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DST 10-CA electric wall saw



DD 350/DD 500 coring system



DST 20-CA electric wall saw



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Words from the IACDS President

Think positive is the motto!

We have almost made it through the second summer of the pandemic, dealing with the 4th and 5th coronavirus waves due to the high levels of vaccination. Thus the motto is to 'think positive' as we approach autumn in a positive mood.

This autumn will also see another structural survey which aims at transparently documenting and comparing global developments in our industry. As in previous surveys, I would ask all concrete drilling and sawing contractors and manufacturers to take part in as large numbers as possible. Of course participation is voluntary and I promise anonymous, with the results being published on our website again at the end of the year.

Also this year there will be a yearbook in which the member associations and manufacturers will participate on the subject of 'Innovation', and I am looking forward personally to reading many exciting and interesting reports. Furthermore, earlier this month on 15 September saw the annual general meeting of the IACDS take place virtually for the second time.

On another note, we would like to thank Anders Andersson, who is leaving the board, for his time and his contribution as the representative of the Swedish Association and for acting as treasurer. The free seat will be filled by Linda Dahlin, an entrepreneur in from Gothenburg, who will act as the new representative of the Swedish Association and as new treasurer. This will be the only personnel change to the board. It was decided that no other personnel decisions are to be made until the next meeting in person which will be at the next bauma in Munich in October 2022.

On 23 September, the annual general meeting of the German Association took place in Willingen. This time the meeting was not accompanied by the BeBoSa trade fair which has been put back to 2023. There was a change in the board of directors, as after more than 12 years, Thomas Springer has handed over his baton to Manfred Witzke who can count on many years industry and board level experience.

Thomas Springer has help shape the association like no other, being largely responsible for the creation of the 'building mechanic' profession. It is also thanks to him that the German Association was able to build a museum in Hamm with the help of the training centre there. And it is also thanks to him and his vision of a tool free drill bit connection that the PQ-6 has been fully developed and introduced. Thomas Springer has always been a friend and advocate of international exchange

and has always supported the IACDS and its work. For this I would like to say - 'Thank you Thomas' - very loudly at this point.

Last but not least, I would like to refer to the 'Diamond Award', which will be presented in two categories at bauma next year. Service providers will be acknowledged 'Best job' category and manufacturers 'Best innovative product' category.

As always, information on this and our work can be found at: www.IACDS.org.

Stay healthy and hopefully see you next year.



Michael Findeis, President of IACDS

The European Water Jetting Industry report 2021 now available

The European Water Jetting Industry Report 2021, a benchmark study for professionals in the industry, is now available. The report, the first one carried out by the association, includes a comprehensive and realistic overview of the water jetting industry in Europe and, in addition, a number of forecasts for 2021. These are based on the responses of numerous contractors, suppliers and asset owners who have completed a survey over the past few months. The European Water Jetting Industry Report is available for online consultation and can be adapted to any type of decision.

Results of value for professionals

Although this is the first year in which the study has been carried out, the results obtained are of great value to professionals in the industry. Furthermore, they are divided

among contractors, suppliers and facility owners. Thus, throughout the more than 100 pages of the study, readers will find data on the companies' investment, their growth at different levels and their annual activity. It also offers a series of general data that serves as a framework for the evolution and development of the industry.

About EWJI

The European Water Jetting Institute, EWJI, was created following the model of similar organisations at European level, to establish an umbrella organisation bringing together national associations, contractors, suppliers and prescribers of the industry. The key goal for EWJI is the development and standardisation of services and products related to water jetting, in whatever field of application it may be used.

PDi business





Partners for Xwatch

Already a major force in the provision of excavator safety systems in the UK, South Wales based technology providers Xwatch safety solutions has just appointed its first Xwatch partner for Estonia, Latvia, Lithuania and Russia. Geliodor Grupp OU is headquartered in Tallinn, Estonia where it specialises in the sale and maintenance of a variety of heavy equipment predominately to the rail, construction and infrastructure markets. Dan Leaney, sales and operations director for Xwatch commented: "We have been gradually growing our presence across the globe since we started Xwatch just two years ago and already have dealers in Europe, Australia, New Zealand, Scandinavia and the USA. The addition of Geliodor Grupp gives us another large market to work with."

The deal with Geliodor has already borne fruit as Xwatch has supplied one of its leading XW5 height, slew and rated capacity solutions (Rci) for a new Jcb wheeled excavator heading off to Lonmadi, the Jcb dealer for Russia. Sales director for Geliodor Grupp, Urmas

Kiss said: "We are very pleased to become the region's partner for Xwatch. They have quickly become the leading excavator safety system for the UK and we hope to have the same success with them in our market. The safety market for rail and construction is being highlighted and we cannot think of a better partner to help us capture the ever increasing demand for this type of product."



CSDA launches new online training platform

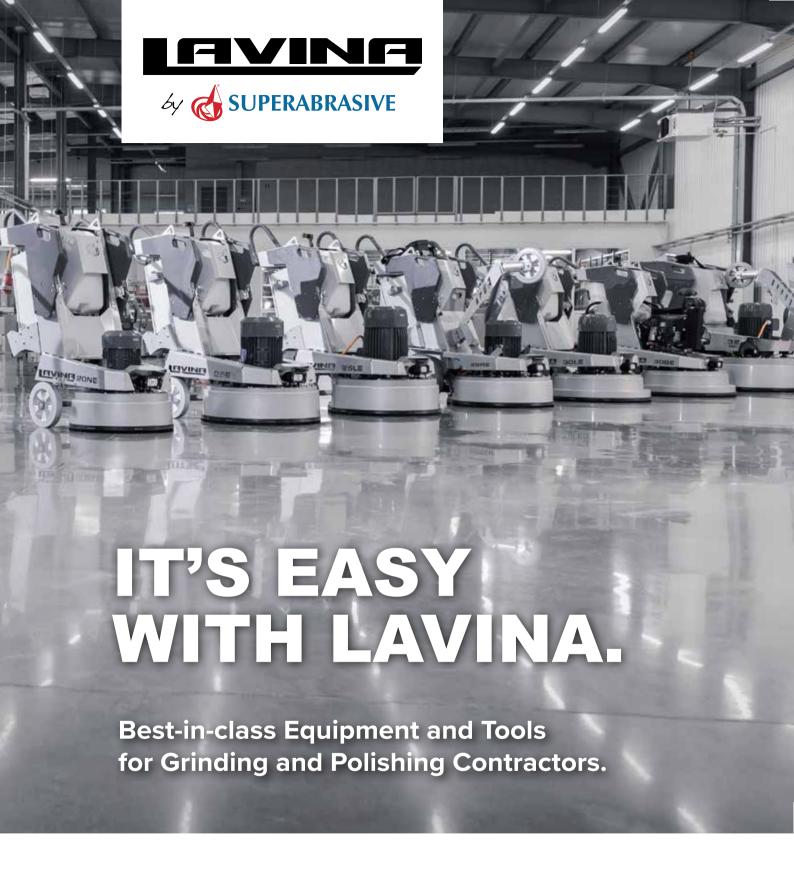
CSDA has launched a brand new online training platform, giving its members, and all members of the concrete renovation industry, more opportunities to advance their knowledge of diamond tools and technology. The new website features an updated version of the association's classic 'Cutting Edge' training class, now streamlined and featuring even more information for operators, sales managers and anyone who wishes to learn more about diamond tools, sawing and drilling techniques and jobsite safety.

"Since our first online training course in 2008, we have had over 7,000 concrete cutters complete our online training courses through CSDA's online training website," says executive director Erin O'Brien. "We continue to review and improve our course offerings and are extremely proud to introduce this new platform and expand our online course catalogue. We plan to add more classes over the next few years."

Cutting Edge is geared towards new and less experienced operators who want to learn about the basics of diamond tools, how

diamonds cut, the basics of slab sawing, core drilling, wall sawing, hand sawing, jobsite safety best practices and more. It is a self-paced course, and each module has a quiz to complete to assure competency. Owners and managers can track their employee's progress and sign up multiple employees to take the course. The online platform also offers the entire library of CSDA's 'Toolbox Safety Tips' (TSTs) available to purchase in bundles according to job type or safety topic. There are over 100 TSTs available, and new topics are added on a regular basis. Classes on GPR Methods & Theory, Estimating, Silica safety and more will be added soon.

"My heartfelt thanks to those involved that helped put together this course," said Patrick Harris, CSDA Training Committee chairman. "This course will give your operators the knowledge of why things happen and could save your company time and money in the long run. Learning is a lifelong process, and anyone in the industry, or anyone who wants to know more about the industry, will benefit from this course."



Superabrasive manufactures complete solutions for floor grinding, polishing and maintenance. Our Lavina line includes one of the widest ranges of grinders, dust extractors and diamond tools for projects of all sizes.

PDi business

LONGER BUT FEWER STEPS

I was asked by the European Demolition Association to write a piece for the upcoming Yearbook. The subject was digitalisation which made me start thinking. I realised that though we have been covering the demolition, recycling, remediation, concrete sawing and drilling, concrete floor grinding and polishing industries since the mid-1990s, we have never actually worked in these fields. We work in the magazine publishing industry, which is by its very nature connected to prepress and offset printing.

With regards to digitalisation, publishing has experienced an overwhelming digital change during the last 15 to 20 years. I remember when I worked as sales promotion manager for Electrolux CR in the mid-1980s that at that time I made the layout for the company's brochures by hand, on a piece of paper. Text was typewritten on paper and the photos were either prints or large positive transparencies. Everything was then sent to the printer's reprographics department, and in return, I received a blue copy with everything laid out, or I could order a cromalin proof in colour. This went on for a few years until things started to change in the early 1990s. By then I had started my own company and bought my first personal computer, a PC and later on an Apple Macintosh. Using PageMaker software I could start to make the layout myself, but still a prepress department had to do all the mounting of films and so forth before the plates for printing were made. This required a lot of people involved in the process, but then the digital revolution changed everything.

Today everything is transferred directly from my computer, and more or less, directly to the printing plate thanks to 'smart' digitalised software. For me, the digitalisation of magazines and publishing was a tremendous step forward, even if it took me some time to learn how to use everything properly. The downside of course was that a whole occupational group of people working within reproduction and prepress had to find new jobs. And all this happened over just a few years, starting with the development of desktop computers.

The digitalisation process involved in the demolition industry is not as dramatic as was experienced by the printing industry where almost everything changed. The digitalisation of the demolition industry actually adds a lot of positive things that directly benefits the industry and the people working in it. As for the printing industry, the new technology eliminated several working steps leaving people without a job so that if they wished to stay in the industry they needed to retrain.

What digitalisation brings to the demolition industry is a safer working environment, more efficient operation of machines and tools, less operational failure and breakdowns, and easier maintenance and repair. There is of course some type of work that due to digitalisation has been eliminated and replaced by mainly safer and more efficient methods. But this is actually a positive development eliminating severe injuries and even deaths caused by dangerous applications.

The ongoing and rapid digitalisation of the demolition industry is strongly refining the daily work cycle for a demolition contractor and its clients. Already, in the planning stage of a demolition project the new digitalisation tools can prevent injuries and improve safety. The right machines and tools, and the right methods, can be chosen using intelligent machines and systems. One example is quick coupling systems for hydraulic attachments where the operator can remain in the machine overlooking operational displays, never needing to step out of the machine to a change tool. Another example is that a bridge deck of concrete can be demolished to the right depth by programming hydrodemolition robots

correctly leaving only the fresh concrete. This means there is no more hard labour required in changing tools, or demolishing concrete with jackhammers.

Developments with the new wave of digitalisation in our industry are also already strongly linked to the work being undertaken creating a circular economy. This latter development is undoubtedly for the best for all of us and our planet.

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





Doosan Infracore Europe appoints new CEO

Doosan Infracore Europe (DIEU) has announced that Chris (Kwanhee) Jeong has taken up the position as the company's new CEO effective from 1 July 2021. Chris has taken over from Charlie Park, who was CEO between 2017 and 2021 who has returned to work for Doosan in South Korea.

Chris Jeong joined Doosan in July 2006 as a senior corporate strategy manager after completing an MBA in the USA. During his career, he has made a significant contribution to the Doosan Infracore business by successfully leading strategic activities across various markets. Prior to being named CEO, Chris was Doosan Infracore's vice president and head of Sales/Marketing & Demand Planning for Emerging Markets, where he managed revenue/profit growth and working capital by overseeing the sales and marketing and demand planning teams for Asia, Oceania, Middle East, Africa, CIS/Russia, Latin America, Brazil and India. Chris previously spent time with Doosan in Europe from 2009 to 2013. During that time, he headed up Europe, Middle East and Africa (EMEA) Regional Strategy. Chris also has a strong product background and spent part of his career leading EMEA product management for the Excavator Business Unit.

Chris commented: "I am delighted to be taking on the amazing opportunity of serving as CEO of Doosan Infracore Europe and to contribute to the great performance the company has recently been showing, mainly thanks to the continuous support and dedication of the Doosan dealer network and the company's highly dedicated and professional workforce in Europe. We have very competent partners and a great team here, which I am excited to build upon as we continue to develop and implement our plans."

"Such plans include upgrading the product range through the launch of Stage V machines, continuously enhancing channel competencies to deal with customers' needs at the endpoint and executing on our strategies to retain sustainable financial stability both for our valuable partners and DIEU. I am confident our best years lie ahead of us and that together we will continue to power Doosan Infracore forward as a leading construction equipment manufacturer."



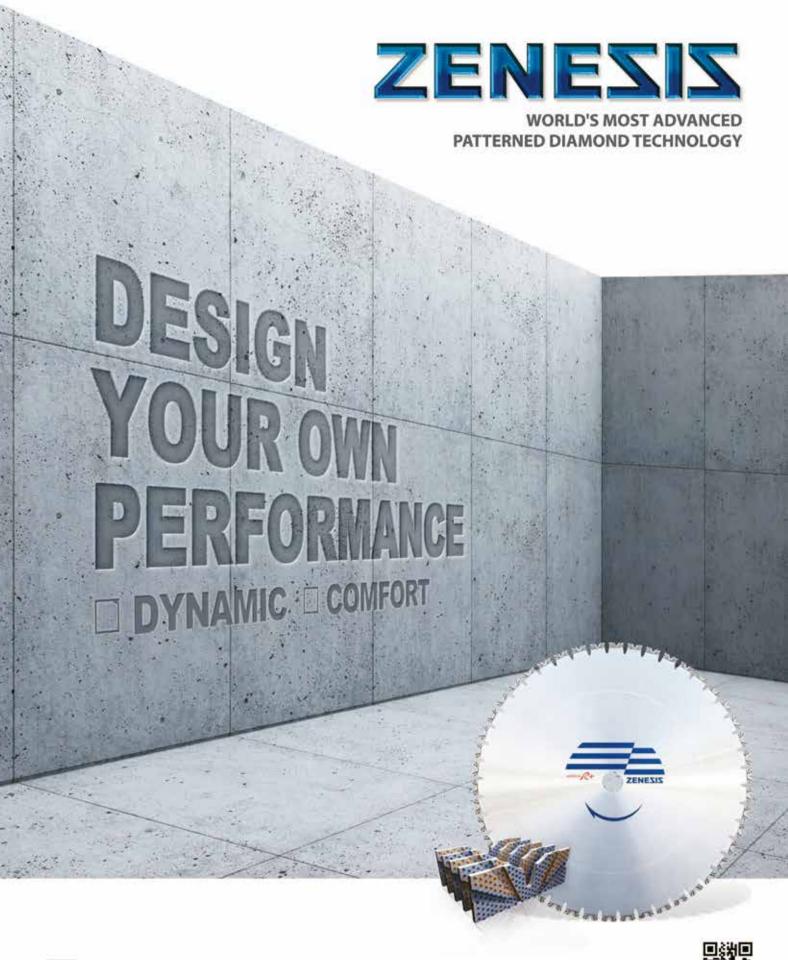
Sandvik and Steelwrist announce cooperation

Sandvik and Steelwrist have entered into cooperation for full automatic work tool adaptors for Rammer hydraulic hammers. As the global demand for fully automatic coupler systems is rapidly increasing, Sandvik will start offering Steelwrist 'SQ-type' adaptor plates directly from the factory during the third guarter of 2021. The deliveries from Sandvik will be compliant with the global 'Open-S' standard.

Sandvik is a world leading supplier of equipment and tools, service and technical solutions for the mining industry and rock excavation within the construction industry. Sandvik offers a complete range of demolition tools under the Rammer brand. The well-known Rammer hydraulic hammers are powerful, productive, and durable hydraulic attachments, suitable for carriers in the 0.6t to 120t operating weight class. The target with the cooperation between the two companies is to increase productivity and reduce downtime for end users as the interface between breaker and adaptor plate can be optimised for performance and compatibility.

"Rammer hammers are known for reliability, so we want to ensure best possible performance also when using fully automatic guick couplers. For that reason, we want to offer SQ system adapter kits engineered to fit our hammers perfectly. Together with Steelwrist we will make sure that the use of Rammer hammers is even more effective." said Jari Paaianen, product line manager at Sandvik Rock Processing Solutions.

Steelwrist's SQ auto connection system is appreciated by customers mainly for the increased safety and ability to change hydraulic powered work tools in seconds without leaving the cabin. Steelwrist SQ products follow the global Open-S industrial standard for full automatic couplers. "Steelwrist SQ products together with Rammer hydraulic hammers create a perfect combination. Our 'QPlus' technology enables higher hydraulic flows with less pressure drops than other systems on the market. Steelwrist and Sandvik product benefits combined together will surely be appreciated by our customers," says Toni Ylitalo, SQ product line responsible at Steelwrist.







Words from the EDA President

New materials for a wider audience

One of the main objectives of the Euro-pean Demolition Association, EDA, from other languages. Through this we are through greater dissemination, that the work of professionals in the field of

the specialised and informative publicarenewed and reinvented as time goes by.

to reach out to a much wider and less specialised audience, with the aim of and its professionals. In short, to highlight the attractiveness and value of a profession

In pursuit of this goal, EDA has developed all kinds of informative materiavailable on the association's website).

The animated video that will be released first will be mainly dedicated to attachments for demolition and recycling. It will contain the main features of these, thus extracting the main points of the 'Guide about attachments for demolition and recycling'.

Through this we are able to complete

the circle of putting together a publication that was launched only a few months ago again seeking to reach a wider audience.

As stated, we continue to reinvent ourselves and we continue to utilise new formats, drawing on new ideas, but without forgetting our origins and, above all, concepts that have always been

. Who said demolition couldn't be attractive and challenging?

About EDA

form for national demolition associations, demolition contractors and suppliers. The EDA has a strong focus on developments in Europe, which are of interest to the demolition industry.

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



PDi business



'Ground breaking' ceremony

The Wacker Neuson Group is building a new logistics centre at its Reichertshofen site which is home to its competence centre for compaction. The move will enable the group to significantly accelerate warehouse turnaround times by cutting down on transport journeys and digitalising processes. Construction work is scheduled to be completed and the logistics centre up and running by the summer of 2022.

On 20 July, the ground breaking ceremony for the new logistics centre was attended by Stefan Pfetsch, managing director of Wacker Neuson Produktion GmbH & Co. KG, president of the local chamber of commerce Johannes Hofner, the mayor of Reichertshofen Michael Franken, project manager Harald Günthner and representatives from the construction contractors. The new building will be located right next to the production facilities where the group manufactures its concrete and soil compaction products, including internal and external vibrators, vibratory plates and rammers.

"The new logistics centre here in Reichertshofen marks the next step in our strategy to focus our entire process chain at one hub," explains Helmut Bauer, managing director of Wacker Neuson Produktion GmbH & Co. KG. "We started on this journey back in 2017 when we relocated the research and development department for light equipment from Munich to Reichertshofen. Now, the entire process chain will be based here from development through production to delivery to customers. This concentration gives us greater speed and agility. At the same time, we will be reducing our carbon footprint by cutting the distance our products have to travel." A 12m high hall covers a total area of around 10,000m², providing space for shelving, picking areas and offices as well as a fully automated high bay warehouse. Eighteen loading docks for trucks will ensure construction equipment can be rapidly transported to and from the site."

"This ground breaking ceremony marks more than the beginnings of a new building. By the time our logistics centre opens its doors in around a year, we will have fundamentally modernised our logistics processes," adds Stefan Pfetsch. "In future, all of our workflows will be software driven with zero paper trail. Combined with our fully automated high bay warehouse, this will significantly reduce turnaround times, enabling us to deliver products to our customers even more rapidly."

Wacker Neuson in Reichertshofen

The Reichertshofen site is home to the Wacker Neuson Group's global competence centre for compaction technology, a market segment in which Wacker Neuson is a leading player. Vibratory plates and rammers for soil and asphalt compaction are developed and manufactured at the site. The portfolio includes Wacker Neuson's battery powered rammers and plates for emission free construction sites; products that resonate with the market for their high levels of environmental and user protection.

At the site, Wacker Neuson also manufactures internal vibrators, external vibrators and inverters for the concrete technology sector along with breakers. The company has been manufacturing its equipment at Reichertshofen since 1964. In 2008, the Group built a training centre at the site and then relocated its research and development activities for handheld light equipment there in 2017. Trainees can complete certified apprenticeships in industrial mechanics or tool and die machinery at the site's modern training workshop.





EVENTS

THE ARA SHOW 2021

October 17-20, 2021 New Orleans, Louisiana

www.arashow.org

ECOMONDO 2021

26-29 oktober, 2021 Rimini. Italy

www.ecomondo.it

WORLD OF CONCRETE 2022

Jan 18-20, 2022 Las Vegas Convention Center Las Vegas, USA

www.worldofconcrete.com

NDA ANNUAL **CONVENTION 2022**

Demolition San Diego Feb 26 -Mar 1, 2022 San Diego, USA

www.demolitionassaciation.com

FACHTAGUNG ABBRUCH 2022

Berlin, Germany

www.deutscher-abbruchverband.de

HILLHEAD

Hillhead Quarry, Buxton, Derbyshire,

www.hillhead.com

BAUMA 2022

24-30 oktober, 2022 Messe München, München,

www.bauma.de

BAUMA CONEXPO INDIA

Gurugram, New Delhi, India

www.bcindia.com

DEMCON 2022

November 24-25, 2022 InfraCity, Stockholm,

www.demcon.se



Doosan Infracore has announced that it has signed contracts to deliver a total of 221 construction machines in Asia, the Middle East, Africa and Latin America this year.

The company has taken an order for a total of 50 mid to large sized excavators, including 30 DX340LC and 20 DX480LC models, from a local construction company that won the runway expansion project for Hong Kong International Airport. In Thailand, Doosan signed a large supply contract for a total of 38 excavators and wheel loaders for a mine development and civil construction company that had previously used products from the company's competitors. Doosan has continued its business expansion in Asia by winning another order for 20 mini excavators from a dairy company in Vietnam.

Orders have continued to be won in the Middle East as well including an order

for 27 excavators and wheel loaders from a mining company in Oman; 35 excavators to a large construction company in Qatar, and another to provide 54 machines to a Turkish equipment rental company, Another big order in the Middle East will provide 10 50t excavators for a construction company in Saudi Arabia. In addition Doosan has signed a contract for 35 excavators and wheel loaders for a Moroccan company. The latter is a large construction company that is actively conducting business in northern and western Africa and is one of Doosan Infracore's major customers, owning more than 300 Doosan products. An order has also been received for 35 wheel loaders for various agricultural projects led by a government department in Egypt. This government department currently owns more than 100 Doosan construction machines. Orders are also being received from across Africa, with an order for 20 excavators to be used in gold mines from a mining company in Ghana being worthy of note.

Elsewhere. Doosan Infracore is actively penetrating the Latin American market. It has received orders for a total of 16 excavators and wheel loaders from construction and rental companies in Colombia.

"The new orders are the result of our efforts to foster dealers and develop the market even in the midst of the market slump caused by the spread of Covid-19. We plan to accelerate our efforts to enhance our brand image in emerging markets and expand sales volume and market share accordingly as the market situation improves," said Jeong Kwan-hee, managing director for sales in emerging markets at Doosan Infracore.

Metso Outotec to divest its Waste Recycling business line

Metso Outotec has signed an agreement to divest its Waste Recycling business line to Ahlström Capital, a family owned investment company. Metso Outotec announced in October 2020 its decision to divest its recycling business which comprises of the Waste Recycling and Metal Recycling business lines due the company's strategic focus on the aggregates and mining industries. The closing of the transaction is expected to take place during the fourth quarter of 2021.

The parties have decided not to disclose the value of the transaction. The divestment will have a minor positive impact on Metso Outotec's financial results. The Waste Recycling business line has been reported as part of discontinued operations in Metso Outotec's financial statements. Metso Outotec continues with the divestment process of its Metals Recycling business line. "We are very pleased that we have found a new owner for our business, whose strategic thinking and ambitions are so well aligned with ours," says Uffe Hansen, head of the Waste Recycling business. "As a standalone company with a sole focus on waste recycling, we will be more agile and customer centric in order to further exploit growth opportunities."

"The waste recycling business, M&J, has a proven track record with a strong growth profile, in an attractive market," says Lasse Heinonen, president and CEO,

at Ahlström Capital. "The business is well positioned to help drive sustainable development with its premium brand offering, robust operations and skilled personnel. I believe that Ahlström Capital as an owner will bring further focus on and resources for growth initiatives and support the standalone business to reach its full potential."

The waste recycling business will be operating under the M&J brand, and its headquarters will be in Horsens, Denmark. All current employees of the business, approximately 120 persons, will transfer to the new company in connection with the transaction. The net sales of the business in 2020 totalled some €50M.

MEISTERWERK.













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Kohler welcomes new China Tier 4 regulation

Chinese authorities have issued an update to the so called 'Limits and Measurement Methods' for exhaust pollutants of diesel engines of non-road mobile machinery. Also known as China NRMM Tier 4, it will be implemented on 1 December 2022 for industrial engines with rated powers of less than 560kW. Kohler engines have been designed to meet high emission standards worldwide, and comply with China Tier 4. Kohler also offers support and expertise to OEM's in designing a China Tier 4 compliant product line.

"The new China Tier 4 emission standard for non-road mobile machinery sets highly demanding requirements on particulate matter emission," says Li Shaoqi, director of Commerce, Kohler Engines Asia Pacific. "Kohler has already upgraded the traditional engine fuel system, intake and exhaust systems and control system, to provide OEM's with fully compliant engines. The upgrade from China 3 to China 4 is much more challenging if compared to the previous from China 2 to China 3, but Kohler. leveraging the experience gained in highly regulated markets, is able to offer enhanced performance, a smart exhaust after treatment strategy, heavy duty design, as well as guarantee low cost of ownership," says Shaoqi.

Kohler began manufacturing engines more than 100 years ago. The company offers hybrid, diesel, gasoline and gaseous fuelled engines up to 105kW which are supplied to equipment manufacturers world-wide in the construction, agricultural, industrial, and lawn and garden markets. Kohler Co. is headquartered in Kohler, Wisconsin, and has more than 50 manufacturing locations worldwide.



Ritchie Bros. to acquire Euro Auctions to expand its reach in EMEA region

Ritchie Bros. and Euro Auctions have jointly announced that they have entered into an agreement under which Ritchie Bros. will acquire Euro Auctions group for an enterprise value of €901M. Founded in 1998, Euro Auctions conducts unreserved heavy equipment auctions with onsite and online bidding under the brands Euro Auctions and Yoder & Frey. It has 200+ employees located in 14 countries. "Ritchie Bros.

and Euro Auctions are an ideal fit with a united goal to make asset insights, service offerings and disposition solutions easier than ever," said Ann Fandozzi, Ritchie Bros. CEO. Euro Auctions founder and director Derek Keys added, "Dave Ritchie and his brothers were a big inspiration for my brothers and I in the creation of Euro Auctions. We modelled much of what we do off Dave's customer-centric philosophy, which still runs through Ritchie Bros. today. Bringing us together will drive value for customers, as we provide more equipment, solutions, and services to the many industries and regions in which we operate." The transaction was approved by Ritchie Bros. and is expected to close in late 2021 or early 2022, subject to regulatory clearances and the satisfaction of other customary closing conditions.

PLATINUM EQUITY to acquire Oregon Tool

Platinum Equity, American Securities and P2 Capital Partners announced the signing of a definitive agreement under which Platinum Equity will acquire Oregon Tool, a manufacturer and distributor of aftermarket driven professional grade cutting tools, outdoor accessories and parts. American Securities and P2 Capital have owned the company (previously known as Blount International) since taking it private in 2016. Financial terms were not disclosed.

Oregon Tool is a leading manufacturer of saw chain and guide bars for chainsaws, lawn mower blades, agricultural tractor attachments and a broad range of other products used by professionals and consumers in the forestry, lawn and garden and agricultural markets. Its product are sold into the aftermarket through multiple channels, including distributors, dealers, mass merchants, ecommerce, as well as to original equipment manufacturers for use on new equipment. Since its foundation in the 1940s, Oregon Tool has grown from a family business into a multinational organisation.

"Oregon Tool has a well-deserved reputation for quality, innovation and engineering that dates back years," said Platinum Equity partner Louis Samson. "We are committed to building on that legacy and with the management team to invest in a new generation of growth and expansion. We have a lot of experience helping companies like Oregon Tool take the next step and our financial and operational resource accelerate their efforts."

With more than 3,200 team members. Oregon Tool sells thousands of products in more than 110 countries as multiple professional and consumer brands like Oregon, Woods and ICS. Earlier this year, the company rebranded from Blount International to Oregon Tool, an effort that highlights its unique heritage and history of innovation, while also marking an important inflection point in its evolution as an industry leader. "Oregon Tool is an outstanding platform that operates in a large

and highly fragmented market," said Platinum Equity managing director David Glatt. "In addition to nurturing the company's existing portfolio, we will pursue an aggressive strategy to expand in adjacent product categories across segments, channels and geographies.

Oregon Tool CEO Paul Tonnesen will continue to lead the company following the transaction. "We're grateful for American Securities' and P2's investment in Oregon Tool, which has helped us accomplish many of our aggressive goals ahead of schedule. We also view the sale of our company to Platinum Equity as evidence of the successes we've achieved in recent years," said Tonnesen. "We are very excited and we know that Platinum's investment will propel our growth and innovation, strengthen our position as industry leaders, and continue equipping our pro and DIY customers with the products they need to get the job done." The transaction is expected to be completed in the fourth guarter of 2021.

"We were Oregon Tool public shareholders for several years prior to taking the company private in partnership with American Securities," said Josh Paulson, partner at P2 Capital Partners. "We are proud of the company's accomplishments and have thoroughly enjoyed working closely with the Oregon Tool and American Security teams. By utilising our deep American Securities Resources Group team of functional expert colleagues and resources, we were able to execute a number of value enhancing, strategic initiatives and to grow Oregon and position the company for future success," added Loren Easton, managing director of American Securities

Evercore and Baird is serving as financial advisors to American Securities, P2 Capital Partners and Oregon Tool. Kirkland & Ellis LLP is acting as legal advisor to Oregon Tool on the sale to Platinum Equity. Lath Watkins LLP is acting as legal advisor to Platinum Equity on the transaction.





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Epiroc completes acquisition of South Korean hydraulic breaker manufacturer

Epiroc has completed the acquisition of D and A Heavy Industries, a South Korean manufacturer of hydraulic breakers. D and A Heavy Industries, based in Seoul, South Korea, manufactures and sells hydraulic breakers for customers in construction, demolition, rock excavation, quarrying and infrastructure. The company, which has a production facility outside Seoul, has about 60 employees and had revenues in 2020 of about €20M. The transaction is not subject to a disclosure obligation pursuant to the EU Market Abuse Regulation. D and A Heavy Industries will belong to the Tools & Attachments division. It will keep its brand and channels, and continue to be based in South Korea. Epiroc announced on 27 April 2021, that it had agreed to acquire D and A Heavy Industries. Epiroc welcomes D and A Heavy Industries to the Epiroc family.



HWH Machines GmbH becomes new Arjes' sales partner for Bavaria and CIS countries

German headquartered HWH Machines GmbH has been appointed Arjes sales partner for Bavaria, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Russia, Moldova, Tajikistan, Turkmenistan and Uzbekistan. Rainer Maria-Kugler, head of sales at HWH Machines GmbH, comments: "We are looking forward to a great partnership and are already working on great plans for a successful cooperation on a national and international scale with Arjes."



Malaysia's construction industry to grow by 14.6% in 2021

Malaysia's construction industry is set to recover in 2021 and expand by 14.6% after construction activity was brought to a standstill across many parts of the country due to the impact of Covid-19 containment measures. However, the recovery is more a reflection of the depths to which activity fell in 2020 amid the Covid-19 lockdown, rather than a sign of resurgence, states GlobalData, a leading data and analytics company.

According to GlobalData's report, 'Construction in Malaysia - Key trends and opportunities to 2025 (Q2 2021)', Malaysia's construction activity had slowed considerably in 2019, owing to delays in several mega construction projects and an increase in unsold housing stock. This weakness was further exacerbated with the pandemic in 2020. As a result, construction value add declined by 19.4% in real terms. The recovery in 2021 will be driven by investments in transportation and energy projects as well as affordable housing.

The construction industry is expected to post an annual average growth rate of 6.5% in real terms between 2022 and 2025, driven by a recovery in economic conditions, coupled with investments in transport infrastructure, renewable energy, residential, telecommunications and water infrastructure projects. In mid-December 2020, the government approved a 2021 budget worth €62.3B which is the largest in the country's history, and is 2.4% higher than 2019's budget. Of the total budget, 73.3% is allocated towards operational expenditure, 21.4% towards development expenditure and the remaining 5.3% towards dealing with the Covid-19 pandemic

Willis Rooney, economist at GlobalData, comments: "Recovery over the forecast period will be supported by the government's aim to increase the share of renewable energy in the total energy mix from 2% in

2019 to 20% by 2025: to achieve this, an investment of €6.41B will be required over the next six years. Forecast period growth will also be supported by the development of telecommunication infrastructure to improve the quality and coverage of 4G broadband services and set the foundation for 5G in the country. To support this, the government launched the Jendela Plan, with an investment of €4.03B, to be implemented between 2020 and 2025."

Both residential and commercial construction struggled over the course of 2020, with the recovery in both sectors expected to be gradual. The residential sector's output over the short term is expected to remain weak due to the disruption to residential construction activity, coupled with weak demand for housing. Reflecting the weakness in the sector, in 2020 there were double digit year over year declines in the total value of residential construction work performed, as well as the total value of loans disbursed for the purchase of residential properties.

Rooney concludes: "There will be some relief to the residential construction market arising from the government's intention to increase the stock of affordable housing. It plans to build 1M housing units to cater for home buyers in the bottom 40% income bracket by the end of 2029. As part of the 2021 budget, the government announced further measures to support the housing sector, which includes collaboration with financial institutions to roll out a rent to own program, which will benefit first time home buyers until 2022. The government also allocated funds for the construction of houses for low income home buyers, which will be used to build housing units under the People's Housing Program, as well as the Rumah Mesra Rakyat and and Perumahan Penjawat Awam housing programs."

Doosan to showcase mini excavators

Doosan will display two mini excavators ideally suited for rental customers during the 2021 American Rental Association (ARA) annual trade show and convention. This year's ARA Show will run from 17 to 20 October 2021 in Las Vegas. The Doosan exhibit space is No 633 in the South Hall at the Las Vegas Convention Center. The Doosan DX62R-3 and DX85R-3 mini excavators will be on display during the show with Doosan staff being available so visitors can learn about each machine's features.

"We're excited to participate in this year's ARA Show and display two of our Doosan mini excavators," says Aaron Kleingartner, product and dealer marketing manager. "We offer a broad range of mini excavators, which are popular machines in the rental market, particularly for customers in construction and landscaping industries. The trade show is a great opportunity to promote our brand and our equipment to an important audience."

The Doosan DX62R-3 mini excavator allows operators to work in confined areas without sacrificing performance due to its reduced tail swing. The excavator's reduced tail swing ensures that this model is ideal for residential construction, landscaping and utility work. Operators can complete precise tasks with DX62R-3 excavator attachments using the selectable auxiliary flow rates and the detent (continuous flow) mode. Standard excavator attachments for this model include a bucket, thumb and quick coupler.

The Doosan DX85R-3 mini excavator has excellent slew performance, making it an ideal machine for working on slopes. At the core of the machine is a smooth, refined hydraulic system that gives operators exceptional machine control. As the DX85R-3 moves, the auto shift drive system automatically downshifts when the job demands more torque. Operators can easily monitor important diagnostic information for the DX85R-3, like fuel level, coolant temperature, day/time, throttle position and engine rpm, all on the mini excavator's deluxe colour panel. It is also easy to select auxiliary hydraulic flow modes and rates from the screen.





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The structural features and the highly aggressive restyling allow the operator to tackle the primary and secondary demolition phases with a single equipment.







KOBELCO ADDS TO 50T CLASS WITH THE INTRODUCTION OF TWO NEW MODELS

Kobelco's new SK500LC-1 and larger SK530LC-11 models benefit from increased speed and performance, improved reliability and maintenance, state of the art ergonomics and design and are Stage V compliant. Weighing in at over 50t, the SK500LC-11 benefits from a new turbocharged Stage V compliant 13l Hino engine which reduces cycle time by 5.1% (compared to H-mode on the company's SK500LC-10). Fuel consumption has improved by 5.4% (compared to S-mode on the SK500LC-10) and productivity has increased by 6.2% (compared to eco mode on the SK500LC-10).

The SK500LC-11 is best suited to general construction applications, while the SK530LC-11 is ideal for general construction and quarrying. The SK500LC-11 has a higher operating weight (50,400kg) when compared with the previous SK500LC-10, leading to increased stability. Both the SK500LC-11 and SK530LC-11 benefit from high hydraulic pressure for greater lifting power at close radius, allowing for smooth

and steady operation while moving heavy objects. The machines also have excellent lifting performance, particularly at a working radius of up to 9m over the side and for enhanced safety, excellent visibility on the jobsite is provided via three standard cameras located on the left, right and rear sides of the machine allowing the operator to customise viewing needs.

Easy maintenance is assured via improved layout of the radiator and oil cooling system, as well as easier access to the urea tank and two stage air filter. An optional walkway on the left side of the machine can also be installed for easier inspection and cleaning of the machine's cooling system elements. Engine reliability is also significantly improved on the new generation models. The engine fan belt is now equipped with an auto-tensioner for reduced maintenance requirements, a reversible cooling fan has been introduced to guarantee radiator cleanliness and heated urea lines help to prevent clogging issues at colder ambient temperatures. Both the SK500LC-11 and SK530LC-11 models are available with standard boom and three arm variations, or as a mass excavation model with a short boom and short arm.

Commenting on the launch of the new Kobelco SK500LC-11 and SK530LC-11, product manager, Peter Stuijt, said: "The SK500LC-11 and SK530LC-11 represent a new generation in excavator performance and design. Years of research, coupled with feedback from our customers, has resulted in the development of new breed of heavy machines that excel in performance comfort and operability. First impressions of the SK500LC-11 from our dealer, Comet Loc in southern France, are extremely positive, with operators reporting that the new machine is very fast, accurate and easy to drive."

Next generation battery power cutter

With 'K1 Pace', Husqvarna has taken a big step forward to offer customers a high power battery cutter that can handle heavy duty jobs. This is the first product to be launched on the company's new battery system, 'Pace'.

"What we are presenting is a breakthrough in the market for power cutters. We are extremely proud to introduce a high power battery cutter that fully supports the transition to low carbon economy the construction industry needs," says Mattias Holmdahl, global product manager, Power Cutters at Husqvarna Construction.

With more than 60 years of experience as a power cutter manufacturer and with a leading position in handheld cutters, Husqvarna Construction believes it has the expertise it takes to lead the development from petrol to battery powered equipment. With K1 Pace, customers are said by the company to expect power and performance equivalent to petrol powered cutters with

all the additional benefits battery powered equipment brings to both operators and the environment. The company says that it now sees an increasing number of construction companies striving for carbon neutral workplaces, and it feels that as a leading supplier it has a responsibility to contribute, together with its partners and customers, towards greater sustainability.

The Pace battery system can be utilised for more machines as the battery powered family expands. In addition to the power cutters and battery system, diamond blades in 300mm and 350mm have been optimised for battery operation. The machine is also equipped with 'X-Halt' brake function capable of stopping the rotation of a blade in a fraction of a second for enhanced safety.

K1 Pace was shown at World of Concrete in the US from 8 to 10 June. For those who had the opportunity to try the machine, Mattias Holmdahl promised a whole



new experience. "We know what it takes to do the high demanding jobs done, and we do not compromise on quality and safety. With K1 Pace, customers get a high performance battery power cutter that provides zero direct emissions. They can expect lower vibrations, smoother cutting and that the machine's low weight and optimal centre of gravity help reduce the strain on their body."

K1 Pace will be demonstrated by Husqvarna Construction and the 'sales start' will take place in stages during the second half of the year, starting in the Nordic countries. More technical data will be released at the start of this process.









In order to describe the current situation on the excavator attachment market, one has to coin a new term because the word 'boom' fails to relay the full extent of a change in suppliers' collective fortune. Last time they had it that good was in 2007. So many orders came flooding in this year that companies' production capacities are stretched to the limit and beyond. Surprisingly, amidst all this bliss, manufacturers still manage to find time for product development. PDi's Andrei Bushmarin reports the latest news from the excavator attachment industry.

Rokla reinvents itself as 'Rock.zone'

In April 2021, the Germany based manufacturer of drum cutters formerly known as Rokla, completed the transition of all its products to one umbrella brand, 'Rock.zone'. Two years ago, the German company acquired the assets of Austria based recycling specialist Hartl Crusher that in its later years focused on manufacturing crusher and screening buckets. Following the transition, the company was renamed Rock.zone GmbH, moved into new bigger premises and launched the new website rock.zone. The manufacturer aims to operate CO2 neutral through a 600kWp photovoltaic system, cisterns for rainwater treatment and an innovative 140kWh high voltage storage system. The product range is divided into three categories: 'Rockwheel' - 23 models of drum cutters fitting 0.7t to 125t carriers; 'Rockcrusher' - four models of crusher buckets for 12t to 35t machines and a five model 'Rockscreener' series of screening buckets for 12t to 35t excavators. Thanks to 40 plus years expertise in manufacturing jaw crushers, a Rockcrusher has the capabilities of a full size jaw crusher in a bucket. With its unique 'quattro' movement of the jaw, the bucket produces an ideally shaped cubical product. Furthermore, this design allows reducing substantially any wear of the jaws. The reverse function allows users to easily clear any blockages. An optional crush control camera mounted on the excavator's stick enables the operator to have a clear view of the crusher chamber. Due to the use of Hardox 450 steel in the frame, the bucket is durable and low on vibrations while replaceable wear plates help avoid wear of the frame. Featuring an extra-large drum and hopper, Rockscreeners boast high screening capacity and robust construction with a high performance maintenance free gearbox.

www.rock.zone/de

Simex launches new range of asphalt granulator buckets

Italy based attachment trailblazer Simex has been focusing recently on innovative solutions for recycling bituminous conglomerate granulate (formerly known as asphalt). The company's R&D department has combined the concept of a milling drum with rotor crusher bucket technology, thus giving life to the 'CBA' range of asphalt granulator buckets available in two models: the CBA 30 for 18t to 28t excavators and the CBA 40 for 25t to 40t machines. The bucket features a cylindrical drum with interchangeable teeth driven by a large displacement radial piston direct drive hydraulic motors. The rear grid, which determines the grain size of the resulting material, is available in several configurations to meet different requirements adopted in various countries. The function of automatic reversal of the drum rotation ensures operational stability and productivity.

www.simex.it







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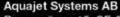
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PDi special feature









Ajce Europe announces a plethora of new products

Netherlands based Ajce Europe is a manufacturer of hydraulic excavator attachments with over 30 years of experience. A part of the Ajce Global Group, it has production facilities in South Korea and the Netherlands. Last year, Ajce Korea boosted its manufacturing and R&D capabilities with the addition of 3,500m2 of new factory space. The company's product range currently includes hydraulic breakers, vibratory hammers, demolition and sorting grabs, plate compactors, scrap shears and concrete crushers. Recently the company has added to the range a new series of vibratory hammers with a side grip for 15t to 55t excavators. The new hammers are suitable for driving or extracting piles and steel sheets of various sizes. Ajce pile drivers are supplied from its warehouse in Holland with a full set of standard accessories such as hydraulic hoses, electric control units, a mounting cap and additional excavator boom. Earlier this year, Ajce Europe introduced a new model of silenced mini breaker with a weight of just 75kg. Called 'Ajce Mini', it fits 0.8t to 1.7t excavators and can also be mounted on demolition robots and mini loaders. Ajce mid and large range breakers all come with an automatic greasing kit, variable working speed and anti-blank firing (ABF) options.

www.ajce.eu

Demarec targets new markets with 'EcoLine' series

Demarec - a Netherlands based attachment heavyweight - has added a new line of rotating pulverisers imbued with the Demarec DNA. Marketed under the name 'Demarec EcoLine', the new 'DLP' pulverisers are suitable for both primary and secondary demolition and have simpler standard cylinder technology and a host of special features, including a redesigned tooth plate. The Demarec philosophy of fully exchangeable wear parts has also been implemented in the DLP line. The first model launched into the market this year was the 2t DLP-24, fitting 18t to 25t excavators. Marcel Vening, Demarec's co-founder and commercial director says of the new attachments: "The Demarec Ecoline originally consists of four models suitable for 10t to 25t carriers, afterwards the range will be expanded to include both smaller and bigger models. With this line of pulverisers we are focusing on new potential customers. We realise that not every user wants a top attachment with a corresponding price tag. Compare it with the automotive market: not everyone buys an Audi when a VW is also fine. This depends, among other things, on the frequency with which a tool is used and the scale and complexity of the task at hand. In emerging markets such as India, users are less demanding, and that calls for a different product."

www.demarec.com

'Demolition Crew of attachments from VTN Europe

Italy based VTN Europe has used the 18month pandemic period to develop a concept of 'Demolition Crew' that sums up the company's core values and aspirations. As the company states on a dedicated website www.demolitioncrew.it: "It is not a catalogue, it is much more than that". New attachments come fast and thick too: responding to the market's requirements, VTN has designed the new 'VD' Series of shears for dismantling end of life vehicles. While conventional manual methods of removing high value materials from old cars and trucks can be labour intensive and costly, the VD series with its slim design, allows for quick and easy dismantling and separation of components even from the difficult to reach zones of a vehicle. Another innovation from the Italian manufacturer is the 'SRF' screening bucket designed for skid steers and compact tractor loaders, which boasts the same features as VTN's standard 'SR' series. Characterised by a sturdy frame, the bucket is mounted on an ISO 24410 quick coupling, with its hydraulic system protected by valves. This year VTN has also expanded its proven 'PD' Series of rotating crushers with the addition of four new models: the PD10 for 10t to 16t excavators, the PD15 for 15t to 22t machines, the PD20 (20t to 28t) and the PD35, which is an upgrade of the existing PD30 model.

www.vtneurope.com



MB Crusher extends 'MB-HDS' range of shaft screeners

The MB-HDS range of shaft screeners unveiled by Italy based MB Crusher at bauma 2019 has been extended this year with the addition of its biggest model so far, the MB-HDS523. The new attachment fits 30t to 45t excavators and is meant for large scale jobs such as quarrying, excavating, earthmoving and trenching. Powered by two motors and equipped with five shafts, the MB-HDS523 ensures extremely high production rate. The 'V Shaft System' design creates a simultaneous dual screening effect and increases performance. The concealed comb allows the material to move through the rotors without jamming. The attachment comes with a removable front upper casing, giving it a greater closing angle. Durability has been ensured by protecting all subject to wear parts with a reinforced Hardox steel slab and by making the bracket and frame thicker than usual. To simplify maintenance, the MB-HDS523 shafts screener comes with a centralised greasing system. The shafts can be replaced onsite within a few minutes and the rotors can be easily extracted and repositioned.

www.mbcrusher.com

Mantovanibenne's 'Eagle II' tears at a German power plant

On 2 March 2019, the Federal Network Agency made the decision to shut down units 6 and 7 of a coal fired power plant in the city of Lünen, North Rhine Westphalia, Germany. In June 2020, the dismantling of the three blocks of the power plant began. The first phase of the demolition project involved explosives, with the flue gas desulfurization system, the electrostatic precipitators, and the combustion gas denitrification system being blown up one by one. It was followed by the demolition of the cooling tower and 250m stack in March 2021. Once the explosion part of the job was over, the plant's operator, Hagedorn Group, decided to proceed with control demolition. For demolition of the electrostatic precipitator building, made predominantly of steel, a SH700R Eagle II shear from Italy based Mantovanibenne was chosen. The 7t shear was mounted on the gigantic KMC1600S excavator, weighing a whopping 230t, which was specially designed and supplied by Kiesel GmbH for this phase of demolition. It took eight trucks to transport the excavator and all auxiliary equipment. The transport weight of the superstructure alone (without trolley and counterweight) was 76t. The job magnitude was not a problem for the SH700R Eagle II shear which passed the test with flying colours by demolishing steel structures with force and precision.

www.mantovanibenne.com



PDi special feature



Trevi Benne multiprocessors destroy eight tanks in Switzerland

G. Ecorecycling SA, a demolition and recycling specialist based in Grancia, Canton Ticino, Switzerland, used two 'MK' series multiprocessors from Italy based Trevi Benne to dismantle eight steel tanks. The 1960s storage facility owned by Pina Petroli is one of the largest in the country with the main tank having a capacity of 33M/, measuring 46m in diameter and 19m in height, with a wall thickness of 15mm. The modus operandi replicated for every tank on the site was to remove the cover from above using a Hitachi ZX 470 excavator with a 30m boom and a MK 18P multiprocessor equipped with the 2t 'CS' shear kit. The operator skilfully chiselled out the entire upper part of the tanks and then removed the steel walls by cutting them vertically first at 2m intervals, and then horizontally at the base into transportable panels using the MK 23P multiprocessor with booster and the 'CL' tank shear kit. The MK 'Premium Series' multiprocessors used on this job are multifunctional demolition tools with an innovative hydraulic system of kit replacement. The 'IZI-Lock' system allows the operator to replace the kit onsite in less than three minutes. The impact booster valve allows multiplying power when reaching the working pressure of 750 bar and reducing the opening/closing cycle of the jaws.

www.trevibenne.it

Rotar unveils fully integrated adapter for OilQuick quick couplers

Netherlands based attachment specialist Rotar International B.V. has announced the launch of the fully integrated hydraulic adapter 'ROQ' for quick couplers designed jointly with OilQuick Germany. From now on Rotar attachments will be fitted as standard with ROQ

adapters made from original OilQuick parts. The use of original OilQuick components ensures full compatibility and operational safety thanks to such essential safety systems as the OilQuick locking control and the OilQuick drop protection. The Rotar ROQ adapter is fully integrated into the attachment design. The rotator head section of the attachments has been completely redesigned so the adapter can be placed directly on the slewing ring without further assembly. The top plate with the screw on threads has been eliminated. This new design offers considerable benefits for users. Depending on the attachment size, the assembly can be up to 200mm shorter and 200kg lighter, which is particularly advantageous in high reach applications. With the time

and labour consuming process of fixing the adapter plate and connecting the hoses eliminated, downtime and operating costs are significantly reduced. A service inspection cover allows easy access to all hydraulic components in the upper head section of the attachment. The following models are currently available: ROQ 60, ROQ 70, ROQ 70-55, ROQ 80 and the ROQ 90 for Rotar's 'RCC' two cylinder concrete cutters, 'RDC' demolition combi shears, 'RDP' demolition pulverisers, 'RG' demolition and sorting grabs and 'RSS' mobile scrap shears. Rotar also offers fully integrated adapters for Steelwrist and Lehnhoff 'Variolock' hydraulic quick couplers.

www.rotar.com









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Arden Equipment releases 'All In One' automatic quick coupler

France based Arden Equipment has released the 'AIO' -All In One fully automatic quick coupler - designed for 12t to 30t excavators. The new coupler allows changing attachments in less than 10sec from the safety of the cab. Compact and robust, the AIO is compatible with most existing types of machines and attachments. It has a visual tool locking indicator, two strong springs to hold the tool in case of hydraulic failure, a front axle safety plate and check valves to ensure that the tool is fixed properly. The coupler's quadruple safety system meets the ISO and SUVA standards. The AIO is also environmentally friendly thanks to the integrated waterproof system, preventing oil leaks.

www.arden-equipment.com

M Lloyd Engineering features 'Rotastar'

UK based M Lloyd Engineering Ltd. was established by Matt Lloyd in 1998 originally as a manufacturer of agricultural equipment. Screening buckets first came into the picture in 2002 when in the course of a building project going on at the manufacturer's site some reclaimed material needed to be screened. They researched the subject and decided to build their own screening system. And that was the beginning of the company's foray into the screening business. The Rotastar is M Lloyd Engineering's top of the range screening bucket for 1t to 30t

carriers, combining many market leading features. The material is constantly rotated without any chopping or pinching, making screening of damp, fragile and special materials possible. It is suitable for topsoil, waste, turf, roots, gypsum, knotweed and many other applications. With some adjustments, it is possible to produce an 8.0mm fraction size. The bucket has a unique screening action as it rotates the material in a similar manner to a trommel screen, but has the benefit of rotating star discs, agitating and clawing at the material as it turns. Thanks to the lightweight, flexible, self-cleaning polyurethane stars, there are no pinch or crushing areas, resulting in low power requirement and no contamination from crushed material. Variable speed control is fitted as standard up to the RS10-20 model, so it is possible to adjust fragment size by changing shaft speed. The rotary action of the bucket allows complete mixing of material as it is being screened, ensuring complete separation. The range is being constantly expanded with the latest model being the RS 25-30 LS, with a working width of 1.7m and a cubic capacity of 1.2m³. Fitted with a dual hitch system, it can be fitted on excavators and wheel loaders.

www.lloydengineering.co.uk

Dehaco's hydraulic magnets with teeth grow in popularity

Hydraulic magnet is a great tool for cleaning up demolition debris. Netherlands based supplier of demolition, recycling and dust control solutions Dehaco offers hydraulic magnets in three different configurations: with a three leg chain, a flat plate and a flat plate with teeth. According to the Dutch company, the latter version, known as the 'MH-FT' series, has become very popular with users recently. This has to do with the circular economy becoming common place and rising prices for scrap metal. In addition, disposal costs for cleaned concrete rubble are much lower. A magnet with teeth allows operators to move rubble aside when reaching out for metal quicker and with better precision.

www.dehaco.nl

Antraquip is enjoying strong growth

2021 continues to show strong growth for US based Antraquip and its 'AQ' line of drum cutters, which is a part of an attachment division focusing on mechanised rock and concrete cutting solutions. Antraquip drum cutters are not used only for controlled demolition or specialty projects but they also have become essential equipment for larger demolition and mass rock excavation works. The AQ cutters' key features include mechanical rotation as standard or hydraulic rotation (optional), adjustable hydraulic motor displacements, a dust suppression system and customisable drum options for various applications. Antraquip manufactures drum cutter models fit 1t to 100t plus excavators.

www.antraquip.net













BLASTRAC, THE **BEST** TECHNIQUE TO PREPARE CONCRETE AND STEEL SURFACES

BLASTRAC WAS THE FIRST INVENTOR OF THE FIRST MOBILE SHOT BLASTING MACHINE AND NOW OFFERS A LARGE RANGE OF SHOT BLASTING AND STEEL BLASTING EQUIPMENT



WHAT IS SHOT BLASTING?

Blastrac closed circuit media blasting machines 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.

WHAT IS STEEL BLASTING?

Blastrac steel blasting system is the most effective and environmentally friendly method of removing paint, coatings, non skid and other contaminants from both horizontal and vertical steel surfaces. Blastrac steel shot blasting systems use steel shot and angular steel grit, or a mixture of the two in a variety of sizes allowing the operator to achieve a wide range of anchor profiles needed for almost any type of coating application.



Doppstadt's 'Methor' signals a new approach to shredding

The Methor is said by Doppstadt Umwelttechnik GmbH (DUG) to be the answer to increasing challenges in the recycling industry due to different materials being processed. With a contaminant resistant processing unit, the multipurpose recycling system is said to offer the most varied range of applications in its class. This is accomplished due to arrange for features including a transverse roller mounting, a simplified feed and discharge system and a hydraulic direct drive system. These enable users in the waste management and recycling industries to benefit from the smart machine design with simple construction, maintenance and operation.

"With the Methor as a universal machine we have come up to our customers' requirements. Thus it is used in many steps of the recycling processes today. In principle, the Methor is the toolbox among our product range," says Moritz Müller, DUG product manager. The machine is suited for applications with frequently changing materials such as industrial waste, C&D waste, mattresses, bio waste or waste wood. Both enterprises with small volume flows and users processing special batches profit from the precisely adjustable and efficient performance of the Methor and from the possibility to adapt the highly contaminant resistant shredding unit quickly to changing materials as needed.

Whether bag opening, dosing, charging, disintegrating, crushing or cutting, the Methor and its



contaminant resistant processing system provides a wide range of uses for a variety of applications. It handles even special batches easily and economically, with users also able to benefit from various upgrade and combination options. "The Methor is designed as a modular multi tool. Therefore it adapts quickly and easily to new requirements and needs," Müller explains.

Flexible application combined with quality

The modular design underlines the Methor's flexibility as thanks to the unique roller change, easily operated comb bars and quickly replaceable tools, the machine can be upgraded in a very short time. In this way, the

Methor can be changed to three different tooth sizes within 4min. Depending on the operating conditions the machine can be mounted on a hook lift frame or crawler tracks. Furthermore, customers can choose the processing unit mounted on support legs for stationary use.

Since the Methor can easily be combined with other Doppstadt smart solutions, it offers users further profitable possibilities to enlarge the range of applications of these solutions. It can, for example, be used as a part of mobile modular plant concepts. The Doppstadt plant concept is based on a combination of mobile machines which are suitable for different applications. They do not take up too much space and need not necessarily be operated in a hall. Compared to stationary plants, they offer a price advantage and greatly simplified commissioning. In case of changes to the basic conditions, e. g. new legislation, users can react flexibly and securely.

Dealing with soil, rock and sand on site

Although NASA's 'Ingenuity' drone helicopter landed on Mars, the earth continues to be the only planet we can inhabit. The soil we live on is a non-renewable resource and needs to be preserved by any means necessary.

When it comes to managing excavated soil, the first form of safeguarding the material is reusing the soil, which leaves the environmental quality unchanged. The focal point is that excavated soil is not waste needing to be thrown away, but becomes a valuable resource for everyone involved. Companies and operators aim to recover a large amount of soil to use it again on the job site or in neighbouring areas.

In order to do this, one of the necessities is to separate the different types of extracted material to reuse the soil. With the right equipment, the solution is within reach. One such case happened in Quillagua, a small Chilean town in the Antofagasta province (National Geographic magazine considers this town the driest place on the entire planet which has seen in the past 40 years barely 0.2mm of rainfall). On this barren land, a MB-S18 screening bucket has been used to select sand and reuse it to cover solar panels' cables. Due to the location's particularities and the operations, the case has gained plenty of media coverage.

The screening and crusher bucket combination has won over many operators in the industry who have used it both for operational efficiency and economic performance. They've obtained lower operating, maintenance, and logistics costs while increasing how quickly they can execute and work on their project. Illustrating this, in Croatia, a company works on several construction sites and solved the problem of separating rocks from soil using an MB-S18 screening bucket, which is easily transported and used at any location. Before this solution, the company took the excavated soil to another site leading to expensive management and transportation costs. With its attachments, MB Crusher provides a solution to companies who manage soil, excavated rocks and sand



while maintaining the soil's quality and functionality. There are several advantages: the environmental benefits, the company becomes more ethical, they respect the complex regulations, and the construction site enjoys a positive economic turnaround.

Another concern surrounds excavated rocks containing polluted materials. Even in this situation, MB Crusher's units provide an excellent solution to reduce the soil contamination. The B-HDS320 shaft screener bucket was recently used in China to move polluted earth and mixed it with other products that neutralized pollution. Excellent quality soil was obtained quickly and allowed the company to use it immediately. The biggest advantage provided was that the MB-HDS sorting bucket is able to change its rotation shafts directly on the job site, providing the facility to switch from one material to another whenever necessary.

From the examples, it can be seen that through using the right equipment it is possible to speed up operations, improve profitability and limit negative environmental impact when excavating. Thanks to MB Crusher's units, companies who want to be more environmentally focused have been able to deal with the problems present, improving protection to the environment and grow their 'ethical' reputation and thereby gaining requests to undertake similar work.

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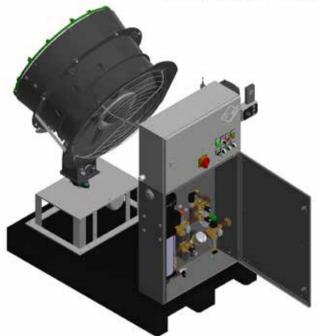


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Aquajet 'Reco' control system

Aquajet, a global leader in hydrodemolition machine manufacturing, has aimed to maximise efficiency in water treatment with it advanced Reco control system.

The Reco system allows for fully automated, continuous monitoring of both pH and turbidity, increasing productivity and opening up opportunities for better workforce utilisation due to minimal operator oversight. Reco also provides easily shareable water quality documentation, allowing contractors to demonstrate accountability for operating in increasingly regulated environments.

"Aquajet's focus in evolving hydrodemolition technology isn't just about faster and more productive material removal," said Roger Simonsson, Aquajet managing director. "We are striving to find ways to increase productivity while also protecting the environment. Water treatment is a key part of that. When we couldn't find a fool proof monitoring system existing on the market, we took it on ourselves to create one. The Reco system applies cutting edge technology for continuous, worry free water treatment. There's no need for labour intensive, protracted filtration systems, and no need to worry if hydrodemolition wastewater meets levels for release into the sewer system. Everyone from



the operator to the general contractor to the project investor and public can rest easy thanks to our innovative monitoring technology."

The Reco is unique to Aquajet's 'EcoClear' and controls major functions of this innovative water treatment solution. The EcoClear is a compact, self-contained system capable of moving as much as 20m3/h through a series of treatment chambers that reduce pH from 13 to 7 and suspended solids from 15,000 to 20-40mgp/l. The Reco control system employs optical turbidity sensors and pH probes as water moves through the self-contained unit. It provides real time data such as total suspended solids (TSS) values and overall flow through the machine. This information is easily viewed via the display screen on the EcoClear. Data can also be shared digitally with project stakeholders through the Reco system. Detailed daily reports offer insight into the cleanliness of the discharged water, including pH levels and the amount of water that was treated, providing proof of compliance to environmental regulations.

With the Reco system, contractors only need to set desired parameters for pH and ppm. After that, the system requires infrequent attention and occasional replacement of carbon dioxide, the agent used to reduce water pH. This frees up crew members to attend to other tasks around the jobsite, increasing productivity and streamlining labour. If water does not reach specified parameters during initial treatment, the Reco shuts down the EcoClear's feed, preventing dirty water from escaping. The water then starts to recirculate within the unit until it meets the pre-set values. Contractors can continue working some distance from the machine, confident no dirty water will escape into the environment. Treated water can also be recirculated through a power pack or high pressure pump system for reuse by the hydrodemolition robot. Using this closed loop setup, contractors can recycle up to 90% of the hydrodemolition blast water for significant savings.

MR50 and MR60 tiltrotators

Mecalac, a global leader in the design, manufacture and distribution of compact equipment for urban construction sites, is pleased to announce the launch of its MR50 and MR60 tiltrotators and dedicated grading buckets. The MR50 and MR60 tiltrotators are available for Mecalac crawler excavators and wheeled excavators fitted with the 'Connect' hydraulic quick coupler.

The integrated Mecalac solution consists of a tiltrotator between two Connect quick couplers, fitted directly at the factory, and a specially designed grading bucket. The Mecalac MR50 and MR60 allow for a 360° rotation in both directions as well as a 40° tilt left and right for various attachments, including hydro mechanical tools such as grapples.

Véronique Kennerson, product specialist for excavators at Mecalac, explains: "Mecalac tiltrotators between two Connect quick couplers are a highly innovative solution of the latest generation. Fully integrated into the machine, they further enhance the versatility and productivity of Mecalac excavators. Thanks to their sandwich mounting between two Connect quick couplers, the operator can easily remove either the tool or the entire tool/tiltrotator system to immediately resume work with a 4x1 or loader bucket, for example. Another great advantage is that the Mecalac tiltrotator, while extremely robust and among the most powerful in terms of torque, is also one of the lightest on the market, thus preserving the power of the machine."

The stability of Mecalac excavators makes them ideal tool carriers for tiltrotators, with Mecalac's patented kinematics in particular coming into its own. The boom, which is positioned far back, is perfect when weight is added to the end of the stick, as it acts as a counterweight. As for the two piece boom with offset kinematics, this enables the positioning of tools ideally when used with the tiltrotator. The offset at the top of the boom (standard), combined with the tiltrotator, further increases the 360° capabilities of Mecalac excavators. Operators are able to dig deeper trenches than ever before, in parallel with the machine. The combination of offset and tiltrotator are said to provide almost infinite possibilities of use, resulting in more accurate results, faster work, less repositioning of the machine and not least, improved safety at the job site.

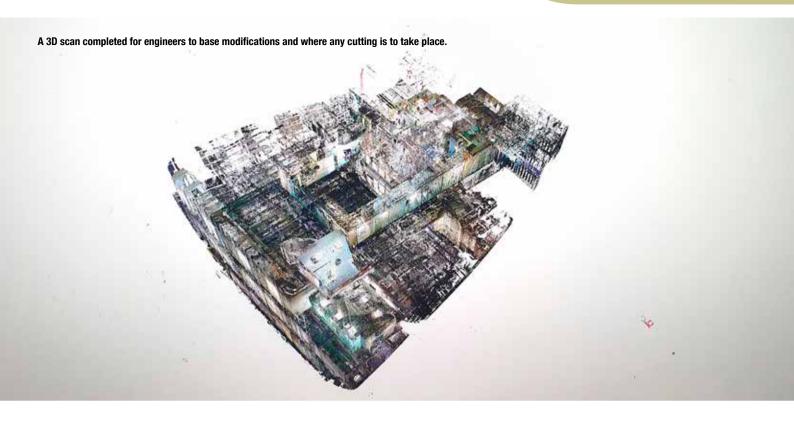






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Scanning ships at berth

A new category of business activity has been born at the world's ports in a race against time to turn the tide on environmental damage from vessels' discharge of mainly water. Our Africa editor, Kevin Mayhew, takes a look.

ompanies involved in sophisticated 3D scanning are undertaking on board work to prepare ships to meet a 2023 deadline for a waste discharge conversion to conserve marine resources. Shipping disgorges mainly water that is used for engine and temperature control, ballast and general cleaning and ablutions each day. This water contains contaminants such as oil, cleaning agents and even alien microorganisms picked up in one area for ballast and then pumped out thousands of kilometres away to potentially devastating effect on the world's eco balance.

"New ships have the filtration systems built in to meet environmental protection needs over the working lifespan of a ship, but thousands of older ships must be modified to meet the 2023 deadline. Engineers need a 3D snapshot of target areas to see where adjustments are to be made to introduce acceptable filtration of water being pumped back into the sea from engine rooms, ballast tanks and holds," says Norbert Plate of Johannesburg based South African company IQ laser. He heads a team of employees providing the service at the ports of Richards Bay, Durban, Port Elizabeth and Cape Town. Saldanha Bay is expected to come on board soon as well.

To scan, his team goes on board when ships are in port for about 48h to set up its equipment for 360° all round 3D scanning. In more challenging assignments,

his team is delivered to a ship at anchor off ports by a tender boat meaning that they need to clamber up a rope ladder while carrying their intricate equipment. Usually it means a one or two night stayover on board and then reverse the ferry process to get back to land. "In port, work is relatively simple, but we always have to bear in mind tight deadlines to not hold up a ship's movements into and out of port as it plies its route. Working at anchor at sea is much scarier and more complicated

because you have to get all sorts of permissions; you even need to clamber up a rope tricate equipment. Usually tayover on board and then get back to land. "In port, we always have to bear in told up a ship's movements because you have to get all sorts of permissions; you even need your passport as you are leaving land for the duration of your work out at sea. Then of course there is the boarding and return which are always challenges," explains Plate.

The 3D scans are then sent back to the contracted engineering firm so that it can assess the needs for a ship

engineering firm so that it can assess the needs for a ship and prepare to make changes by cutting and rerouting piping to introduce adequate filtration. The conversion, based on what the 3D scans reveal, is prepared for and made when the vessel is in a dry dock for its routine check and refurbishment each five or so years. This particular work has been unaffected by the Covid-19 pandemic which has provided a boon for the laser scanning sector worldwide.



Scanning equipment in place to record images.

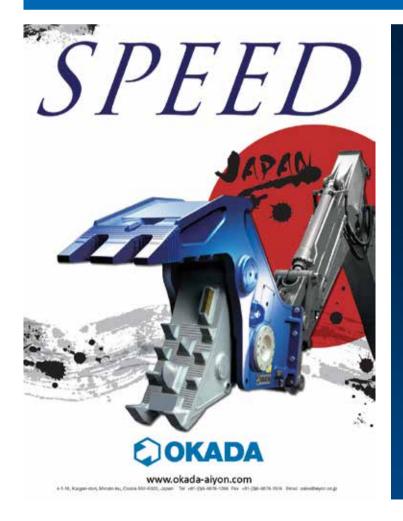


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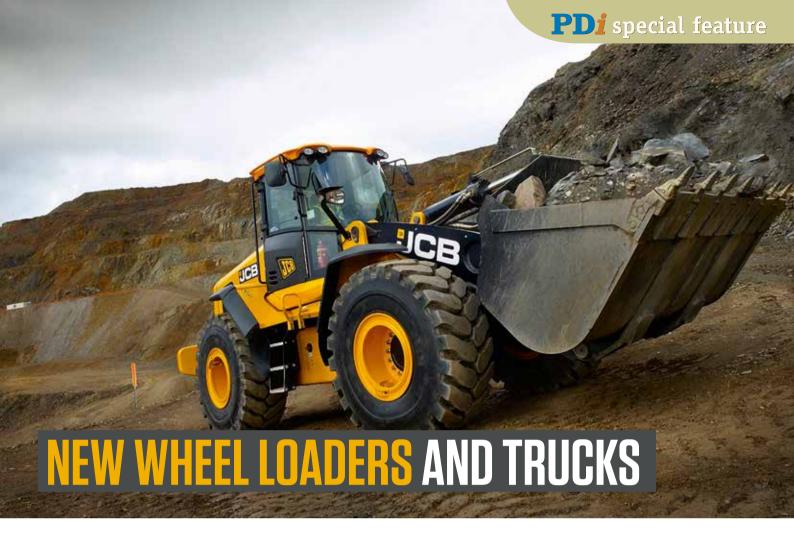
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This year sees the introduction of new wheel loaders from companies such as Bobcat, Hidromek and Case. Read about updated and electric versions as well as completely new models in our annual special feature on wheel loaders.

Engine change on JCB 457 loader and more

JCB has updated it 457 wheeled loading shovel to meet EU Stage V. The company has moved from the previous MTU engine to Cummins with the 457 being powered by a QSB6. $\bar{7}$ diesel engine with single module after treatment containing a diesel oxidation catalyst, selective catalytic reduction, diesel particulate filter and an ammonia slip catalyst. The move brings an increase in overall engine power, from 192kW to 210kW. The 457 is equipped with two power modes, and the machines will be supplied with five speed power shift transmission that can be activated from the cab by the operator to reduce the engine's output to 167kW for lighter operating duties. This combination aims to deliver a better range of speeds to suit a range of applications. In addition, the 457 will feature an auto engine shut down feature that can be adjusted by the operator. The machine will continue to use JCB's 'Command Plus' cab, but will benefit from improved KAB seating in both 'Deluxe' and 'Super Deluxe' specifications. JCB has also made improvements to the engine canopy fit, mudguards, rear grill latching and cooling pack sealing. Steering now benefits from end damping to improve ride comfort and the wide core cooling pack, that was previously an option on the 457, will become standard equipment on the revised loader.

Staying with Cummins as engine supplier, JCB has also taken the opportunity of EU Stage V compliance to boost the power output of the 437 model. The 437 now comes with 145kW, while the 427's engine delivers 123kW. Smaller loaders will be supplied with a five

speed power shift transmission as standard, while the 437 engine will feature a low power mode.

Updated versions of Liebherr's L 550 and L 556 'XPower'

Liebherr has updated the L 550 XPower and L 556 XPower by reinforcing the lift arms and overhauling the working hydraulics. Further developments include increased tip load, breakout force and engine power. The models are equipped with power split travel drive whilst



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an increase in performance in the working hydraulics has enabled dynamic lift and tip functions, irrespective of the size or weight of the working tool. Liebherr also states that structural modifications to the lift arms have paved the way for higher breakout, holding and retrieval forces, which means operators are now able to manipulate challenging materials such as scrap metal, particularly in the upper lifting range.

Liebherr offers four lift arm versions in the form of 'z-bar' kinematics and industrial kinematics both in standard and high lift configurations, having overhauled all four versions of the lift arms as part of the model update as well as reinforcing the steel construction. The modified z-bar kinematics offers strength in the lower lifting range and higher breakout forces than before, according to the company. Liebherr has also overhauled the industrial kinematics which is tailored to industrial operations that frequently require operators to work with heavy working tools such as light material buckets, high dump buckets and log grapplers. The high lift version (one for both z-bar and industrial kinematics) has extended lift arms, and the overhaul of the lift arms has increased the tip load. The automatic 'Likufix' quick coupler system, which allows operators to switch mechanical and hydraulic attachments and tools from inside the cab at the press of a button, is being made available for both models. Additional equipment allows the models to be prepared for customer specific requirements. A hydraulic quick coupler with optimised visibility is also available when requested by the customer, as well as a range of assistance systems.

New 'G-Series Evolution' from Case

Case Construction Equipment has announced the European launch of the G-Series Evolution wheel loader range. The payload system is integrated directly into the wheel loader's primary display and provides bucket weight, pass counts, accumulated/running weight and more whilst the payload system helps operators track total loads. Case 'SiteConnect' and 'SiteWatch' come as standard for three years on each Case G-Series Evolution wheel loader. The touchscreen display provides tablet like performance for accessing settings and operational data. This includes electro hydraulic controls that enable the operator to set lift (boom) and tilt (bucket) responsiveness to match operator preference and loading situations. Each function can be set with a choice of three responsiveness modes: smooth, moderate and aggressive.

Case has also simplified the previous engine power management operating mode offering with two new ones: 'Max' (for tough conditions) and 'Smart' (with



performance and communication between engine and transmission on less challenging jobsites). According to Case, operators can take advantage of the parallel lift functionality across all boom configurations that assist in material retention and smooth loading by automatically maintaining the angle and position of the bucket or forks. A three colour coded configurable button has been introduced on the right arm rest enabling the operator to react quickly whilst being able to interact with pre-programmed machine settings. These settings are determined by the operator and can include critical functions/displays such as the payload screen, rear view camera and differential lock or declutch. A 'Tyre Pressure Monitoring System' features individual sensors that mount to the valve stem of each tyre. Technology powered through telematics enabled '4G SiteConnect Module' to be installed on the machine which can be accessed via the new 'SiteManager' App. Service intervals have been extended from 500h to 1000h+. 'Case Care', a standard planned maintenance programme, can be selected as part of a bundle of 'Case Service Solutions'

New 'XE' models with 'CVT' from Cat

The Cat 980 and 982 medium wheel loaders, in the 10t to 12t class, are said by the company to deliver up to 10% more productivity and up to 20% lower maintenance costs when compared to the previous 980M and 982M power shift. The XE models feature a continuous variable transmission (CVT) that delivers increased fuel efficiencies up to 35% and lower maintenance costs up to 25% compared to the M series models. The



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models include an expanded technology platform, and standard Cat 'Payload with Assist' on all 980 and 982 series loaders provides weighing of bucket payloads. Optional Cat 'Advanced Payload' expands the system's functionality and can wirelessly integrate the machine in the scale house process with 'Dispatch for Loading'. The Cat 'Autodig' with 'Auto Set' tyres helps reduce tyre slip and loading time. The models also introduce 'Application-Profiles' in which pressing one button sets multiple machine parameters. The models feature a continuously variable parallel path drive system which combines a direct mechanical path from the engine to the wheels with a 'HystatTM' variator.

The cab features a wide door, stair like steps and grab rails, whilst other features include a new dashboard, seat mounted electro hydraulic joystick, a 'push to start' system that requires a valid 'Operator-ID' to start the engine and other features. Cat 'Detect radar' and 360° multi-view vision system are also available. 'Remote Troubleshoot' connects the machine to the dealer's service department to diagnose fault codes without on machine cable connection. 'Remote Flash' ensures the models are operating with up to date software while working around the production schedule. Update files are pushed to the machine in the background and installation can be initiated from the Cat 'Remote Services' web portal which connects fleet managers to the machine and allows dealer service requests to be made from a mobile device. In addition Cat 'Performance Series' buckets balance bucket shape against the machine's linkage. Cat 'Work tools' is also an integral part of the machine design and is a significant contributor to Cat wheel loaders. The Cat 980 can be equipped with the 'Fusion Quick Coupler', and contractors can choose from several purpose built configurations.

Doosan's DL-7 wheel loader range. They are equipped with a third spool valve with settable flow and detent function (a fourth spool is also available). Operators can control hydraulic attachments via the proportional

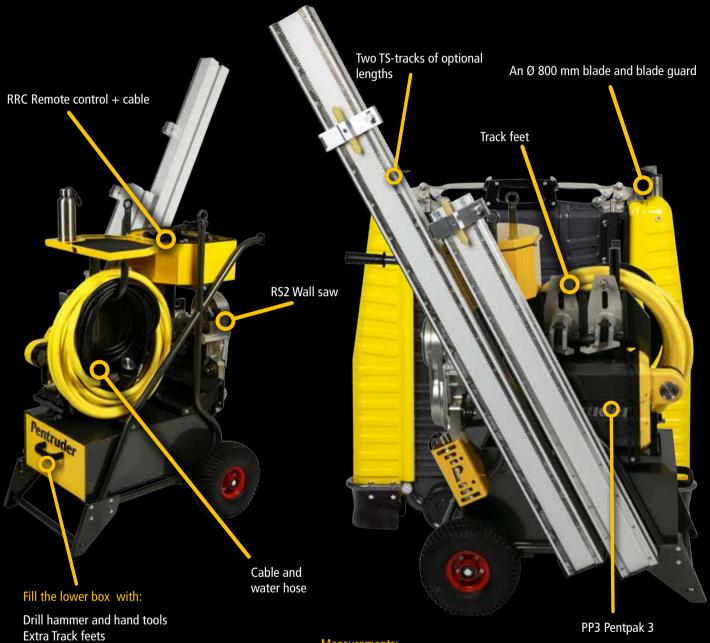


switch on the joystick. The bucket capacities are 2.3m3 and 2.5m3, respectively. Both models are available as 'HL' versions featuring a high lift arm and a 300kg counterweight. An automatic four speed power shift transmission and 'Limited Slip' differential axles come as standard. Power is provided by the Doosan DL06V Stage V 6-cylinder engine with an output of 119kW and 128kW respectively, whilst Doosan's 'Smart Guidance System' analyses driving habits of the operator to show fuel economy and other information. The cab offers electrically adjustable rear view mirrors, LED working lights, air compressor/blower and more. Using the Doosan 'Smart Key' system, the operator can start the machine using a keyless device. Overall, the redesigned interior offers a larger and quieter operator environment, increased leg room, enlarged storage area and more. The 'DoosanConnect' wireless fleet monitoring system further provides information about machine performance in a dual mode (satellite, mobile network).

Doosan has also launched the new DL420CVT-7 Stage V compliant wheel loader equipped with a 'CVT'. With a maximum bucket capacity of 4.5m3, the model



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the Scania DC09 engine provides torque at low rpm and meets Stage V emission regulations. Just like the DL220-7 and DL250-7, the DL420CVT-7 features a third spool valve with settable flow and detent function, air compressor/blower, 'Smart Key system' as well as other features. Another new machine is the Doosan DL380-7, with features such as enhanced comfort, increased bucket capacities, new fuel saving technologies, to name but a few. Every DL-5 Series Doosan wheel loader will eventually be replaced by a DL-7 Series machine — from the DL200-7 to the DL580-7. The new DL380-7 — a replacement for the DL350-5 - features an axle upgrade allowing customers to carry and lift larger load capacities. In addition, a larger standard bucket provides up to 7% larger capacity than the previous model.

Lastly, Doosan's 'Transparent Bucket' has won two awards at the Matexpo Exhibition in Belgium. The Transparent Bucket is a fully integrated system that allows a wheel loader operator to see the bucket blind spots through the in cab monitor. The system records images at the front of the wheel loader and displays the combined images in real time.

Hidromek releases new HMK 635 WL

Hidromek's new heavy duty wheel loader HMK 635 WL aims to provide high performance, durability, low fuel consumption, versatility, operator comfort and safety, as well as shorter cycle times. It is said to deliver high breakout power and control capability in tough working areas such as quarries, concrete plants and industrial applications. It has a Stage V engine with 1,200Nm torque, a standard operating weight of 20,600kg and 3.5m3 bucket capacity. It is also said by the company to save fuel under all conditions owing to the high torque

it provides even at low rpms. HMK 635 WL has five forward, three reverse power shift transmission, whilst the 'TipShift' function enables to change direction by pressing a single key without using the gear lever when the machine is moving forward or backward while loading. The machine is said to be highly manoeuvrable during work in narrow areas with its articulation angle of 40° and features equipment for improved operator comfort that enables the user to work comfortably without getting tired during long shifts. Other features include a panoramic cab, insulation against noise, a heated adjustable air suspension operator seat, fully automatic A/C system, touch control panel and other features. Access to service points on the machine are from ground level, whilst the cab may be manually tilted to 35° with a jack, whilst the bonnet may be tilted to 80° with the aid of an electric actuator. The bonnet is opened as two pieces and the engine and transmission groups are located separately. Radiator cleaning can be done whenever required thanks to an aerodynamic cooling fan that is reversed automatically or manually. This feature is designed to provide benefits when working in dusty and covered areas.

New Bobcat compact wheel loader wins design award

The new Bobcat L85 compact wheel loader (CWL) has been announced as a Product Discipline winner in the 2021 edition of the iF Design Awards. The organiser of the awards, iF International Forum Design, is an independent design organisation, based in Hannover in Germany. The L85 won in an automobiles/vehicles subcategory decided by a 98 member jury made up of independent experts from all over the world, coming top from almost 10,000 entries submitted from 52 countries. Working with Bobcat on the L85 was the

According to Bobcat, CWL's are often used by less experienced operators, so the machine's intuitiveness and maximum visibility are key for confident operation. When developing the L85, Bobcat focused on optimising these features resulting in the short, steep rear bonnet and fully glass doors on both sides providing side and rear visibility. The machine also features a rear view camera and LED lights. All operator controls are grouped on the side console, with the joystick connected directly to the seat armrest. The L85 can be used in construction, landscaping, rental, industrial, waste, recycling and agriculture, but is also suitable for road work, snow removal, maintenance and other applications.

There are several Bobcat loader attachments approved for use on the L85, with more to be announced in the near future. The current portfolio includes a general purpose bucket, light material buckets, a combination bucket, pallet forks and angle broom and snow blower. Another feature of the L85 is the 'Advanced Attachment Control'. This system enables the operator to switch to an alternative machine control pattern at the touch of a button. The engine is generally started by the standard key, but for quick engine start and stop during the day the operator can also use soft touch buttons located on the right hand console. The machine is also equipped with 'Automatic Parking Brake' and 'Slope Assist' features. The joystick's position is adjustable horizontally and integrated in the operator's suspension seat. The steering column is also adjustable in two directions - horizontal and vertical. There are two full glass doors either side of the cab. The L85 is equipped as standard with a heating system, with a full heating, ventilation and air conditioning (HVAC) system available as a factory option.







PDi site report



Rockster R1000S reduces demolition waste in Sweden

Haga R.O.T. Service AB recently invested in a Rockster R1000S mobile impact crusher in order to further enhance its recycling and onsite demolition waste

For the past 25 years, Haga R.O.T. Service AB has been a specialist in heavy demolition, decontamination and recycling. Located in the southern part of Sweden, approximately 160km south west of Stockholm, Haga R.O.T. has offices in both Norrköping and Linköping. Regardless of the size of the task, the company's 70 employees ensure each project receives proper care and attention with a high level of professionalism. Besides heavy demolition, Haga R.O.T. also undertakes contract crushing of asphalt and concrete as well as recycling at its newly opened recycling centre in Norsholm, just outside of Norrköping.

Company owner John Torsell first saw the Rockster R1000S impactor on site in Austria and was immediately convinced that the crusher was suited to his needs. He contacted Rockster's Swedish sales partner, Niklas Johansson of Biocare Svenska AB, who introduced Rockster mobile crushers to Haga R.O.T.. Biocare has been in the crushing business since 2008, and during this time has acquired valuable knowledge in terms of what works and what doesn't when it comes to mobile crushers. Furthermore Haga R.O.T. and Biocare Svenska have a long history of working together. "There is a developed trust between Haga and us. They know that they can rely on our top quality service and support as well as our expertise on how to process materials. One of the reasons why they chose Rockster R1000S is because of our ability to provide fast and efficient supply of spare and wear parts," says Niklas Johannson.

Östergötland is where Haga R.O.T. does most of its business, although it is active throughout Sweden, and thus keeping its ecological footprint to a minimum is of outmost importance. To this end, the R1000S has the latest Cat Stage V engine, which is both optimal for the machine fleet, but more importantly, to its philosophy. The C9.3B is the latest in Cat emission technology, with the crusher also being powered through a hydrostatic drive. This type of drive, in comparison to diesel-electric, ensures a constant crushing performance as well as reduced diesel consumption. Johannson explains: "With Rockster's hydrostatic crusher drive, the diesel engine always stays in the optimal rpm range. The hydraulic pump only adapts to the crusher's power requirements, which means lower fuel consumption p/ton of crushed final material." In addition, the crusher is equipped with a RVB1700 air blower that blows away light non aggregates such as plastic, textile, polystyrene, wood and similar materials, which results in higher quality and more valuable final product.

KEMROC ES 60 UNIVERSAL CUTTER FOR WHERE PRECISION IS REQUIRED

Located along the route of the new A44 autobahn from Kassel to Herleshausen (Germany), the steep walls of the Trimberg Tunnel portals are supported with shotcrete faced with massive blocks of Jurassic limestone. In total. around 9,000 blocks are being milled using a Kemroc ES 60 HD universal cutter.

The 600m Trimberg Tunnel is just one of numerous construction projects that were required when building the new A44 autobahn. After breaking through in each of the twin tunnels, work commenced on the interior lining and supporting the steep, shotcreted portal walls with a cladding. Strabag was subcontracted to clad both portal walls, each about 500m long and up to 10m high with blocks of Jurassic limestone. Each of the 900mm x 1,800mm long and 500mm x 900mm high limestone blocks were delivered to site by truck and then trimmed to precisely the correct length. This was the only way that the contractor could meet the joint dimensions specified.

When work began on the east portal of the tunnel in April 2021, a rotary drum cutter mounted on a wheeled excavator was used to trim individual limestone blocks to size. Shortly afterwards, Enrico Trender, the application consultant from Kemroc, visited the site. He suggested doing a trial to compare the performance of an ES 60 HD with a drum and rotation unit with the current attachment. Strabag agreed to the trial, with both the excavator operator and his foreman, Simon Cox, being impressed with the speed and precision of the new attachment.

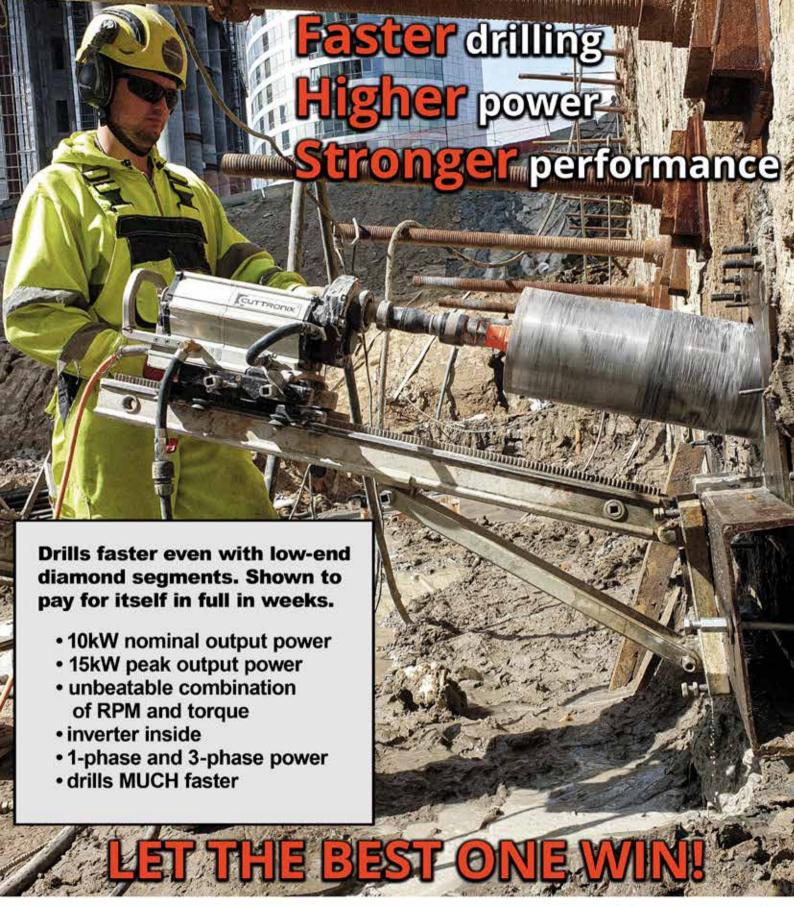
Fast and Accurate

The ES range of universal cutter attachments were designed for use on excavators with operating weights from 1t to 40t. When fitted with a cutter wheel, they can be used as slot cutting attachments for concrete, asphalt or rock; when fitted with a cutter drum they can be used to accurately profile horizontal and vertical surfaces. For the Trimberg Tunnel, Enrico Trender suggested the ES 60 HD as based on his years of experience, he knew that according to the weight and hydraulic power of the Liebherr A920 wheeled excavator, this model together with the optional rotation module would provide the optimum performance. Based on the successful results of the trial, the Strabag site manager, Andre Hatwig, rented the equipment.

The 9,000 blocks had to be sized before they could be used at the portals of the Trimberg Tunnel. The sizing process in detail consisted of placing the block with one end up against other blocks with wooden wedges underneath so that the face to be milled was facing up at an angle. A petrol powered cut off grinder was then used to cut the outline of the required surface to size so that the finished product would have sharp, straight edges. Using a full hydraulic quick coupler, the operator was able to change over to a universal cutter and milled the front face of the block in a vertical cutting motion up and down the face. After another change - to a grapple as was used originally - the block is transported and placed in position on the portal wall.

By the end of May, at the eastern portal, where the limestone clad wall reached almost 8.5m in height, about half the wall had been completed. According to Andre Hatwig, the Kemroc attachment proved to be a flexible pacemaker for the entire process. He explained, "According to the excavator operator, working with the Kemroc universal cutter was more accurate, faster and quieter than with the standard drum cutter being used previously. Enrico Trender from Kemroc, brought the ideal excavator attachment combination on site and set the hydraulics on the wheeled excavator to the correct values. Now the operator saves an enormous amount of time and fuel while trimming these blocks." Meanwhile, another Kemroc ES 60 HD universal cutter has been delivered to the western portal of the tunnel to do the same job.











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The new K100 boom change system for PC490HRD-11

With the introduction of the new K100 boom change system for its PC490HRD-11 high reach demolition machine, Komatsu Europe aims to offer customers a new level of demolition project efficiency. The K100 boom change system allows the reconfiguration of the machine within minutes, without leaving the operator cab, so the most effective attachment can be used at every stage of the project.

"Listening to demolition contractors showed us that the industry is looking for a significant improvement in efficiency," says Simon Saunders, Working Gear product marketing manager at Komatsu Europe. "At Komatsu, we took up this challenge, asking ourselves how to translate our own capabilities into the best business benefits for our customers. With the introduction of the patented K100 boom change system, we believe that our customers can fully benefit from the versatility built in to every Komatsu HRD machine, enhance site safety, and reduce project time."

With a total of six different working configurations, from the 32m extended high reach through the powerful 28m high reach to the medium reach and digging equipment, the PC490HRD-11 already offers a wide range of configurations, ready to handle any part of a demolition project. The K100 boom change system makes these wide ranging capabilities significantly more accessible. There is no need to manually handle any heavy hydraulic hoses or to carry out any manual work at height when changing the machine's configuration. Used to its maximum effect, the K100 system could even allow the PC490HRD-11 to carry out both primary demolition as well as site clearance, perhaps even removing an extra machine from the site.

Komatsu's New K100 boom change system

With relatively few changes to the structure of the well-known PC490HRD-11, the K100 builds on its durability and adds new in-house Komatsu Group

technology with highly visual graphical controls, operating in compliance with ISO safety regulations. The operator cab of a machine with the K100 system looks very similar to that of the conventional boom change machine. All the controls of the K100 system are incorporated within the 'Human-Machine Interface' (HMI) panel, which doubles up as the working range indicator system in normal use. The HMI panel offers instructional animations as well as a built in view from the alignment camera so that the operator is fully aware of the machine's condition at all times. No additional monitors are needed, ensuring the view from the operator cab remains uninterrupted.

Equipped with the K100 boom change system, the machine's operating weight ranges from 62,105 kg up to 75,830 kg, depending on the working configuration. The machine is able to handle a range of demolition attachments, from 2,500 kg in the maximum 32m extended high reach arrangement, up to 3,350 kg in the common 28m high reach arrangement, up to 5,000 kg for the digging or medium height arrangements, giving a huge range of available power/reach.

Hydraulic performance of the K100 system is similar to the machine with the conventional boom change system, ensuring that users are able to make full use of the various working configurations available. The standard safety and fleet management equipment fitted to the PC490HRD-11 are retained with the K100 boom change system, with the 'Neutral Detection System', 'Komatsu Care', 'KomVision' and Komatsu's telematics system, 'Komtrax', all featuring in the standard specification.

New Look S450

Bobcat has launched a new version of the company's S450 radius lift path skid steer loader, introducing Bobcat's bold new branding scheme for the first time in the Middle East and Africa (MEA) market.

The new Bobcat 3D decals that the S450 now carries for the first time in MEA emphasise Bobcat's track record for very reliable equipment and maximum uptime. Gaby Rhayem, regional director Middle East and Africa at Doosan Bobcat EMEA, said: "The new S450 introduces a fresh look for our market leading loaders in MEA. As well as being the most popular skid steer loader in the region, the S450 is far and away the most reliable and as a result has the highest resale value on the market. A used S450 with four year/4,000h on the clock will typically sell for 60% of the original price, representing an unbeatable return on investment for our customers."

The S450 has features to minimise maintenance and to protect the machine including machine shutdown protection, self-diagnostics and battery run down protection. In addition, the S450, like all Bobcat skid steer loaders, utilises what the company says is the industry's only maintenance free chain case, which further reduces maintenance. This is further reflected by the extended two year (2,000h) standard warranty that is now available for the S450 and all other new Bobcat compact loaders in the MEA market. For easy to access maintenance and servicing, there is simple, full access

to the engine checks and fills, filters and battery. There is no need to raise the lift arms to service the machine, providing more time to complete maintenance.

With what the company says is the largest entry/exit area in its class, operators are said to appreciate the extra space of the wider cab. Once inside, the operator can combine manoeuvrability in tight areas with the reach and visibility the machine provides for applications such as dumping materials over walls, backfilling or loading flatbed trucks. As well as its compactness, the S450 skid steer loader can now be supplied with a comprehensive choice of over 70 different product families of approved attachments, offering solutions for a very wide range of applications. The S450 also now offers customers all the common loader control patterns with a choice between the popular Bobcat 'Standard Hand and Foot Controls'

or the exclusive 'Selectable Joystick Controls' (SJC). The SJC option provides low effort joysticks to help operators to control their loader and attachments more easily and comfortably.

Instead of the standard cab, the S450 can be equipped with a 'Deluxe' variant. There is also a 'Heating Ventilation and Air Conditioning' (HVAC) option available.

The 'Cloth Suspension Seat' option is also now available on the S450, improving the operator's comfort all year long, providing more comfortable seating on slopes and inclines. Complementing this, Bobcat provides cushioned lift and tilt cylinders on the S450 thus increasing productivity, and again enhancing comfort. It also removes the need for the operator to worry about slowing down the motion of the arms and bucket when approaching the end of the stroke. In addition, cushioned cylinders soften the impact when the lift arms contact the mainframe, greatly reducing the jostling and noise that can be caused by such collisions. The enclosed cab on the S450 has a pressurised interior space that keeps dust down to a minimum, keeping the inside clean and comfortable. The one piece seal and curved door pocket ensure high levels of protection.

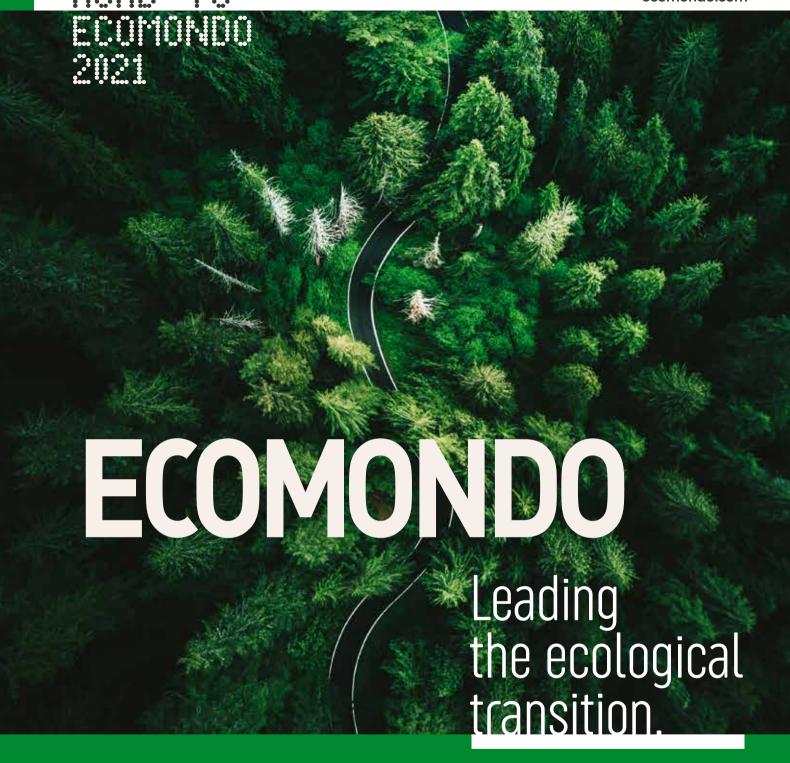


A mini dumper is a nimble, versatile machine with a range of applications that includes, but is not limited to, construction, earth moving, agriculture and land-scaping. For demolition contractors, mini dumpers are useful auxiliary equipment. PDi's Andrei Bushmarin presents the latest innovations from the mini dumper industry.

Wacker Neuson celebrates 50 year expertise in dumpers

At the turn of the millennium, Neuson Baumaschinen GmbH took over specialist dumper manufacturer Ebbs & Radinger, which already had decades of experience by that time. Dumpers were originally manufactured in Vienna and Wales, jointly with the Lifton Company, then in 2008 production was fully relocated to Austria. With the merger of then Neuson Kramer Baumaschinen AG and Wacker Construction Equipment AG, expertise in dumpers was inherited by Wacker Neuson SE. Since 2012, the Wacker Neuson production centre for dumpers and excavators has been located at the Hörsching site, near the city of Linz. Currently, Wacker Neuson offers ten models of wheel dumpers, three models of dual view dumpers and seven models of tracked dumpers. "When developing our dumpers, we always try to think one step ahead," explains Stefan Kurzmann, product expert





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for dumpers at Wacker Neuson. "On the one hand, we optimise already proven models in terms of safety, ergonomics, performance and handling. On the other, issues such as digitalisation and electrification play a growing role in further development. For example, the electric wheel dumper DW15e works without direct exhaust emissions; the machine is equipped with one electric motor for the drive system and another motor for the hydraulics in order to use energy independently on an as needed basis. Compared to conventional models, noise levels have been reduced here by more than 20 decibels to 60dB(A), which is equivalent to normal ambient volume." Another innovation from Wacker Neuson is the three dual view ('DV') models - DV60, DV90 and DV100 - with a payload of 6t - 10t. DV allows the operator to change quickly the seat position through an 180° rotation of the operator control panel and the seat console. The dual view dumpers are particularly handy for jobs in confined areas such as inner cities, tunnels and busy roads.

www.wackerneuson.com

Messersì updates 'All Terrain Line' with two new models

ersì in Senigallia, Italy, Messersì is one of the pioneers of hydrostatic track dumpers with its patented self-loading shovel. Manufacturing dumpers since 1992, Messersì has become a benchmark for this type of machinery worldwide. Recently the Italian company has updated RESSERSI

its 'All Terrain Line' with two new models - the TC230d and the TC350d. Powered by a 18.9HP Stage V compliant Kubota diesel engine, the smaller TC230d has an operating weight of 2,200kg, a payload of 2,300kg, two speeds (0-3.5 and 0-7.5Km/h), whilst the driver's seat has integrated joysticks controls and self-loading shovel as an option. Weighing in at 3,800kg, the bigger TC350d is driven by a 66HP common rail intercooler DPF Kubota diesel engine. Supplied with canopy or closed cab, the machine boasts a payload of 3,500 kg,

two speeds (0-5.5 and 0-11Km/h) and a driver's seat with integrated joysticks controls.

www.messersi.it

Mecalac upgrades the 'MDX' range

Following up on the successful launch of the 3.5MDX, France based Mecalac has announced the addition of its new 6t 6MDX and 9t 9MDX models, fitted with optional state of the art hydrostatic transmission, to its MDX range. The new models will be available with



PDi special feature

the ROPS (roll over protective structure) foldable roll bar, making optional the use of cab. Hydrostatic transmission simplifies operation without gear shifting and provides the additional benefit of responsive dynamic braking. Removal of the gear stick allows for a more spacious operator environment, while fewer parts mean less maintenance, resulting in lower cost of ownership. Both models deliver high performance, torque and traction, particularly on steep slopes. In the ROPS configuration, the machines are easy to transport between job sites and

allow operators to work in low height areas. Thanks to a handle and gas strut, the structure is easily foldable. Since the ROPS roll bar has fewer components than a cab, it is an economical choice, which still offers reliable operator protection. For additional safety and comfort, the 6MDX and 9MDX can be fitted with an isolated MDX cab. The certified ROPS/FOPS MDX cab has been designed to withstand high impacts while loading the dumper skip.

www.mecalac.com

Ausa unveils two 'reversible' dumpers

Spain based Ausa has launched two new models of 'reversible' dumpers. Featuring hydrostatic transmission, the DR601AHG and DR1001AHG have a payload of 6,000kg and 10,000kg respectively. Thanks to an innovative 'reversible' design, the seat can rotate 180° with all components instantly adjusting to the driver's new position. The driver can get on and off on either side of the dumper. Powered by a 55.4kW Stage V compliant Deutz engine with a new generation DPF and automatic regeneration system, the machines come equipped with the 'Eco' mode function, which automatically controls the engine speed to ensure lower fuel consumption and less CO2 emissions. Another highlight is the 'Hill Holder' system - a start assist and safety feature that engages the dumper's brake when the driver takes the foot off the accelerator at zero speed. This significantly increases safety, especially when operating on slopes. As an option, the new dumpers can be equipped with 'Smart Stop': a plug in system that automatically shuts down the engine when it is not in use. Both models are available with a range of accessories, including a ROPS/ FOPS removable cab.

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Albert Freise came to Germany from Poland in the 1950s, initially working transporting gravel and sandstone for companies and communities.

n May 1959 he founded his own company, working as a haulage contractor. After a while he extended the offering of his company, which led in 1979 to the purchase of land at Augustdorf as a trans-shipment centre. In 1992/93 the first sorting and composting facilities were operational, marking the start of the company's development into a waste disposal service provider. To round off the disposal concept, the Dörenschlucht lime works and the associated landfill were acquired in 1999.

The biggest expansion step came in 2019/20 with the amendment of the Commercial Waste Ordinance, which lead to the site at the Augustdorf industrial estate being almost doubled to about 40,000m². A second site went operational with a new commercial waste pre-treatment plant of 30,000m2. Today, Albert Freise GmbH has some 60 employees, with the company being known as a full service provider for waste disposal, processing and supplying natural and recycled building materials as well as offering container services.

Jens Ahle, Albert's grandson is responsible for the material groups at the recycling yard of Albert Freise GmbH. He is particularly proud of the milestones his late grandfather achieved, and the long standing partnership with Norbert Hammel and Arjes GmbH. Albert's and Hammel's paths crossed many times through the years, long before Arjes GmbH was founded. In 1989 they met for the first time to talk about designing a wood waste shredding machine. Since then, almost all of Norbert Hammel's new machine developments have undergone at least one test at the Freise's facility to learn their strengths and weaknesses. The special thing about this partnership is that to this day is these machines have been purchased by Albert and his team after they were running optimally and to their satisfaction. The testing saw many faulty designs and the resulting adjustments being made directly on Freise's site. One thing is there-

fore clear, the knowledge, success and growth of the two companies is based, on this long standing partnership and mutual trust. "Without Norbert Hammel and Arjes machines, we might not be where we are today, if this partnership had never existed. Even if there were ever problems or failures, a quick and uncomplicated solution was always found, and in the end the result was always achieved," says Jens Ahle.

The latest acquisition of Albert Freise GmbH is the 'Titan' 950 combined with a specially designed hammer mill. As usual, there were many intermediate steps and adjustments that took place during the process until the final completion of this combined shredding plant. With an average throughput of 100t/h and a final particle size of 0-100mm, the plant at the recycling yard is responsible for shredding waste wood in the A1 to A3 range.



Thanks to paddle shafts with an asynchronous drive system, the 950 provides pre-shredding of the material.

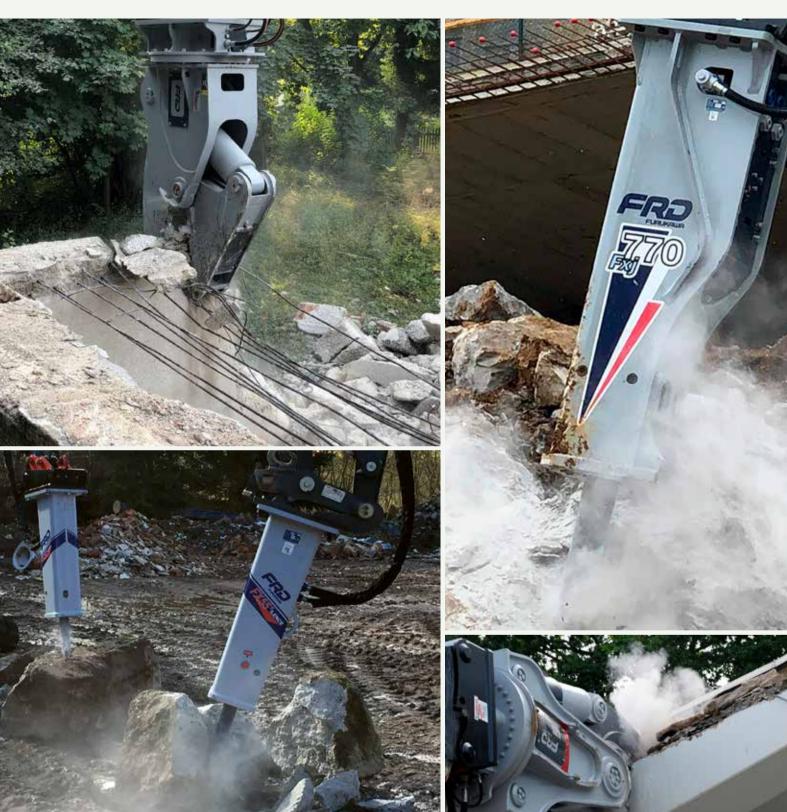
Contained metal parts can be easily sorted out after shredding with the help of the over band magnet. In the next step, the waste wood is passed over a disc screen before moving on to the next shredding stage. Material with a grain size below 100mm falls right through to bypass this process. Anything larger is re-shredded with the mutton mill to produce the desired quality. Here, another over band magnet and a magnetic roller in the discharge ensure that any metal parts still contained, such as screws or nails, are removed.

Before using the Titan 950, a VZ 850 was used. By switching Arjes performance class, the company now achieves a 30% higher material throughput. However, the VZ 850 now operates in the green waste shredding area at the same site in Augustdorf. In addition, the company continues to operate one of the first 'Impaktor' 250 machines for shredding construction and demolition waste, as well as a second Titan 950 for shredding at the site of the commercial waste facility.

Albert Freise GmbH is an owner/managed family business, which today is run by the children of Axel Freise and Eveline. However, the grandchildren Joeline Freise and Jens Ahle, are also active in the management and ensure that their grandfather's group of companies is continued with pride. "The special thing about working with Arjes is that we know exactly who to turn to with what concerns. Thanks to the long standing partnership, we know just about every player in the company. Regular contact with colleagues from the design and service departments means that quick solutions can always be found when problems and challenges arise. Even if this should not be the case, we can be sure that a replacement machine will be ready for us in the shortest possible time," stated Jens Ahle.



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ansson Entreprenad AB, a demolition contractor from the city of Linköping in Sweden, is doing well, but it has been a long time since the company only worked in the area where it was founded. Now works comes from all over Sweden, with different types of complicated demolition jobs encompassing process industries, real estate and infrastructure.

The demolition of the car reseller plant in Stockholm

PDi Magazine met up with Jansson Entreprenad when the company was working on the demolition of a car reseller plant in Stockholm called Bilia. It is a five storey facility of a total of 30,000m2. "In total, we will demolish 40,000 solid tons of concrete at work," says Hannes Hammar, who is the site project manager. The job is being undertaken on behalf of the real estate company Fabege and the general contractor Zengun. Jansson Entreprenad is responsible for the remediation and demolition work, beginning operations in the spring of 2021 with remediation and selective demolition. Heavy demolition is now underway with four demolition equipped excavators are at work equipped with

With many large and complicated heavy demolition jobs undertaken, Jansson Entreprenad qualifies as one of the largest heavy demolition company's in Sweden. Maybe even the biggest. PDi met Jansson during the demolition of the Bilia car reseller plant in Stockholm in June.

powerful hydraulic demolition tools working through the heavily reinforced concrete.

Two more excavators are used for excavation. Johan Persson is one of the demolition operators using a newly acquired demolition equipped Volvo EC750EHR excavator. "We are very happy with the machine. It is flexible and safe to work with and has a fantastic capacity. The climate in the cab is also exceptionally good on hot days like today," says Johan Persson, who in addition to being a demolition machine operator also is responsible for the machines at the company. Its Volvo EC750EHR has a reach of 36m and weighs 104t. The other three

demolition machines at work come from Caterpillar, Cat 352F, Cat 340 'Next Generation' and Cat 330F. The machines have demolition tools from 'Cat Work Tools' and hydraulic quick couplings from OilQuick. "We are very pleased with Cat's demolition tools and use them on most of our machines. I want to highlight Cat's large pulveriser MP365. Incredibly good tool," says Johan.

During the visit to Bilia, it was one of the hottest days of the summer, being around 30°. The operators constantly replenish water supplies and there is a lot of dust. Water dust suppression cannons from Duztech work to keep the dust level in the air down. Johan says





Hannes Hammar is the project manager for the Bilia job and says that Jansson Entreprenad is responsible for decontamination and demolition, while the company Zengun is the general contractor for the client Fabege.



Johan Persson, who is responsible for the machinery fleet at Jansson, keeps a close eye on the company's machinery and says that they now have around 35 machines weighing from 1t to 104t as well as around 175 hydraulic demolition tools.

that the job is covered by rigorous planning directions with Jansson's job divided into different stages. Until 1 August, heavy demolition was undertaken, then excavation to dig out the ground for the new structures to be built on the site was undertaken. After that, new stages of the demolition work will commence, with Jansson's work being completed by November when the construction stage will start in earnest. The new construction consists of new housing - as seems to be common in Stockholm at present - aiming to be completed in 2025. A recycling centre will also be built to deal with the demolition materials at Bilia. During the summer 30 people worked on site, including the staff from Jansson Entreprenad. "When construction starts in earnest, we will probably reach about 100 people working," says Hannes Hammar.

'Largest heavy duty contractor in Sweden'

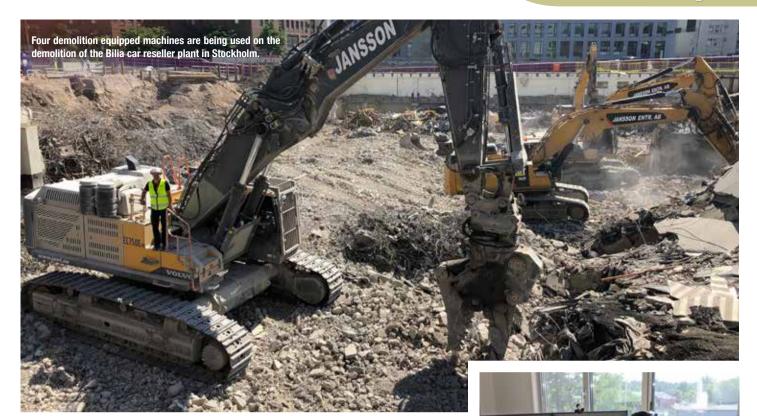
"It's going really well now. We have a lot of projects underway and new ones are added all the time. But we are also the country's largest contractor on heavy demolition projects in my opinion," adds Johan Jansson, the operations manager and owner of the company together with his brother, Victor.



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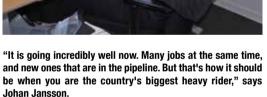
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Jansson Entreprenad's machine manager, Johan Persson, is very pleased with the new acquisition, a demolition equipped Volvo EC750EHR. "The machine is great! We are very satisfied. We are also satisfied with our demolition tools from Cat, which work well with our machines, which are equipped with quick couplings from OilQuick," says Johan.





The company is also undertaking large jobs that are running in parallel; they include demolition in the large Stockholm harbour, Värtahamnen, where apartments close to the Baltic Sea are to be built. There are also other large jobs in the Stockholm area, in the cities of Flen, Kungsör, Gothenburg, Nyköping, Linköping and more. In the autumn, the demolition of the old Kalix road bridge in the far north of Sweden will start as well as the demolition of a large property in the Stockholm suburb of Liljeholmen.

To undertake this varied work, Jansson Entreprenad currently has 35 demolition machines in its fleet, ranging from 1t Bobcats' to excavators of 104t. The excavators are for the most part Caterpillar, with each carrier having around five different hydraulic demolition and sorting tools at its disposal. The tools include hydraulic hammers, pulverisers, concrete shears, shredders, sorting buckets, milling cutters and so forth. The majority of the excavators are also fitted with hydraulic quick coupling systems from OilQuick.

Third generation contractors

The company was founded in 1946 as a haulage contractor by Johan Jansson's grandfather and grandmother Sture, and Marianne Jansson. Johan's father, Kjell, joined the company eventually taking over the business. Today, Kjell has taken a step back with his sons and his daughter Malin who works in administering the business, now running the company. For the past 25 years, the company has worked exclusively in demolition, remediation and recycling. The majority of its projects consist of turnkey contracts in demolition and construction work. It assesses and manages the contracts under its own auspices, usually with its own resources when capacity exists. Today, an estimated 80% to 85% of jobs are demolition, but work is being done to increase regular construction operations.

The business turns over around €17M, with headquarters located in Linköping on an industrial plot of 100,000m² and now employs 40 people. In Linköping, the company has its own recycling and sorting plant. In May 2021 an office, workshop and machine and tool warehouse were acquired located north of Stockholm. This is where PDi met Johan Jansson in the newly renovated premises. "With as many jobs as we have in the Stockholm area, we simply have to have our own depot on site. Here we have plenty of space for both the staff and our machines," says Johan. Johan himself moved to Stockholm four years ago to be on site and direct the business. "It is not extremely far between Linköping and Stockholm, but it is time consuming to commute in the long run," says Johan.

Jansson Entreprenad is certified according to the quality management system ISO9001, the environmental management system ISO14001 and the work environment system ISO45001. In 2020, it was also awarded the industry body Maskinentreprenörernas (ME) Infrastipendium 2020, with the award being presented at ME's annual event, the Big Infra Day.

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RGS Nordic helping to keep

Europe's far north tidy with Lindner twin shaft shredders

The largest waste management company in Scandinavia, RGS Nordic, has its sights set firmly on keeping the environment clean for the future. It is accomplishing this using almost a football team of shredders – all made by Lindner – with the company believing there are many good reasons why.

The word 'Scandinavia' alone conjures up images of incredible natural beauty with untouched wilderness and endless forests. The Nordic countries have been pioneers when it comes to environmental protection, and that entails a lot of work in order to pass on to future generations a clean world where natural resources are still available and waste is transformed back into valuable new materials. One such company that is hard at work ensuring this is the case is the region's largest waste management company, RGS Nordic, based in Denmark.

The company recovers more than 4.8M/t of waste and soil annually at over 28 sites in Denmark and Sweden. It also operates the largest commercial wastewater treatment plant in the northern region located at the coastal town of Stigsnæs. The enormous amount of solid waste is a colourful mix of municipal, industrial and mixed construction waste, bulky waste, green cuttings and waste wood, which must be processed prior to subsequent recycling or energy recovery. To manage the different materials efficiently and flexibly, the company



Jan Glerup, managing director of RGS Nordic, (left) and Jørgen Komi, CEO of Lindner partner Komi Contractor Supply, (right) are looking forward to putting the freshly delivered Urraco 95DK in operation.

has since 2015 relied on Austrian company Lindner's solid but versatile shredders. The fleet comprises of 10 'Urraco' shredders, consisting of six of the 95 DK type and four compact Urraco 75D's, one of which has a purely electric drive, all designed for working in tough conditions.

Jan Glerup, managing director of RGS Nordic, explains why the company has almost a complete football team of mobile shredders in operation: "We looked at several machines from different manufacturers, but there are two things that made us choose the Urracos. Firstly, we process a lot of different materials in large quantities. Everything from green cuttings to mattresses to mixed construction waste, which can be very diverse itself. What we need are machines that can be used flexibly without major retooling; machines that can handle even tough materials without any issues and deal with occasional non-shreddables without any major damage. That's also incredibly helpful during peak times. When times get tough, we can simply reassign one of the Urraco's and be ready for action at the push of a button.

"Secondly, our facilities need to operate at all times. We expect the machines to be robust, and the cleanly welded, solid twin shaft system has proven to be just that. But it is at least equally important for us to have easy access to rapid service support and Lindner's after sales team and our regional contact, Komi Contractor Supply (KCS), have an impressive client centred approach. We recently commissioned the ninth and tenth Lindner Urraco. I think that says it all."

The subsequent recycling paths are, however, just as varied as the materials produced. Depending on their composition, the shredded fractions that are reduced in volume are used for subsequent recycling processes, composted or recovered as sources of energy, for example, to supply the Danish city of Copenhagen with heat and electricity.

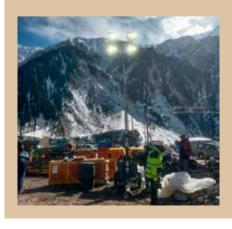


Kelly Earthmoving use Epiroc MB 1200 for extremely challenging job

At a large quarry in the UK Midlands, Kelly Earthmoving has delivered enabling works associated with the installation of a cable suspended conveyor that will span nearly 1km across the quarry. The project has seen the Kelly team on site for 12 months working on two separate sites. For the project's upper platform, Kelly formed a slope down through the mudstone and rock to where a second working platform was broken out and levelled. At this point the team encountered the very hard rock that the quarry is famous for. "We had a number of options for the removal of the rock head. Our usual hammers were struggling with the hard rock so we decided to look at investing in something more reliable and productive to complete the job. We used an Epiroc MB 1200 hammer as a replacement for one of our existing tools. And to be fair, we have been very impressed with the Epiroc breaker's reliability and performance."

Atlas Copco helps light the Zojila tunnel project in India

Atlas Copco's 'HiLight V5+' light towers have been used to provide power for the Zojila tunnel project in the Kashmir valley (India). This 14.2km long road tunnel will be one of the largest tunnels in Asia, and will connect the Srinagar valley and Leh, making travel safer and reducing travel time from 3h to 15min. The tunnel is located in hilly terrain and work needs to be completed to strict deadlines to reduce the risk of damage caused by monsoons. With vigorous day and night shifts, Atlas Copco's light towers have been providing reliable, efficient, and safe light power with no interruptions.





HILTI BESPOKE DIAMOND WIRE SAWS

developed for complex decommissioning environments

ompanies in the decommissioning field daily face critical challenges as they must cut components with an ultra-high density that simply cannot be cut by most existing technologies. They must also ensure the health and safety as well as the productivity of operators in critically dangerous environments (e.g. operators working in radioactive zones and manipulating machinery with safety equipment and three pairs of gloves). Furthermore they must reduce the volume of nuclear waste which requires long term disposal/storage.

These problems are not addressed with standard or modified standard wire machines nor with alternative cutting methods available on the market, e.g. torch, plasma, water jet, band saw or laser cutting. Not only do these alternative methods simply fail in cutting large, complex materials, but even when they can cut, they often require significant manual labour in the hot zones and result in significant additional contaminated waste. Close collaboration with customers has enabled Hilti to understand their needs, discussing and discovering requirements and constraints in a series of specific projects. This has resulted in solutions evolved from

modified standard wire saws to fully bespoke wire saws, which fully meet market needs. Hilti has stated that is has gone the extra mile by creating fast, reliable and high end solutions to meet customer challenges; it has taken the complexity out of wire sawing, giving the confidence to E&I companies to choose wire sawing as their main cutting solution.

Highly innovative, differentiated solutions

Hilti's goal has been to increase productivity and safety whilst reducing waste and complexity and the associated risk of high consequence mistakes. With its bespoke wire saws this is accomplished with benefits delivered to customers. These benefits include low risk of operator error which enables even inexperienced workers to safely cut complex structures as the system is equipped with Hilti 'CutAssist' technology. The machines can be operated remotely and cutting can be dry, without liquids or aerosols, so no toxic fumes or secondary waste is created thereby reducing risks and harm to operators. The Hilti solutions also have fast set ups with no time consuming set up of the machinery required as the machine is built with a fixed set up optimal for the job. This means they

are productive, with what Hilti says is an increased cutting speed of up to 70%, which is achieved by increasing the wire speed and tension with robust components and with the help of the unique double layer vacuum brazed wire. This directly leads to greater efficiency, as well as benefitting from an increased wire life of up to 70%, which is achieved by increasing the cutting speed and lowering the vibrations and wire contact time.

All these factors have enabled Hilti customers to now perform complex decommissioning applications on their own, giving them more flexibility and thus more productivity. In effect, with Hilti's innovative solutions, companies in the decommissioning industry can successfully accomplish their applications much faster, with much higher safety and much lower waste than they ever could before. They are also able to increase their productivity and profitability and decrease risk to their workers and to the environment.

Case studies prove Hilti's value

The Hilti decommissioning solutions are becoming recognised by an increasing number of influential companies in the nuclear and offshore industries thanks



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GENERATORS
VARIABLE GENERATORS
WELDING GENERATORS
MAGNET GENERATORS
MAGNETS
INSTALLATION VALVES

POWER WASHERS
STREET WASHING UNITS
PIPE CLEANING UNITS
DUST SUPPRESSION
DRILLING FLUID PUMPS
FIRE FIGHTING SYSTEM

AIR COMPRESSORS BIN WASHING SYSTEM POWER BOOSTERS POWER TAKE-OFF VIBRAS ETC.



DYNASET COM

PDi special feature





to a number of projects that have been successfully accomplished. One such example involved a development for one of the main nuclear players in France. Here Hilti had to build a solution for miscellaneous dry steel cutting in a nuclear power plant with a maximum material size of 2.5m x 2.5m. The solution that Hilti developed is a bespoke portal wire saw with a cutting gap of 2.5m x 2.5m. The dry cutting is done with a vortex wire cooling system and closed loop Hilti vacuum brazed diamond wire. To maximise the productivity, several options were mounted on the machine such as CutAssist technology, vertical cutting in two directions and a walking platform for easy wire replacement.

For another renowned player in the nuclear industry in Slovakia, Hilti had to develop two of the same bespoke portal wire saws for miscellaneous steel cutting of the primary and secondary circuit in a nuclear power plant. The bespoke portal wire saws that Hilti have developed have a cutting gap of 2.5m x 2.9m and can be moved horizontally on rails to move the saw over the work piece. Both saws are mounted in containers for contained wet vertical cutting with a water collection and filtration system. They are both used with closed loop Hilti vacuum brazed wire to cut materials with a high density.

Another major company working in the nuclear decommissioning field in Germany had a large project where a number of steam generators and other miscellaneous steel components needed to be cut in situ. The steam generators had a diameter of 4m and steel wall thickness of 200mm with 16,000 steel tubes inside. For this complex application, Hilti designed a bespoke wire saw for dry horizontal cutting which can be held by an

overhead crane. To guarantee that the largest cut could be done with one wire, the bespoke wire machine was equipped with wire storage for a closed loop wire of 173m in length and vortex wire cooling. For the same customer, Hilti also designed a modular portal which can cut various steel components with a maximum size of 4m x 4 m or 6 m x 4 m. This machine was designed for dry horizontal and vertical cutting with vortex wire cooling. The horizontal cuts can be performed by the electric translation and rotation table which is positioned under the portal saw. Both of the saws are also equipped with walking platforms for easy maintenance and wire replacement.

For offshore and civil contractors, Hilti has developed and built a full range of machines and consumables for underwater operation. The machine can be operated from a vessel but also by ROV.



oped another bespoke portal wire machine for one of the key players in nuclear decommissioning. The machine will be used in Sellafield, one of the biggest global nuclear decommissioning projects in recent years. The portal wire saw with its cutting gap of 2.5m x 2m has been developed for vertical and horizontal dry cutting. With its wire storage it can handle miscellaneous big steel components which are brought to the machine by the rotation and translation table. Whilst cutting, most of the cutting chips are caught by the swarf plate. Thanks to its nuclear paint the machine can also be chemically decontaminated.





Automated Pile Cutters

Improved occupational safety

MotoCut Cutters are excavator attachments that are operated from the cabin, so there are no risks of falling piles, dust or HAVS issues.

Excellent quality cuts

Compared to manual cutting, MotoCut cutters offer even five times higher productivity. Cutting results are predictable and cut-offs can be reused.

MotoCut Pile Cutter for concrete piles



MotoCut Plasma Cutter for steel piles and pipes



Motocut Concrete Pile Cutters & Steel Pile Cutter



Q-350 Up to 350mm (14")



Q-400Up to 400mm (16")



Q-350SFull cut up to 350mm (14")



Q-500SFull cut up to 500mm (20")



P-400 Steel piles and pipes Up to 400mm (16")

'Hbox+' the new lighting tower from Himoinsa

Low fuel consumption, long running time and 600h service intervals are the cornerstone of the new Hbox+ lighting tower that incorporates innovative connectivity features and a two cylinder Yanmar (Himoinsa's parent company) engine.

The latest Himoinsa model is part of a portfolio of new lighting towers and is equipped with a Stage V engine, manufactured in Europe and designed primarily for the European rental market. The new design represents advances in connectivity, efficiency and safety, being unveiled at Matexpo, Belgium. With a light capacity of 210,000lumens, the Hbox+ incorporates 4 x 350W LED spotlights (50X50 SMD chip technology) and has a hydraulic mast that reaches a height of 8.3m and can rotate through 360° for optimised light coverage.

The Hbox+ incorporates a Yanmar 2TNV70 two cylinder engine with optimised fuel consumption of less than 0.55l/h. It features a large capacity tank with a running time of 400h.

The lighting tower incorporates a LED dimming control that regulates the intensity of the light with a progressive start up with dimming, thus avoiding glare, mainly when the lighting towers are operating in road construction. A 'CET8' controller offers an intuitive, user friendly interface to ensure simple and reliable use of the machine. It includes an automatic working mode (start/stop), engine run/stop, mast up/down and lamps on/off, as well as a reverse mode when the stop is activated. The control system has been developed with the user experience in mind, with the controller coming with a joystick to raise and lower the mast. It also includes a stability control system that does not allow the machine to run until it is perfectly level. This means that there are a wide range of possibilities for interaction between the user and the controller depending on the user's level of expertise. It also includes 'CAN BUS', which means it can connect to the 'C2cloud' fleet management module to provide remote control of the units, as well as planned hybrid and 100% electric variants.





BROKK INTRODUCES 'PEDESTAL BOOM'

The new Brokk Pedestal Boom is a compact, stationary breaker boom system for the mining and aggregates industry. The new range allows producers to apply the power and precision of Brokk's demolition robots to primary breaking tasks that feed mobile crushers, jaw crushers, gyratory crushers and grizzlies.

The Brokk Pedestal Boom pairs Brokk's three part arm system with 360° slewing for versatility in underground applications. The unit can be operated with either a tethered remote or from a control room. Depending on network configuration, the machine can be manoeuvred from over 2,000m away using video monitoring and operation to increase safety and efficiency. At the same time it features a rugged design and compact footprint continuing Brokk's tradition of powerful solutions for confined spaces. The new development, along with other solutions, was displayed at MINExpo, 13 – 15 September, in Las Vegas, at Brokk's booth 1155 in the North Hall.

"Brokk saw an opportunity to give our customers a better solution for breaking oversize rock in crushing and grizzly applications. We've developed technology that is powerful, compact, flexible and easy to install," said Martin Krupicka, president and CEO of Brokk Group. "The new Brokk Pedestal Boom provides a plug and play solution that is perfect for underground spaces with low headroom or other space constraints. We are leveraging our 45 years of experience and proven technology platforms to create a smart, safe and user friendly solution."

The Pedestal Boom is based on the proven arm system and power pack of Brokk's demolition robots. The machine body is then mounted on a pedestal, rather than tracks. This allows the machine to be installed in a stationary position next to a crusher or any area where primary breaking is needed. Unlike existing breaker boom options, Brokk says its Pedestal Boom system integrates the power source and arm for a compact breaking solution with just a single power cable. No external power pack or hydraulic hose connection is needed. Model sizes for the range include the 200, 300, 500 and the 900 Pedestal Boom, with the latter capable of producing 3,050J/Nm at a rate of 330-680b/min with the 'BHB 1500' breaker.

In addition to a streamlined design for easy setup, the Pedestal Boom offers flexibility in underground and confined space applications. Its three part arm design allows users to reach closer to crushers and manoeuvre in as little as 180cm of height clearance. This, paired with the unit's slewing capabilities, means operators can maintain the best angle against the material for efficient breaking. The compact and flexible three arm system also makes maintenance and switching attachments easier, especially in areas with space constraints.

All systems are remotely operated and feature Brokk's 'SmartRemote' technology. The 'Standard Remote Operation' solution features ergonomic remote control, intuitive controls and professional grade radio technology with a 300m working range. Additionally, 'Networked Remote Operation' allow operators to control the robot while sitting in an office, which depending on network configuration, can be located over 2,000m away. The machine is connected and operated over Ethernet or Wi-Fi. The standard video option includes two cameras on the machine and an ergonomic operator's desk with integrated controls and video screen. Upgrades are available including additional cameras for better visuals and optical zoom cameras. One control system can be paired with up to six Brokk Pedestal Boom systems.

The Pedestal Boom comes standard with a corresponding BHB hydraulic breaker for optimal efficiency and breaking capacity. Brokk says its design enables operators to use 100% of the breaker's potential with minimal wear and tear on the carrier with the same applying to the new Pedestal Boom product range. In addition to the breaker, the Brokk Pedestal Boom works with grapples, drilling attachments, and more.

Worker safety is a major focus for many companies and Brokk actively searches for ways to make every aspect of our customers' processes safer," Krupicka said. "Over the years, our demolition robots have helped mechanise a number of high risk, heavy labour tasks such as scaling, drilling and secondary breaking. The new Brokk Pedestal Boom range addresses one more challenge, enabling customers to efficiently complete work without any health and safety risks."

Komatsu Europe introduces the PW98MR-11 wheeled midi excavator

The Komatsu PW98MR-11 tight-tail excavator bridges the gap between compact and construction sized machine for a wide variety of applications. It has been designed to offer lower fuel consumption, improved operator comfort and fast access to all service positions.

The PW98MR-11 meets EU Stage V emissions regulations, with no need for AdBlue. It comes with what Komatsu says are first class operator comfort levels, smart safety initiatives and intuitive ergonomics for improved performance, controllability and ease of maintenance. "This perfect match between size and performance efficiency was a focus for Komatsu designers," says Alex Visentin, product manager for Compact Wheeled Excavators. "The operator can concentrate on the work in front of the machine and worry less about rear swing impact in confined areas; this makes the machine exceptionally versatile, with the lowest running cost in its class, without the expenses of an SCR system. On the European market today, no other manufacturer can guarantee such a unique combination."

Proportional joysticks on the excavator have been designed to facilitate job versatility while providing precise attachment control and standard high flow auxiliary hydraulics. Optional Komatsu integrated attachment control also grants versatility whenever there is a need to manage a variety of attachments. The operational concept aims to enhance operator control of the machine with travel direction, undercarriage attachments, and manual/



automatic axle lock being able to be actuated by switches on the control joysticks or the dashboard. Without removing a hand from the right joystick, the operator can switch its function from boom operation to undercarriage control for precise control over the parallel dozer blade.

The PW98MR-11 is said by Komatsu to possess 'an unrivalled lifting performance', with its combination of power, dimensions and control making the PW98MR-11 ideal for heavy duty lifting applications, or simple excavating tasks in narrow alleys, road construction sites and sewer construction work sites. Its swing boom design allows digging parallel to buildings or barriers and the protected two piece boom cylinder grants safe truck loading operation. When working on

slippery and uneven surfaces, the standard 100% differential lock on both axles provides direct traction for enhanced mobility on any jobsite.

With growing demand for environmental solutions, and urban areas becoming increasingly sensitive to emissions, the PW98MR-11 EU Stage V wheeled midi excavator provides users with the opportunity to participate in any tender, demonstrate environmental credentials and 'future proof' investment. Komatsu 'ICT' contributes to the reduction of operating costs by assisting with the comfortable and efficient management of operations, being designed to raise the level of customer satisfaction and the competitive edge of Komatsu products.



SMART TANK CUTTING

For cutting the sheets that make up the supporting structure of a tank, a traditional shear is often not the most suitable equipment. It is therefore necessary to have equipment with a specific profile to facilitate penetration and makes clean and precise cuts to tanks, silos, cisterns and so forth. Trevi Benne's MK system has specifically designed 'mouth geometry' to cut sheet metal plate whilst advancing slowly and progressively, both vertically and horizontally, leaving a space for the release of the cut metal.

In Grancia, Canton Ticino in Switzerland, a Swiss contractor dismantled eight steel tanks using the Trevi Benne 'Multi Kit MK 23P Processor' equipped with booster and 'CL' tank shear kit. The 1960s built storage facility, owned by Pina Petroli, is one of the largest in Switzerland, with its main tank having a capacity of 33M/l of fuel, measuring 46m in diameter and 19m in height with a plate thickness of 15mm. The modus operandi, replicated for all the tanks of the property, was to eliminate the cover from above using a Hitachi ZX 470 excavator with a 30m high reach boom equipped with a 'Multi Kit MK 18P' and a 2t 'CS' shear kit. The operator chiselled the entire upper part of the tanks and then attacked the steel walls - up to 15mm thick - removing them working 'in a ring way', from top to

bottom. By engraving the walls vertically, at intervals of over 2m, the skilled operator then horizontally cupanels of transportable dimensions at the base. Once the huge tanks have been demolished, the area will be used for the construction of industrial warehouses for the nearby commercial area.

The Trevi Benne MK Series Multi Kit Processor is a multi-functional tool consisting of a universal body for attaching a variety of interchangeable demolition kits with an innovative system. This means that there is no longer a manual exchange, but a fast hydraulic one, without the need for removing any structural pins. This TZI-Lock' system allows the replacement of kit on site with a single operator in less than 3min. The addition of an impact booster valve, as with the entire 'Premium' demolition line, enables the multiplication of power (the working pressure of the excavator), reaching a peak of 750bar, starting automatically when the material to be demolished offers great resistance. With the use of tools equipped with booster, reducing the opening/closing cycle of the jaws on site translates into gained time and a substantial increase in productivity.

weighs 2,585kg and has an opening width of 315mm.

www.trevibenne.com



A major flooding caused unprecedented damage in the German Ahrweiler district in mid-July this year. Using Lindner's mobile Urraco 95DK universal shredder, the Kockmann Company has helped with the clean-up efforts on the ground. For this very special application, recycling specialist Lindner contributed the rotor, the beating heart of the shredder, free of charge.

n July 2021, the Ahr River burst its banks and sent water surging through the local area, causing great damage. More than 140 people died in the flash floods with a further 17,000 suffering severe damage to their properties. When the disaster recovery workers arrived on the scene, they were confronted with a picture of utter devastation, with bulky waste clogging the streets and mountains of driftwood piled up on the banks of the Ahr. Many volunteers come to support the hard hit population. Among the helpers is the waste management company Wertstoff-& Recyclinghof Kockmann from Ochtrup, 250km away, with company CEO Martin Brinkschmidt personally delivering Lindner Recyclingtech's Urraco 95DK to help with the clean-up operation.

"That's more or less how I imagine a war zone to be," said a deeply affected Martin Brinkschmidt after his arrival at the flooded area, with collapsed houses, washed away bridges and lots of rubbish. "There is a lot to do. We are dealing with the mountains of driftwood. Lindner specifically sent us two technicians to personally install the powerful and robust LW-10.10 twin shaft cutting system, which is also perfectly suitable for bulky waste wood."

"When our customers set out to help in a disaster area, we are more than happy to support them," says

Wulf Schellwanich, sales manager at Lindner Recyclingtech. "Our Urraco mobile shredder is inherently versatile and can be used for wood, waste wood, metal and bulky goods. Each material has different requirements and



The severe weather also devastated Dümpelfeld. (Copyright Lindner)

the twin shaft cutting system we install in each Urraco is adapted to the specifics of the input material. In the beginning, we didn't know how to best support the disaster relief efforts on the ground. When the Urraco was called in to shred driftwood, we immediately dispatched an installation team to make the shredder fit for the specific requirements."

The Urraco's twin shaft cutting system is incredibly resistant to non shreddable items, which is critical in situations like these. The driftwood in the flooded area is mixed up with mud and stones as well as materials such as mattresses, metal grates and other objects that were washed out of homes. The specifically designed pull-in rippers' ensures that the material is shredded with maximum efficiency. The rippers pull the material into the rotor with special hooks, achieving continuous material feeding and a consistent throughput quality.

"The material we shred is very special, heavily soaked, muddy and rich in minerals. In terms of power and performance this is not a challenge for the Urraco. We shred more than 50t/h of material, and we do that 12h to 14h a day, seven days a week," says a satisfied Brinkschmidt. Although the clean-up has been in full swing for over a month, the Kockmann employees will probably remain on site with the Urraco for another two to three months and further support clean-up efforts.



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Doosan has launched the first of the company's new generation of medium sized Stage V compliant excavators - the new DX225LC-7 23t crawler model. It is also the first Doosan excavator of this size to feature Doosan's innovative 'D-Ecopower' virtual bleed off (VBO) technology, providing operators with higher productivity and lower fuel consumption.

n addition to what Doosan says are higher performance and cost savings, the DX225LC-7 excavator offers new features as standard. Many of these are common to other new medium sized excavators which are set to be launched in the near future and build on the design of the previous generation machines. The new features are said to provide major enhancements in machine controllability, versatility, operator comfort, uptime and return on investment, with a strong focus on increased productivity and robustness.

New heavier counterweight for work with tiltrotators

The DX225LC-7's new features include a 4.9t standard counterweight particularly suited for working with heavier attachments, such as tiltrotators. The heavier counterweight also contributes to higher lifting and digging capacities compared to the previous generation model. The DX225LC-7 also incorporates as standard a new lifting eye that forms part of the casting for the push link for the bucket attachment at the end of the arm. The new lifting eye has a maximum capacity of 5t and has a special bush insert to prevent deformation of the lifting hole. Complementing the increased stability provided by the new counterweight, is a new smart hydraulic system that offers an improvement of around 30% in attachment work compared to previous excavator models. The new system applies a smart hydraulic logic for optimal distribution of the hydraulic flow rate when both the arm and attachment are working simultaneously.

New tiltrotator mode and swing function

The new tiltrotator mode on the control panel in the DX225LC-7 can be selected to ensure an optimised hydraulic flow and helps to maximise the accuracy of tiltrotator work by eliminating back pressure. This new mode is a special two way flow mode, but it is managed by the 'EPOS' like a one way flow mode, with direct return to the tank in each direction, to avoid back

pressure and increase flow and controllability. Another standard new feature is the 'fine swing' function which minimises the shaking that a lifted object undergoes at the start or stop of a swing movement with the excavator. This has been designed to increase worker safety and to prevent damage caused by the object falling from the excavator. Additionally the cab provides high levels of spaciousness and ergonomics. Key new features in and around the cab include a new 203mm touch screen, DAB audio (hands free and Bluetooth), smart keyless start system, a cooling seat with seat belt warning alarm, parallel wiper system, new design pedals, improved air flow for defrosting and air conditioning.

Doosan D-Ecopower and new engine

Doosan's D-Ecopower technology utilises an electronic pressure controlled pump within a closed centre hydraulic system, aiming to accomplish increases of up to 26% in productivity and 7% in fuel consumption improvements, depending on the mode selected. A closed centred main control valve minimises pressure loss, while the electric pressure controlled pump manages



and optimises engine power more effectively. Improved feedback to the operator through the joystick results in improved machine control and less operator fatigue. The acceleration and deceleration of the excavator workgroup functions are smoother, allowing operators to perform repetitive swinging and digging motions with less jerking movements.

To meet Stage V engine emission regulations, the new DX225LC-7 excavator is powered by the latest generation Doosan 'DL06V' diesel engine which offers a new solution to exceed Stage V regulations without exhaust gas recirculation. This is combined with 'DOC/DPF+SCR' after treatment technology to ensure minimal emissions. Thanks to the new technology, maintenance of the diesel particulate filter (DPF) has been greatly reduced, with no maintenance required until the machine has operated for 8,000h.

'SPC3' smart power controls and telematics

With the DX225LC-7, Doosan has tried to ensure that productivity and environment protection are truly compatible. The enhanced fuel efficiency of the DL06V engine in combination with a new hydraulic main valve and the new generation SPC3 smart power controls provide increased fuel saving of 7% in the 'S' mode and +6% in the 'P+' mode when compared to the previous generation machine. These are two in a range of four power modes now available on the DX225LC-7, which help to simplify the operation of the new excavator when compared to the more complex choice of eight power modes and SPC combinations in the previous generation machine.

The new DX225LC-7 model is factory installed as standard with Doosan's state of the art 'DoosanConnect' wireless fleet monitoring system. This system offers a web based fleet management solution which is very useful for monitoring the performance and security of machines and promoting preventative maintenance. It is available as a standard feature on all new Doosan excavators (from 14t), all new Doosan wheel loaders and Doosan ADTs.







Roy Johansson was one of the first pioneers in robotic demolition to help teach American contractors the benefits of the technology. After 36 years working for Brokk demolition in New York, he has returned home to the old country of Sweden.

his is the fifth time since 1996 that our publishing house has written about Roy, as in 1996 PDi's Swedish sister publication, Professionell Demolering, wrote about him. Over the years some five articles has been published in PDi, PD and also the US magazine PDa. Roy Johansson has made a fantastic journey in the demolition industry since the 1970s when remote controlled demolition robots were a unique innovation.

The circle has closed

With this article about Roy Johansson, you can say that the circle has closed. He was born in 1951 and grew up in the small town of Lilla Edet, north of Gotheburg. He started working in the demolition industry for the contractor Besab in Gothenburg in the 1970s. A few years later, he opened a branch for Besab in the city of Karlstad and in 1981 he started with a colleague the company Rivteknik in Karlstad AB. Rivteknik was Sweden's biggest chain of demolition companies at the time. During this time, remote controlled demolition robots began to become more common in demolition in Sweden as well as abroad.

Roy fully embraced the technology and over the years became an expert in working with demolition

robots, mainly the Brokk brand (then called Holmhed Systems). In addition to Brokk, the DMX brand was found on the Swedish market. Holmhed Systems gained market share at a furious pace and its products were also exported to other markets. It was when Brokk began to be sold to the American market in the 1980s and early 1990s that business began to flourish in earnest. However, when Brokk robots began to be sold in America,



The bridge in Fjällbacka.

operators who knew how to handle the machines were needed. Roy had gained experience working with Brokk from his time at Besab and Rivteknik. He joined colleagues who had already crossed the Atlantic to try their luck in the US demolition industry, including Thomas Lundström, Hans Roland Johansson and Roland Jarl.

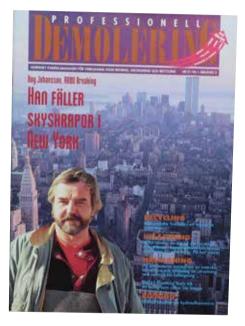
Holland Tunnel breakthrough

The real breakthrough for Brokk in the United States came in connection with the renovation of the Holland Tunnel that connects lower Manhattan with New Jersey under the Hudson River. The renovation work started in 1983 and, amongst other things, Brokk robots were used to remove the cladding on walls and ceilings that were damaged by water. Roy's colleague, Roland Jarl, decided to travel over and help with the work and shortly afterwards Roy also moved. The year was 1984: "There was basically as much work as possible in the tunnels, including in Manhattan and around New York, and demolition robots became a bit of a revolution in demolition work," says Roy.

After being involved in the successful demolition job in Holland Tunnel, there was basically as much work as possible for Roy. For two years, Roy worked for the demolition company Beaver, among other companies.

In 1993, owner Marvin Livson decided to retire and offered the business machinery to his son in law Mitch Schumer and Roy. In January 1994, the new company Robo Breaking Company, Inc. was formed, based in Port Chester, just northeast of Manhattan.

Robo Breaking worked mainly in and around the area around New York with most jobs being in New York, but also saw operations throughout the US. At its peak the company operated 36 Brokk robots employing around 20 people. Robo Breaking also collaborated and shared premises with the concrete cutting firm Concrete Cutting Company in Port Chester, which at the time was run by Jeffrey Billington and now by his son Charlie. Port Chester is located right next to the Atlantic Ocean



Roy on the cover of Professionell Demolering in 1996.



The 1996 article about an exhilarating life as a demolition contractor in New York.

with Long Island across the strait, being about half an hour from downtown Manhattan. In the late 1980s, Roy's son Roger, who still lives in the US, also moved to the United States and was employed for a time by a demolition contractor.

Roy particularly remembers the events around 9/11 when two passenger planes crashed into the Twin Towers skyscrapers in Manhattan. PDi's editor Jan Hermansson was in New York at this time and could see up close the devastation when both the skyscrapers fell and over 3,000 people died. "It was a terrible event that shook the whole United States and the whole world. I remember being in a boat on the Long Island sound the evening before and that was the last time I saw the two towers standing in the horizon. We worked a lot with the reconstruction in the area around what is today called Ground Zero," says Roy.

However, it was in the work of clearing up and rebuilding around Ground Zero that Roy suffered some work related injuries. He worked in the subway stations under Ground Zero and the air was polluted which caused damage to his lungs. "It eventually became difficult to work with the actual demolition tasks and in recent years I have instead monitored the work and worked with a lot of transport of equipment within the company," says Roy. When Roy made the decision to retire, he sold his share in the company to his colleague Mitch who now runs the company.

Longed for Sweden

Roy has enjoyed his years in the USA very much, but always sought to return to Sweden. Since November last year, Roy has been living permanently just outside Fjällbacka on the Swedish west coast. "It feels fantastic to be back home in Sweden again. I still have my mother who is 87 years old and my daughter Ellinor and her family in Gothenburg. I also have siblings at



In Fjällbacka Roy enjoys life close to his family with mother in Lilla Edet and daughter in Gothenburg.

close range. But I also miss my son and grandchildren in the United States and sometimes also the constant pulse in New York that was my everyday life for several decades," smiles Roy.

Roy Johansson has been a fantastic ambassador for demolition using Brokk robots. Brokk was founded in 1976 and Roy was one of the first entrepreneurs to invest in the technology and helped show the Americans how to tear down structures with the Swedish demolition robot. "It has been a privilege to be involved in, and on five occasions, document the Brokk legend, Roy Johansson's professional life over the years," says PDi editor Jan Hermansson.



In 1997 Professionell Demolering took a group of Swedish entrepreneurs to the USA and visited Robo Breaking, amongst others. From left: Hans Wibell from Wirob, Magnus Karlsson and Magnus Bergman from Bergslagens Betongteknik, Robert Hietanen from Wirob, Roy Johansson from Robo Breaking, Jan Hermansson from PD and Jeffrey Billington from Concrete Cutting Company.



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Ecomondo and Key Energy 2021 focuses on the green challenges of Africa and Europe

Experts from the European Commission, innovators, international and national authorities, representatives from the world of science and universities, decision makers and investors, will all gather from 26 to 29 October, at Rimini Expo Centre in Italy, for Ecomondo (24th edition) and Key Energy (14th edition).

These two shows of ours are green economy and renewable energy leaders in the Euro Mediterranean basin. They present products and compare projects for the global green challenges that every country has been called upon to resolve, particularly those on the African and European continents," explained Corrado Peraboni, CEO of IEG- Italian Exhibition Group,

IEG's Green & Technology group exhibition manager, Alessandra Astolfi, adds: "The African embassies of Algeria, Egypt, Morocco, Tunisia, Ruanda and Kenya, to name but a few, will be represented at the trade shows, as well as companies, associations and delegates from the aforementioned countries and from Europe, to further their know how, develop networking and finalise business agreements." The 2021 editions of Ecomondo and Key Energy are aiming to ignite an authentic debate and business platform, further enriched by one to one meetings, which international operators and companies will be able to organise prior to the event.

Besides the exhibition area, which will occupy all the Expo Centre and is the core of Ecomondo and Key Energy, the two shows will also feature 150 seminars and conferences, many of which are international and in English. These will be officiated by Professors Fabio Fava and Gianni Silvestrini, both heads of their respective scientific and technical Committees. The main theme will be the Mediterranean basin as part of the 'BlueMed Pilot' initiative and will see the participation of the European Commission, with the event set to illustrate production and plastic recycling strategies for a clean sea and for the recovery of degenerated ecosystems and habitats. Other events will deal with the topic of the circular bio economy proposed by the Mission Soil Health and Food Mission Board to ensure that 75% of soils are healthy by 2030. Workshops on plastic waste transformation will further highlight the opportunities



of pyrolysis systems as well as the legal obstacles that are still blocking these types of technologies.

Within the context of Key Energy, the opening conference will offer the chance to shed light on the opportunities for Italy linked to the PNRR, (National Recovery and Resilience Plan), on incentive policies for energy transition and the assessment of their impact in Italy. The Africa Green Growth event, in collaboration with ITA (Italian Trade Agency) will directly involve institutional representatives and African associations from Kenya and Ruanda, as well as Italian companies in Sub Saharan Africa to highlight the future role of wind energy in the African continent's energy mix. In line with the events, the electricity sector at the centre of European actions to re-launch the economy, institutions and European associations, will meet with Italian interlocutors to define the best strategy to fulfil the 'Green Deal'.

This year, running alongside Ecomondo and Key Energy, will be SAL-VE, the biennial Environmental Motor Show, organised by IEG in partnership with ANFIA (Italy's automotive industry association). This will see an exhibition of a large range of vehicles and fittings for urban hygiene, street cleaning and solid and liquid waste collection and transportation.







"Change has always been a constant in the construction and demolition industry. Contractors, workers and project managers pushing for safer, more productive solutions have transformed the modern jobsite that relied predominantly on manual labour to a streamlined operation dominated by hard hitting machines," so says Jeff Keeling, North American sales and marketing manager, Brokk Inc.

eff explains further: "In today's competitive market, methods that rely on manual labour are unsustainable; in terms of worker safety, productivity and overall cost effectiveness. Instead, successful contractors are supplementing experienced crews with machines that increase efficiency in a number of areas. This mechanisation has allowed the industry to continue to thrive and meet challenges, such as safety concerns, environmental issues and shrinking workforces, head on. Within demolition, remote controlled machines provide an innovative mechanical solution, enabling contractors to continue moving forward despite ever changing industry conditions. These machines also pave the way for new opportunities in industries such as processing, concrete cutting, mining and tunnelling."

Non-stop productivity

On a demolition jobsite, where the use of handheld pneumatic breakers and other highly physical methods have been commonplace, employing a remote controlled demolition machine can revolutionise productivity. Thanks to advanced technology, and what Brokk says is an industry leading power to weight ratio, these compact machines can access some of the most restrictive jobsites, including those with dust, vibration and noise restrictions as well as low floor loads. At 790mm wide and weighing 560kg, the most compact units are small enough to fit through standard doorways and light enough to be transported on passenger elevators, making them ideal for confined spaces and interior demolition projects. A number of larger models — up

to 11,793kg — are available for projects where power is more important than footprint.

Regardless of size, the demolition robots provide impressive hitting power, on par with excavators three times their size. This allows contractors to greatly increase efficiency by employing heavy hitting machines in applications previously limited to large crews with handheld equipment. Jeff explains; "For example, one contractor cut the demolition crew by a third on a recent interior demolition with two 990kg remote controlled demolition machines. The robots, each with a single operator, were able to access floors where even skid steers were deemed too heavy. With minimal labour requirements, the contractor could better utilise employees across simultaneous jobsites while increasing



Remote controlled units physically distance employees from harmful silica dust, as well as the strong vibrations of handheld equipment such as breakers, rivet busters and chipping guns.

productivity and lowering overall labour costs."

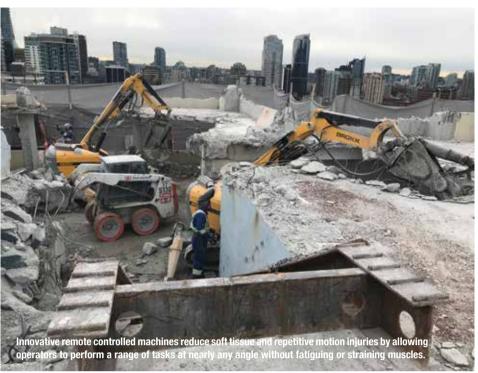
In addition to replacing large crews with handheld equipment, remote controlled demolition machines with the right attachments can also do the job of several common compact machines allowing contractors to increase productivity without expanding their fleet. Innovative manufacturers offer a number of attachments, such as rock drills, buckets, scarifiers, planers, concrete crushers, drum cutters, metal shears, grapples and many more, to help contractors streamline jobsite logistics and increase efficiency across the board.

The benefits of increased productivity and versatility from remote controlled demolition machines translates into more jobs, lower overheads and a bidding advantage for contractors in a number of applications, including concrete cutting. For example, removing an elevated floor using traditional concrete cutting methods starts with adequate shoring, for safety, followed by sawing the floor into workable pieces before removal and crushing at another location. "Instead (of this), one contractor was able to revolutionise his process with remote controlled demolition machines. Taking advantage of the lightweight robot's compact size and a crusher attachment, crews were able to break the floor into small enough pieces to safely drop onto the ground below. This process eliminated the need for shoring and allowed crews to complete the work twice as fast. It also reduced labour and parts costs, enabling the company to cut overall project costs by two thirds, which, in turn, provided a significant bidding advantage in a competitive market," explains Jeff.

PDi reports



Thanks to advanced technology and an industry leading power to weight ratio, compact demolition robots can access some of the most restrictive jobsites.



Leading safety levels

For many in the construction and demolition industry, increased safety is perhaps as important as productivity benefits when it comes to mechanisation on the jobsite. "Again, remote controlled demolition machines are at the forefront, maximising safety by removing operators from many of the most dangerous situations," says Jeff. Social distancing and other preventative measures to stem the spread of Covid-19 are also currently at the forefront of contractor safety concerns. For companies using remote controlled demolition machines, the reduced crew requirements make it easier to follow recommended safety guidelines.

There are also a number of long standing safety and health risks remote technology can help alleviate. With an operating distance of up to 300m, remote controlled units physically distance employees from harmful silica dust, as well as the strong vibrations of handheld equipment such as breakers, rivet busters and chipping guns. Long term use of these common demolition tools is linked to a number of chronic injuries, including carpel tunnel syndrome, nerve damage and hand arm vibration syndrome. These health concerns affect a large number of construction and demolition workers, which is reflected in compensation claims and insurance premiums for employers.

Additionally, remote controlled demolition machines help prevent one of the most common causes of serious work related injury and death in construction - falls. Recent U.S. Bureau of Labor Statistics data identified 338 fatal falls to the lower level among 1,038 total construction fatalities for the year. A remote controlled unit allows operators to remain a safe distance from ledges and other fall hazards. This provides peace of mind for workers and project managers, but also increases productivity by minimising the need for erecting fall protections.

Another common jobsite safety risk where remote controlled machines can offer relief is mounting and dismounting equipment. While the cab of an excavator

or other compact equipment protects operators from dust and flying or falling debris, climbing into or out of these machines is a leading cause of jobsite injury for employees, resulting in sprains, strains and other minor ailments. Remote control demolition machines eliminate this risk by allowing operators to remain safely on the ground and outside the immediate work zone. Innovative machines with an advanced three part arm and 360° rotation further reduce soft tissue and repetitive motion injuries by allowing operators to perform a range of tasks at nearly any angle without fatiguing or straining muscles. "An ergonomic, lightweight control box conveniently attached at the waist also helps," says Jeff.

For contractors using remote controlled machines, these safety benefits can quickly add up to significant savings on compensation and insurance premiums. Remote operation paired with smaller crew size can significantly lower worker liability costs by limiting personnel in confined spaces or hazardous operations. "One concrete cutting contractor who made the switch to demolition robots nearly two decades ago has seen a decrease in annual compensation claims by about 50%, thanks in part to the reduced physical strain provided by these machines," says Jeff. "The company has also seen a 25% decrease in injury costs per year. Another concrete cutting operation reduced its experience modification rate, or EMR, along with workman's comp claims with the addition of remote controlled demolition machines." Insurance companies calculate EMR based on a company's safety record and using it to gauge future chances of risk. Higher EMRs result in higher insurance premiums.

Crunching the numbers

The desire to reduce injuries and insurance premiums has driven an industry wide trend toward mechanisation. "One in 10 construction workers are injured annually. In 2018, this resulted in €145.81B in total cost and 103M total days of lost production. A company facing €46,000 in losses from injuries, illness or damage, must

sell an additional €1.5M in services just to remain profitable. But, those who have made the switch to remote controlled demolition machines have found the benefits go far beyond money," says Jeff.

In today's competitive job market, finding and retaining skilled workers has become a major challenge for construction and demolition operations. At the heart of the labour shortage are two key factors: an aging group of current employees and fewer young workers interested in entering skilled trades. However, despite these shortages, the demand for demolition continues to grow, leaving contractors with a perfect storm of plentiful work but not enough hands to carry it out.

"Here again, mechanisation offers an innovative solution. In addition to safety and comfort features that allow existing employees to remain on the job for longer, cutting edge robotic technology is attractive to younger workers. For one concrete cutting company, including advanced robotic technology in their fleet helped reduce the median age of their 300 strong workforce to just 25 years old and cut (employee) turnover (by) 10%. The machines also allowed the contractor to do more work with fewer people, increasing productivity 17% over three years," added Jeff.

More jobs in more places

Mechanising with remote controlled demolition machines provides significant growth potential for contractors. Increased productivity opens up opportunities for consecutive projects and better workforce utilisation, while the machine's unique capabilities offer the chance to expand into new markets and applications. "There's no way to accurately predict what tomorrow's jobsite will look like, but, for successful contractors, factors such as productivity, safety and profitability remain evergreen. Mechanisation allows these companies to quickly adapt to changes in labour, process or regulation, keeping them ahead of the curve and the competition," concluded Jeff Keeling, North American sales and marketing manager, Brokk Inc.





Allu has announced that it has acquired a business license in China to establish its own entity to manufacture and operate from. This expansion reflects a strategic commitment to enhance market position and improve service to its customers. Expanding its position in the Chinese market is key to Allu's strategy, providing a unique opportunity to deploy Allu's management

system to create value through what the company says is operational excellence.

Peter Grönholm, managing director commented, "The opportunity for growth and manufacturing in China is fantastic. We have a clear strategy and are continuously developing our network and always looking at improving to help the customers' requirements. Our people are at the heart of what we do and safety is one of our key values. The new operational facility gives us the strength we need to invest in the future for the region by providing competitive products." Allu China Co., Ltd. is headquartered in Kunshan, China, and shall be recruiting in the short term for its manufacturing site.



Cold cutting technology for use in explosion-hazardous areas

Tyrolit has introduced what it says is a revolutionary ATEX certified wire saw system that complies with the current EU directives 2014/34/EU. The company states that it provides safe, fast and economical working in potentially explosive atmospheres.

Tyrolit has stated that it is now the first company to introduce an ATEX certified diamond wire saw system for Zone 1 explosion-hazardous areas. 'Atmosphères Explosibles', abbreviated to ATEX, is the European Union's explosion protection directive, which regulates compliance with the basic health and safety requirements for machines and protection systems for proper use in explosion-hazardous areas. The cold cutting technology enables the implementation of complex projects in chemical plants and oil facilities, for example. After extensive testing by GexCon in Norway, DNV granted Nemko Presafe the corresponding certification for Ex Zone 1, II 23G IIA C T3 in 2017.

The system has now been adapted according to the current standards, recertified and complies with the current health and safety directives according to 2014/34/ EU for equipment and protective systems intended for use in potentially explosive areas.

Tyrolit's system consists of a 'Premium SB' hydraulic wire saw and DWS-S galvanic sawing wire for steel, with the ATEX certification being extended to cover the protective cabin. This contains connections suitable for the PPH40RR drive as well as an ATEX certified remote control, and is thus optimally suited for companies that do not yet have an ATEX certified unit and would like to use a versatile drive.

Safe, fast and efficient

In environments where there is a risk of explosive gases, the innovative wire saw system can be used to cut pipes and other steel structures. A significant advantage of



the Tyrolit system is the ability to use drives that are already certified. This means that users only need to obtain the

approvals, permits and authorisations required for the work process, which significantly cuts the costs and time involved in preparing for work.

Interaction of the components

The ATEX certified system comprises of the Premium DWH-S diamond saw wire, Premium SB hydraulic wire saw as well as the ATEX certified protective cabin with PPH40RR. These component parts are optimally coordinated to provide the best cutting results in explosive working environments. The galvanic Premium DWH-S ATEX saw wire for steel and non-ferrous metals delivers excellent cutting performance combined with a long service life. Its specially optimised bead assembly and the bead count, ensure extremely smooth running. Due to the robust design, a high degree of safety can be provided even when meeting the highest demands and the most complex situations. The DWH-S saw rope has been newly certified with yellow rubber, which enables better visibility during underwater operations.

The 'SB Offshore' hydraulic wire saw, 'Hydrostress', has large wire storage in a small space as well as high power transmission and performance thanks to a multiple pulley drive. Integrated rope pulleys provide the option of deflection in all directions, while the hydraulic rope tensioner delivers smooth running. For easy and fast working, the rope storage can be reduced and enlarged without additional tools. The ATEX certified protective cabin has a remote control and is suited for companies that want to use a versatile system together with the PPH40RR drive. The 40kW PPH40RR drive provides the optimum cutting speed thanks to its four stage control and is easy to use thanks to the radio remote control.

Pioneer in diamond wire technology

Tyrolit's latest development is based on many years of experience in the production and application of diamond wire saws and wire saw machines. The ATEX certified wire saw system enables the Austrian company to expand its portfolio and now offer systems for potentially explosive atmospheres. The company's solutions are also ideal for use in such applications as during renovation, demolition of bridges, buildings and many other large scale reinforced concrete components.

New 'Smart Attach' fully hydraulic quick-hitch system from Kramer



Kramer-Werke GmbH has unveiled a new, fully hydraulic quick-hitch system, Smart Attach. The patented development has been designed to provide flexibility and productivity when changing attachments.

Kramer's Smart Attach is an enhancement of its well-known quick change plate. This has been a standard piece of equipment for wheel loaders since 1963 and is still an effective system. The new quick-hitch system has the same dimensions, enabling existing attachments to be used. Hydraulically driven attachments can be coupled with the new system without getting in and out of the vehicle, as connection with the hydraulic circuit is automatic. The attachment is locked and hydraulically coupled, with automatic pressure release by a simple touch of a button, with a secure two hand operation. With the coupling unit's integrated locking display, the operator can always see that the attachment is attached to the machine successfully and securely. For

all machines already fitted with the new quick change plate, the display also features a corresponding illuminated indicator. The company states that what makes Smart Attach so special is its flexibility as attachments without the hydraulic function and attachments with the conventional hydraulic coupling system can still be used.

Kramer also provides the EC declaration of conformity for the entire system, for both machines and attachments. Initially, the system will be offered as an option in the large '5-Series' as well as for some machines in Kramer's premium '8-Series'. As well as the attachments already factory fitted for these machines, corresponding retrofit kits will also be provided ex works to enable existing attachments to be fitted with the system. The fully hydraulic quick-hitch Smart Attach system is said by the company to be an innovative and sustainable enhancement, highlighting Kramer's continued focus on flexibility, durability and quality.







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EvoQuip, a compact crushing and screening brand with products that focus on simplicity, easy maintenance, fuel efficiency and ease of transport, recently celebrated five successful years in business via a virtual hour long celebration attended by almost 100 distributor representatives from around the world.

Launched at Hillhead in 2016 to bring a simplified range of equipment to the crushing and screening industry, EvoQuip has grown from strength to strength to become a major compact crushing and screening brand. Starting out with the 'Bison 35 crusher', which is said to be capable of 30t/h, EvoQuip continued to introduce innovative products with the 'Cobra 290R', which is now the biggest crusher in its range, capable of 320t/h. On the screening side, EvoQuip's products have evolved ranging from the 'Harrier 220', a small yet robust machine designed for recycling, composting, topsoil, landscaping, and contract building industries, capable of 90t/h, to the highly aggressive scalping screen 'Colt 1600', which was built upon the features which have made the 'Colt 1000' a global success. The Colt 1600 is the largest screen in the EvoQuip range and can process up to 661t/h, depending on application.

EvoQuip's range has also developed to include tracked mobile conveyors, high and low level feeders and radial stockpilers, all designed to work alongside its range of crushing and screening equipment. More recently, hybrid offerings, designed to give customers alternative energy options to operate their equipment and digital solutions, such as 'T-Link' telemetry, provide customers with real time information on the performance of the machine, have been at the forefront of EvoQuip's evolution to address emerging industry needs.

EvoQuip would not be the success it is without its loval dealers and customers. While the brand started off in 2016 with just five dealers, this has since grown to 44 dealers from around the globe. This growing distribution network alongside attendance of exhibitions such as ConExpo, bauma, World of Concrete and Hillhead continued to strengthen the brand, showcasing its offering to global audiences.

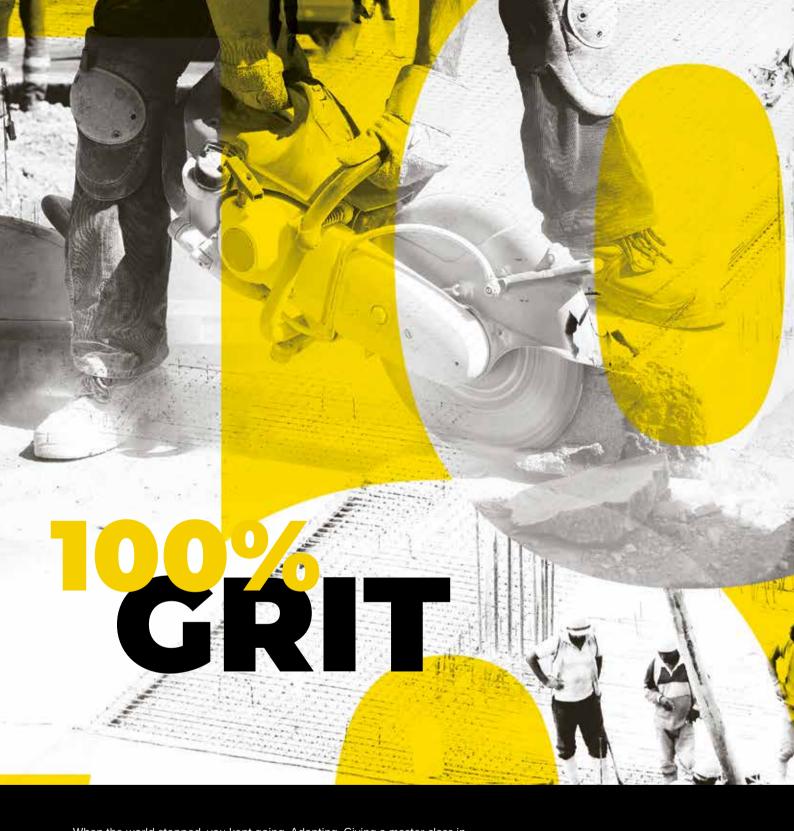
Due to the Covid-19 pandemic, EvoQuip had to change initial celebratory plans for its milestone from an in person

event to a virtual one. Hosted by Northern Irish actor and comedian, Tim McGarry, dealers were treated to a personalised EvoQuip song, a timeline of the last five years, a live quiz where some of the team members' knowledge was put to the test, a raffle and the first ever EvoQuip Dealer Awards.

The EvoQuip Dealer Awards included several categories such as Global Leader in Industry Growth and Customer Support and Rental Business Growth, to name a few. Among the winners were Mobile Screening and Crushing (MSC) from New Zealand which won Global Dealer of the Year. MSC is a strong dealer in all areas and engage extremely well with the EvoQuip team. It achieves sales targets, has a strong online presence and is wholly invested in the EvoQuip brand. It is a partnership that will continue to flourish and grow.

Speaking of the last five years, Barry O'Hare, business line director, EvoQuip said, "EvoQuip brings value to customers by providing intuitive equipment that is simple to operate and maintain, fuel efficient and easy to transport. User friendliness is at the heart of our brand and as new products have been developed, the focus has always been on simplicity and entry level customers. Since joining EvoQuip over two years ago, I have seen the business grow from strength to strength and we couldn't do that without our global distribution network.

"It is with the dedication of the EvoQuip team and the relationships we have built with our dealers that has enabled us to grow and maintain our place at the forefront of the compact crushing and screening world. I'd like to thank our dealers and customers for their support over the last five years and together we look forward to the future. There are some really exciting, innovative products in the pipeline and with the help and expertise of our distribution network, we will continue to grow and dominate the global compact crushing, screening and conveying market."



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EXHIBITS: JANUARY 18-20, 2022 EDUCATION: JANUARY 17-20

LAS VEGAS CONVENTION CENTER

PDi site report



Kemroc KDS 50 diamond saw dismantles historic aircraft

When no economical reason could be found for saving it, a 65 year old Boeing 707-400 was scrapped at Hamburg-Fuhlsbüttel airport on 10 June 2021. To break the aircraft down, Thelen Industrial Demolition GmbH (TID) decided to use a Kemroc diamond saw attachment mounted on its own material handler. Some of the more valuable sections are due to be auctioned off in September.

With a buzzing sound, the diamond saw cuts through the left wing of the old disused Boeing 707-400 at Hamburg Airport. The outer end of the wing has already been cut off, and the operator cuts through the thin aluminium wing on the inner side of the engine. This is not a testing task for the powerful attachment mounted on the telehandler belonging to Thelen Industrial Demolition GmbH (TID). The forks of a telescopic forklift have been placed under the jet engine to prevent it from falling once it has been cut free from the rest of the aircraft. Final separation of the jet engine is carried out using a shearer and the engine is then lowered, strapped securely and transported away.

Cutting with precision

"We fought with the engine for an hour," reported Jens Hamann, head of the Hamburg branch of TID. He had rented the Kemroc diamond saw from Tristan Vierbergen, an ex - colleague who is now managing director of Arvi, a Dutch supplier of demolition tools. TID had won the contract to scrap the 46m long aircraft by cutting it into segments and saving historically valuable components for sale by auction in September 2021.

The KDS range of diamond saw attachments from Kemroc were developed for cutting through concrete, reinforced concrete, rock and fibreglass reinforced plastic. High rotation speeds combined with a large variety of saw blades make them highly effective in a wide range of applications. The KDS 50 mounted on TID's Cat MH 3024 telehandler made light work of the aluminium

components on the Boeing 707. "Dismantling the Boeing correctly required precision tools, so it made sense to use the Kemroc diamond saw, which is known for its precision," said Jens Hamann, explaining the logic behind his choice of attachment.

Auctioning each component

The jet aircraft era started for Lufthansa in 1960 with the Boeing 707 aircraft. In the same year, the aviation company took possession of the aircraft named 'Frankfurt' and known with the identification 'Dabod'. It made its last scheduled flight a good 15 years later. The aircraft was then based at Hamburg Fuhlsbüttel Airport and used for training technicians. In 1999, the airport purchased the aircraft for a nominal amount of €1 and it was then used for exercises and as a film set. When the upkeep costs became too expensive, the owners tried to auction the four engine jet as a whole but no buyer

was found. The decision was then made to dismantle the aircraft and auction off individual components.

Thelen Industrial Demolition specialises in industrial assembly, dismantling, demolition, asbestos removal, environmental technology and fire damage restoration throughout Germany. On 10 May 2021, exactly one month before the deployment at the airport in Hamburg, TID employees had scrapped a discarded Boeing 707-400 at Berlin Tegel Airport. In Berlin they had used shears and a grapple. Jens Hamann said that both Boeings were scrapped in different ways, but the time to complete the work was about the same. "In Hamburg, the diamond saw proved to be very precise, allowing us to cut out the largest possible sections of the Boeing 707 in their original state, thereby maximising the value of each component at auction. Certainly, we can imagine using the Kemroc diamond saw attachment for similar tasks in the future."





PDi site report

Rye Group targets 90% reduction in fuel emissions

A leading provider of demolition, remediation and ground and enabling works has substituted its use of standard red diesel with HVO (Hydro-treated Vegetable Oil) at its site plant and machinery, to proactively reduce fuel emissions and inspire industry change. Headquartered in Flitwick, Bedfordshire, Rye Group is committed to delivering its own sustainable standard philosophy, which targets the reduction of carbon emissions from all site equipment by 90% over the next two years.

Working with national fuel and lubricant provider, New Era Fuels, Rye took delivery of its first tank of HVO and immediately began using the fuel in its machinery located at the Kodak factory site in Harrow. On delivery, Rye's managing director, Simon Barlow, and safety, health, environmental and operations director, Ben Griffiths, met with the managing director of New Era Fuels, James Hunt, together with the Howard Button from the National Federation of Demolition Contractors (NFDC), to discuss the positive impact HVO could have on the environmental credentials of the wider demolition industry.

Howard Button, chief executive of the NFDC stated: "As an industry we need to play our part in tackling climate change and we are expecting all NFDC member organisations to make every effort to switch to HVO by



December 2022. It is encouraging to see such a respected organisation as Rye make this big step in reducing their carbon emissions. We are proud of all NFDC members taking responsibility and making changes to decarbonise their business operations. It was also great to meet with New Era Fuels, who have just joined the NFDC as an industry service provider member, providing valuable services and expertise regarding the usage of low emission fuels in the demolition sector."

Made of used cooking oil and supplemented with an organic additive, HVO reduces carbon emissions by 90% and NOx emissions by 30% when compared to diesel. New Era's HVO Green D+ was chosen by Rye Group due to the sustainable nature of its production. The fuel is fully certified back to source to ISCC standards, in line with the Renewable Energy Directive. Rye is committed to improving its environmental impact, building on its

recycling and reuse rates and other sustainability measures it is deploying. As one of the first demolition contractors to roll out HVO across its fleet, Rye hopes to lead the way and be a positive influence across the industry.

Simon Barlow, commented: "We are hugely excited to have taken such a significant step to reducing our environmental impact. As an organisation we are heavily focused on making a positive difference wherever we work, so it is fantastic to be able to transfer our fleet from diesel to HVO. We will accelerate the roll out over the coming weeks to maximise the benefit we deliver." James Hunt, added: "Simon and the team at Rye have really championed the use of HVO and are leading the way in the industry. We are delighted that they have chosen to make the transition to HVO and work with us to manage the roll out across their extensive fleet of plant and machinery."







RUSSIAN DEMOLITION FORUM

BECOMES A MUST VISIT EVENT

On 7 September 2021, the second edition of the Russian Demolition Forum (RDF) took place at Holiday Inn Moscow-Sokolniki. With some 160 delegates in attendance, the conference/exhibition was a big step up both in terms of turnout and organisation. PDi's Andrei Bushmarin reports from Moscow.

espite being only two years into its existence, the Russian Demolition Forum is growing fast and furious. The brainchild of Artem Kondratiev, it provides a showcase for cutting edge demolition, recycling and concrete sawing projects and acting as the meeting place for

the Russian Demolition Association, 'NADO'. The premier edition that occurred in February 2020, right before the first wave of lockdowns, proved a success and showed that the Russian demolition community has become mature enough to embrace the most advanced techniques and practices and to acknowledge

the need for a set of common rules and standards for all industry players.

Growth on all fronts

This year's version of the RDF outdid its predecessor in every aspect with overall attendance being up by







Joe Brinkmann of South Africa-based Jet Demolition captivated the audience with fascinating tales of doing demolition work under extremely challenging conditions in a truly unique country.



Anna Chtorkh, International Development Manager with France-based decontamination expert CURIUM.



(Left) Dumitru Dziuba, VTN Europe and (right) Andrei Bushmarin, PDi magazine.



The AT Machinery team – an Italmek and Okada dealer in Russia.



(Left) Igor Malceff, General Manager of Arden Equipment Russia.



(Left) Alexey Krasnikov, General Manager of AT Machinery.

some 30%, with the number of companies increasing to 70 (from 60 previously) and the number of exhibitors doubling from 6 to 12. Restrictions imposed on international travel by the pandemic notwithstanding, industry professionals from 10 countries came to the forum to present case studies and exhibit their most recent innovations. One can't help but be impressed by the sheer geography of the congregation with speakers from Europe, North and South Americas, Middle East and South Africa sharing insights about the way the

demolition industry works in their countries with an attentive audience.

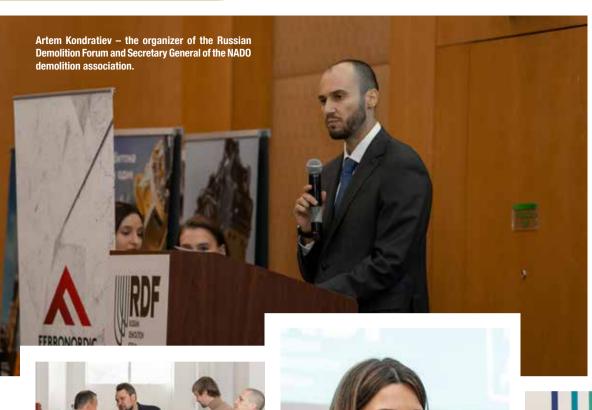
Split in four sessions, the twelve presentations covered a wide range of topics from industrial and civil demolition to decontamination and recycling to the latest advances in BIM (Building Information Modelling) software. Outside of the conference hall, there was an exhibition space for suppliers of machines and attachments featuring such world recognised brands as Volvo CE, Caterpillar, Liebherr, Case, Dynaset, Epiroc,

Demarec, VTN Europe, Arden Equipment, Italmek, Okada, Rotar and LaBounty.

A world class demolition congress

Organising an international gathering at a time when even travelling between two provinces of the same country might prove difficult is no mean feat, but Artem Kondratiev managed to pull it. As the forum's organiser and secretary general of the NADO association, Artem got the conference started with an opening address. It was

PDi reports



Sergey Melnikov (second from the left), area sales manager with Finland-based Dynaset, and the LaBounty/ Megarex team.

followed by welcoming speeches from the president of the European Demolition Association, Francesco Cobo Valero, and Anton Ananyin, NADO's vice president. Once the meet and greet part was over, specialist presentations ensued. Although every case study presented at the forum was informative and interesting in their own way, there were a few standouts. Joe Brinkmann of South Africa based Jet Demolition captivated the audience with fascinating tales of doing demolition work under extremely challenging conditions in a truly unique country. Born in Illinois, USA, Joe moved to South Africa in 1983 seeking adventure and became fully entrenched there. His company Jet Demolition focuses on large scale industrial and commercial demolition projects for multinational companies.

The delegates were equally impressed by a case study presented by Anne Mittelsdorf who is a member of the board and head of financial management of Germany based demolition specialist MB Spezialabbruch. She outlined the dismantling of a cooling tower at the nuclear power plant Mülheim-Kärlich, some 10km from Koblenz. MB Spezialabbruch's main expertise lies in controlled demolition of tall industrial structures such as stacks, chimneys and cooling towers. For this purpose, the German contractor has designed a unique fleet of equipment including the so called 'spider excavator' (owing its name to six height adjustable legs), and a follow up version, 'DriveBreaker' as well as exterior and internal 'climbing saws' which are essentially wall saws customised for cutting high tubular structures.

The delegates were equally impressed by a case study presented by Anne Mittelsdorf, Member of the Board and Head of Financial Management at Germany-based demolition specialist MB Spezialabbruch.

Anna Chtorkh, international development manager with France based decontamination expert Curium, talked about identifying and managing contamination risks when dismantling hazardous industrial facilities. Unable to attend the forum personally due to the travel ban on flights from Brazil, Fabio Bruno, CEO at Fabio Bruno Pinto, a Brazil based specialist in explosive demolition techniques, delivered a Zoom presentation describing demolition by implosion inside an operating petrochemical plant.











Anton Ananyin, NADO's Vice President and Head of the Committee for Legislative Initiatives and Interaction with Governmental agencies, head of Volgaspetsstroy company.



🔾 Epir



The pinnacle of the long and productive day at the RDF was a gala dinner and award ceremony. All entries were divided into seven categories - five for contractors and two for suppliers - that were reviewed by a panel of industry experts. In the category 'Industrial Demolition', the winner was Yekaterinburg based contractor GCC 'Reforma' for a job at the Ufaleinickel smelter, Russia's second biggest producer of nickel. The category 'Civil Demolition' had two winners: Moscow based heavyweight 'CrushMash' for selective demolition of a historic building in Russia's capital with retention of the facade wall, and LLC 'Technoservis' for demolition of a residential complex consisting of 44m high multi storey buildings in the city of Adler. Saint Petersburg based concrete cutting specialist GC 'Arasar' won the 'Diamond Technologies' award for renovation of a bridge over the Oka river. LLC 'Likvidator' from Lipetsk was chosen the best in the category 'Environmental Safety and Recycling' for underwater demolition of a gas pipeline. The 'Best Project' award was given to LLC 'Volgaspetsstroy' for a complex demolition job at the Voronezh nuclear power plant. LLC 'Stroitelnye Mashiny', a Case and Kocurek dealer in Russia, and LLC 'Hammer Rus' won the innovation awards in the categories 'Machines and Mechanisms' and 'Demolition and Recycling Attachments' respectively.

www.rusdemolition.ru www.demolition-nado.ru



Outdoor exhibition space.



The railing system from Baier is a fully automatic surface milling system for demanding tasks such as the dismantling of nuclear power plants with contaminated concrete or for precise floor markings at airports and train stations. As part of the dismantling, the contaminated lavers in the floor and wall area must be removed before the actual dismantling can begin. At the moment, the removal of coatings in the contaminated area is carried out by hand with abrasives with approximately 50,000 m² needing to be removed per reactor.

aier states that the decisive factor for efficient milling of the surfaces is the constant milling depth in order to remove the coating (thickness approx. 3mm) with one milling process if possible, or not to mill too deeply and thus not unnecessarily increase the amount of material to be disposed of, which would otherwise make disposal significantly more expensive. Baier's milling system is generally suitable for operations in which milling is carried out up to 50mm wide and 45mm deep and in one cut in reinforced concrete and all other types of stone. Surfaces to be milled often have unevenness (large spherical areas or depressions) that are reflected in the milling. This unevenness inevitably leads to a constant milling depth that cannot be guaranteed neither by freehand nor by a manually guided milling machine. This inevitably leads to rework or to higher amounts of waste.

Unevenness on the surfaces

The Baier system is suitable to minimise the working time of the employees in the contaminated area and to optimise removal. The unmanned use of the milling system enables longer working hours overall whilst the presence of personnel in dangerous areas is minimised. The surface milling system consists of a modular rail system with precise guidance for unmanned milling on ceilings, walls and floors. The precise guidance and the fast unmanned feed ensure a perfect line with minimal wear on the diamond discs. Wear is recorded using a diagnostic tool with the tool change therefore taking

place as required, in contrast to the previously practiced fixed change cycles. By reading out the work data, the worked area and the period of work can be recorded and can therefore also be reconstructed.

Unmanned removal of the contaminated material is said by Baier to increase efficiency whilst any abrasion is minimised, thereby reducing the amount of contaminated dust. Current machine tools are in part able to monitor some operating parameters, however, basic monitoring, recording and evaluation of all relevant operating parameters is not 'state of the art', especially in the case of hand held machines.



The assessment of the machine wear and the expected remaining service life of the machine components are currently carried out using simple tables or 'empirical values'. By using suitable sensors and cyclical recording of the operating parameters, after a sufficient data-base has been created, a classification and evaluation of this data using an AI would be conceivable. This should go hand in hand with a maximisation of the service life with a corresponding reduction in running costs and resource savings.

Sustainability (economical - ecological - social)

Significant reduction in the amount of disposal is achieved, as only the defined layer of the contaminated area is milled off. According to calculations by the engineers in the NPP, a 50% reduction in the amount of waste is expected. If only 1 mm too much is milled off on an area of 50,000 m², there would only be an additional expense of €2.5M in relation to disposal costs. In addition, no concrete must be removed together with the epoxy coating, as these then have to be separated again, which in turn increases the costs. A significant improvement of health and safety at work is experienced, as the milling machine is no longer being operated by hand and thus the stress on employees is greatly reduced. Furthermore, significantly higher efficiency can be expected, thus resulting in productivity being significantly increased and the time required is reduced. The machine can process 5m²/h, which Baier says is roughly 40 times more than by a human operative.



Material

Built of high performance

structural steel

Modern

Lowest fuel consumption and operational cost of cutting









OilQuick parts. As an OilQuick Clean System partner, Rotar has placed great emphasis on compatibility with original OilQuick couplers and the associated Clean System partner suitability.

The original OilQuick components ensure that the user receives the latest development stage from OilQuick, ensuring full compatibility and the highest possible operational safety, especially in connection with the essential safety systems such as the OilQuick locking control and the OilQuick drop protection. The Rotar ROQ adapter has been fully integrated into the attachment design by Rotar engineers with the support of OilQuick Germany. The hydraulic connections and hoses are included in the design. The rotator head section of these attachments has been completely redesigned and optimised for the integration of the adapter, meaning that the adapter can be placed directly on the slewing ring without requiring further assembly.

This very compact combination of attachment and adapter offers considerable advantages for the user. Depending on the size of the attachment, it can be up to 200mm shorter and 200kg lighter. This makes a considerable difference due to the more favourable centre of gravity of the attachment. This benefit is especially noticeable on high reach applications, as this design is lighter and closer to the excavator arm's suspension point than conventional adapters. Rotar dealers and customers can order the attachments complete and ready for use from the factory, with additional work and time to bolt on the adapter plate and install the hose connections being eliminated, saving time and service costs.

Due to the fully integrated hydraulic hoses, damage during hard demolition work is almost impossible. This increases operational safety and thus reduces operating costs and saves downtime on job sites as well. Due to the full integration of the adapter, a service inspection cover is implemented. This allows easy access to all

hydraulic components in the upper head section of the attachment, with no time consuming unscrewing of the adapter being required. In addition, all attachment parts used, such as hoses and screw connections and the original OilQuick hydraulic couplings, are standardised and documented in the spare parts manuals. This makes it very easy and quick to identify a component and replace it if necessary. All these measures aim to reduce maintenance and operating costs, increase ease of maintenance and provide maximum safety.

The Rotar ROO fully integrated hydraulic adapters are currently available as ROQ 60 / ROQ 70 / ROQ 70-55 / ROQ 80 and ROQ 90 for the Rotar series 'RCC' two cylinder concrete cutter, 'RDC' demolition combi shear, 'RDP' demolition pulveriser and 'RG' demolition and sorting grab as well as for the 'RSS' mobile scrap shear. Rotar also offers original fully integrated adapters for Steelwrist and Lehnhoff Variolock full hydraulic quick couplers. Other sizes and models are available on request.



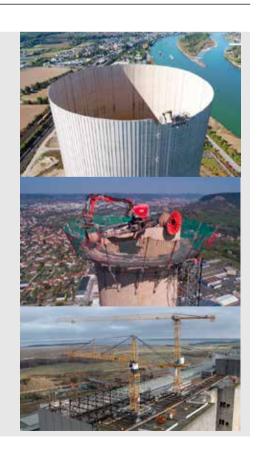
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GAINING GROUND WITH US!



DSM 800RC/DSM 650RC

- Suitable for very large areas, agile and versatile in use
- Maximum grinding ease: with theremote control always at a glance
- Ensure a uniformly high surface quality and maximum productivity
- Large selection of high-quality tools for perfect grinding results
- Versatile areas of application: grinding screed and concrete, coatings, renovations and much more
- For more light in the work area and perfect illumination of building sites



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