avoiding problems and find better technical solutions. That also creates more room for new innovations.

Compatibility and safety are of course important questions in the development of Open-S. That is why we ensure that the tiltrotator and work tool fit together with the customer's choice of equipment. Members of the standard must meet a number of technical criteria and tolerances, and also be able to produce products with good quality in large series'. The door is open to all manufacturers who are interested and the technical questions can be managed.

This is therefore not a question of technology but about politics. You need to want to cooperate to be able to cooperate. An example of a design change that causes problems is OilQuick's introduction of the 'Front Pin Guide pins' that no longer follow the symmetrical de-facto standard, with the only purpose being preventing compatibility. This is a sign that compatibility is not seen as desirable. Instead of focusing on what makes us different from each other, we prefer a scenario where we keep developing the common standard together, to be able to make the same journey in the future, as for example, 'Bluetooth' or 'CAN-open', that also started out as collaborations between different companies and that in time have become CEN standards.

We are certain that more manufacturers will join and we also welcome OilQuick to make that journey.

This is good for the machine owner and for the whole industry. The initiators behind Open-S



Open-S Anders Jonsson Rototilt

Stefan Stockhaus Steelwrist

PDi news



Benefits of having hydraulic equipment on service vehicles

When there is a need for several forms of energy on worksites, such as electricity, high pressure water and compressed air, hydraulic equipment offers a number of advantages, especially for service vehicles. As well as providing an excellent power to size ratio, extra load space is created for tools and equipment.

When there is source of electric power on-board, a service vehicle, electric tools and equipment may be used at worksites. Since the hydraulic generator is always ready to use, it enables work to start immediately with no need for dragging large diesel generators to the worksite. As they are maintenance free, there is also no need to be concerned with servicing due to the advanced technology used. All that is required is a connection between the hydraulic generator to the hydraulics of the service vehicle. When using quick couplings, connecting the pressure hose and tank hose takes only a few seconds, with Dynaset hydraulic generators producing single and three phase electricity allowing the use of lights, electric tools and to charge batteries.

Effective washing

High pressure water solutions helps to work efficiently when, for example, washing and cleaning, with high pressure water having low water consumption. Everyday pressure washing is easy to do when the easily connected compact and light weight equipment is on-board and ready to use. When used for cleaning, Dynaset high pressure pipe cleaning units make working life easier thanks to their simple and robust design. The compact size of the units allows installation of an additional water reservoir on a van or truck, with the small hydraulic equipment size leaving room for other hydraulic equipment such as a hydraulic generator or tools.

Powering pneumatic tools

Compressed air is another source of power which is commonly used at worksites and on service vehicles. When there is a need for air flushing, the use of pneumatic tools or inflating tyres on site, a hydraulic compressor on-board is a great asset. It can make work easier thanks to its compact size and light weight being easily installed in a van with room left for other equipment.

PTO enables the use of hydraulic power

When purchasing a van or truck to be used as a service vehicle, the best option is to equip it with factory installed PTO, also known as 'power take off'. By installing a hydraulic pump, hydraulic equipment may be used enabling more efficient working. Quite often though, a van or truck doesn't include a factory installed PTO. That is not a problem anymore, as PTO can be installed afterwards to provide the use of hydraulic equipment. Dynaset has created a PTO guide which will help provide more information about this subject and can be downloaded from the company website.



Hilti unveils its first construction robot

Hilti has introduced the 'Jaibot', a semi-autonomous mobile ceiling drilling robot. The Jaibot will help MEP installation contractors tackle productivity, safety and labour shortage challenges, being a further solution towards digitisation of construction sites.

The Jaibot executes its tasks based on building information modelling (BIM) data. The robot is a completely cordless and easy to use system. It locates itself accurately indoors, drills the holes dust controlled and finally marks them according to the trade, making the solution ideally suited for mechanical, electrical and plumbing businesses. "The productivity of the construction industry has been lagging behind other sectors for years. Margin pressure and shortages of skilled labour are already facts of life in our industry and make it increasingly difficult to overcome productivity shortfalls. But leveraging the opportunities offered by digitisation will compensate for it. We do this by intelligently linking processes, teams and data," said Jan Doongaji, member of the executive Hilti board. "With Jaibot and in close collaboration with our customers, we are further stepping towards realising the efficiency that digital transformation can and will bring to construction sites."

Paradiam shift in the construction industry underway

Time and budget overruns are common occurrences, especially on large construction projects. However, significant productivity gains are possible with digitally planned construction projects and their realisation with

the help of robotic solutions. BIM enabled robotic solutions also make the construction process more transparent with improved execution speed, constant performance and fewer errors. Daily progress can be reported from the field to the project office via the cloud. Potential conflicts between the trades involved on a jobsite also can be detected at an early stage and then limited, resulting in more projects delivered on time and within budget.

Helping workers

Safety played an important role in the development of the Jaibot, with it being designed to assist tradespeople in physically demanding, repetitive installation tasks such as drilling numerous holes overhead. It is navigated by via remote control and uses reference data from a robotic total station, the Hilti PLT 300, with holes within reach being drilled automatically. "We looked at which routine work on the construction site is among the most stressful, and that is primarily overhead work," said Julia Zanona, product manager for Robotics at Hilti. "From the beginning, it was important to us to develop a robotic solution that supports our customers where it is most needed. The Hilti Jaibot takes over the most strenuous and exhausting tasks, working alongside the installation team."

New 'Clever' stirring station from Janser

German based company Janser is introducing a new stirring station named Clever for subfloor and surface treatment working with levelling compounds. It is a compact and robust mixing station with good balance for pouring self-levelling compounds, even with large mixing volumes. The mixer is equipped with a-speed gearbox and infinitely variable speed setting. It is delivered with a special stirrer and a 100l mixing bucket. It runs on 230V power and the motor has a power of 1900W. The speeds of the motors are 150-300 rpm and 300-650 rpm. The M14 tool holder and the stirring station weighs 48kg and the container can take 100l.

www.janser.com



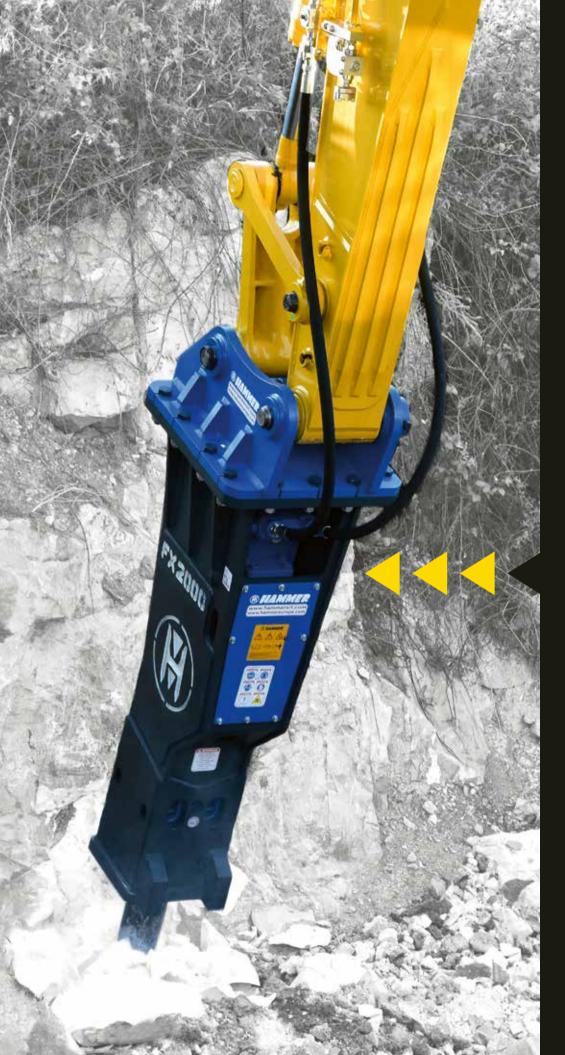
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