March/April 2019 Issue 55

Global News & Information on the Quarrying, Recycling & Bulk Materials Handling Industries



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CRUSHING SCREENING WASHING CONVEYING SUPERIOR COMPONENTS PLANTS TURNKEY AFTERMARKET

Superior Industries showcases new groundbreaking low-water sand washing solution at bauma 2019



At bauma 2019, Superior Industries offers a hands-on, up-close look at a new ground-breaking low-water sand washing system, which accepts dry feed directly from the crushing circuit, processes material into a higher-value manufactured sand, and cuts water usage by up to 80-percent.

As a U.S.-based, single-source, global supplier of bulk material processing and handling systems, Superior Industries has developed the AllianceTM Low-Water Washer as a cost-effective, eco-friendly solution to highly-efficient crusher fines management. Ideal for limited footprints and easily retrofittable to existing plants, this compact washing system reduces operating costs-per-tonne by significantly decreasing water use, while eliminating costly material re-handling and the need for material transport to a separate washing circuit.

Visit Hall B2, Stand 107

Within Superior's expanded bauma 2019 footprint – more than three times larger than their prior bauma displays – attendees will view the Alliance Low Water Washer, as well as the latest conveyor component innovations and more, at stand 107, inside hall B2. The Superior Industries team – including top executives, product engineers, and application specialists – will be available throughout the event to discuss specific processing strategies with producers, plant design engineers, and local distribution partners.

Rock Face to Load Out® solutions

Superior Industries product engineers will share processing solutions covering its complete line of bulk material processing equipment – from feeding, crushing and screening, to washing, conveying, stockpiling and loading.

"Because we design and manufacture equipment for every function of material processing, from Rock Face to Load Out, we're able to maintain the highest level of quality control," says John Garrison, vice president of sales for Superior Industries. >



Featured story



"Importantly, as a single-source supplier, we 'package' plant solutions far more effectively than those manufacturers who must rely upon outsourcing key plant components," he says.

"For example, at Superior, we manufacture our own Helix® Cyclones in a range of models so that we can package modular wash plants with the right cyclone for a given application," he says. Notably, he adds that Superior offers its new Spirit® Sand Plant in a variety of models to suit specific requirements. This flexible, modular washing and classifying plant combines the Helix Cyclone, with a dewatering screen, sump tank and slurry pump to create a single-plant-package capable of sand production, fines recovery and dewatering.

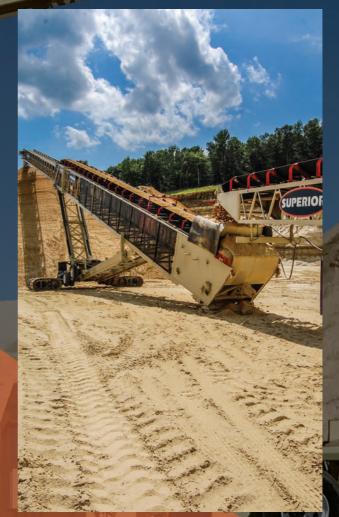
"Rather than providing 'off-the-shelf' products, Superior is keenly focused on modifying and fine-tuning processing solutions for precise market needs. Customers in European markets are looking for modular and skid-mounted solutions, portability, turnkey setups, user-friendly automation, serviceability, and local parts and service support," says Garrison.

Cost-efficient sand washing systems

Depleted sand reserves and environmental constraints drive a fast-growing demand for cost-efficient, targeted sand washing systems.

"As an alternative to conventional sand washing methods, Superior's Alliance Low Water Washer is particularly targeted to operations with dry crushing facilities or portable plants; or operations limited by a smaller footprint or available water resources," says John Bennington, a recognized washing and classifying expert who serves as the director of wet processing technologies for Superior Industries.

The system combines a specially-designed agitator and a dewatering screen within one machine. The agitator converts the material to a slurry before the integrated dewatering screen removes excess water leaving as little as 8-percent moisture in the discharged manufactured sand.



Bennington explains that the dewatering screen is outfitted with a series of spray bars that help to push the material down through the screen. "Using a sand screw requires lifting the silt over the weirs of the screw with high water usage. Alternatively, when the Alliance Low-Water Washer pushes the material down through the screen, up to 80-percent less water is needed," he says.

Featured story

Innovative components & optimum plant performance

"As one of the few manufacturers to develop and build both conveyor systems and conveyor components, our engineers are continually innovating component design for extended wear life, greater belt protection, and safe high-capacity performance," says Garrison. "Our cutting-edge components, combined with our knowledge of how best to design material transfer points, allows us to build the most clean, efficient plants, especially in portable or modular formats," he explains.

Superior Industries will display a sampling of its recent conveyor component innovations at bauma 2019, including:

- Chevron® Pulley a unique V-shaped wing pulley that extends belt and pulley life by preventing rocks and debris from becoming trapped between the pulley's wings. Compared to the conventional wing pulley, the V-shaped wing pulley deflects material far more effectively, while providing smooth operation with less vibration, less belt wear, less of an impact and load on the bearings, and less noise.
- Moxie® Rolls retrofittable idler rolls designed with a specially-formulated high-density polyethylene (HDPE) material that is highly corrosion-resistant and sheds material quickly. When combined with a seal design that protects against bearing damage, the Moxie Roll offers extended wear life and greatly reduces the frequency of roll replacement due to bearing failure and shell wear.
- High Performance DT Idler engineered for improved performance in high-capacity applications, its double-tube (DT) design features inner and outer tube construction for increased rigidity and bearing insulation.
- Exterra® SFL Dual Belt Cleaner features a patented blade design that's manufactured with a thicker profile and a beefier tip for more material at a scraper's point of attack. It's the first-and-only combination primary and secondary cleaning system to feature two blades on one mounting pole. Also, the system features a one-time tensioning system at setup, requiring no further tensioning during the life of the blade.

Distribution partners & aftermarket support

To exceed customer expectations, Garrison stresses that Superior is committed to maintaining long-term distributor partnerships and the highest levels of aftermarket parts and service support.

"While some manufacturers merely launch a product, Superior is dedicated to supporting that product from within the local market," says Garrison. "We've built successful distributor relationships in many international regions. Our target at bauma 2019 is developing new dealer partnerships throughout Europe, the Middle East, and Africa (EMEA)."

To jumpstart dealer and product development, industry veteran Michael Dunne joined Superior in 2016 as its EMEA business development manager. Based in Northern Ireland, Dunne brings more than 20 years of bulk material processing equipment experience to the table. He works closely with producers, dealer partners, and the Superior Industries product

development team to establish design standards and processing solutions that meet the needs of the EMEA markets.

"Our dealer partners play a major role in the product development process. We're seeking distribution partners with application-savvy sales and service teams and long-term customer relationships. In partnership with local dealers, Superior Industries designs, builds, and relentlessly supports equipment targeted to the specific market, customer, and application," says Garrison.

Continuous growth - then & now

Superior Industries was founded in 1972 by Neil Schmidgall and his wife Linda as a company which repaired, built, and improved portable plants and conveyors for sand and gravel operations in Minnesota. It was entrepreneurship passed on from prior Schmidgall generations. Neil's grandfather established Hancock Concrete in 1917, and Neil's father formed Schmidgall Sand and Gravel in 1940 — an initiative that inspired Neil's passion for the aggregate industry.



Then and now, continuous growth is the heart of Superior Industries. In 1974, Neil began manufacturing both conveying systems and their components, creating a single-source strategy that remains today as an ongoing catalyst for growth. Add to that a culture of customer service, opportunity, innovation and long-term relationships — and the potential for solid growth is virtually unlimited.

The 1990s marked stunning creativity and engineering expertise with the design of new material handling and portable plant technologies that revolutionized the market. Into the new millennium, product development remained at the forefront, followed by strategic acquisitions, and unparalleled industry leadership.

Enter today's Superior Industries — a global company with worldwide customers and distributor partnerships, and a company that's proud to manufacture the highest-quality equipment for every part of the process flow — from rock face to load out.



The JCB Wastemaster range offers 36 machines purpose built for waste and recycling operations. This means that your choice of machine is now greater than ever, and with over 11,000 machines working in waste worldwide, we understand the importance of round-the-clock support.

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Welcome to issue 55 - all roads lead to Munich!

With only a few weeks to go the show is gearing up for seven days of business and looks certain to maintain its title as the 'World's Leading Construction Machinery Trade Fair' – The heartbeat of the industries it represents!

This issue contains our bauma 19 preview and details of what the companies in our industries are exhibiting at the show.

Back in the UK we have the Let's Recycle Live show in May, followed by Plantworx in June and the RWM in September; so lots to do, lots to see.

We will of course be at all the shows flying the HUB flag – see you in Munich!

John Edwards

Editor



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Terex Trucks gears up for bauma 2019

Terex Trucks' recently updated TA300 articulated hauler will soon be making its first international tradeshow appearance at bauma Munich 2019.

Visitors to the bauma 2019 exhibition in Munich, Germany, will have the chance to get up close to the newly upgraded Terex Trucks TA300 articulated hauler. This will be the first time the machine has been displayed at an international trade show and it will take pride of place on the company's outdoor stand: FN 720/9. The Terex Trucks team will be at the event, which runs from April 8th to 14th, to show visitors how the company's two articulated haulers - the TA300 and TA400 - deliver low total cost of ownership and high productivity at jobs including large-scale construction projects, infrastructure developments and quarries.

Undivided attention

"Bauma is the world's leading construction machinery trade fair, and as such, it's a showcase of virtually every machine in the industry – but for Terex Trucks, it's all about the articulated hauler," says Paul Douglas, Managing Director of Terex Trucks. "The articulated hauler is the only product Terex Trucks manufactures – so therefore we're able to focus all our attention on this machine. We are the experts in all things articulated hauler. That's one of the key messages we want to get across at bauma 2019: we specialize in

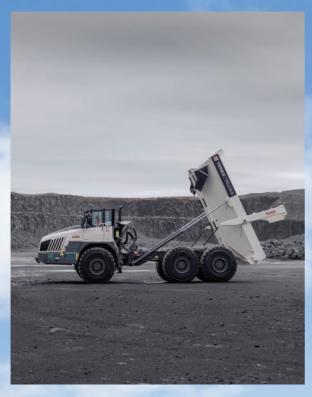
network. All of this, which is underpinned by our longstanding expertise in the field, has helped us to make sure our articulated haulers are even more productive and reliable. Terex Trucks is the strongest it's ever

"Having recently launched an updated version of the TA300 that boasts improvements in fuel efficiency, performance, productivity and operator comfort, we see bauma 2019 as the perfect opportunity to display the hauler in front of a global audience," continues Paul. "As well as this, we'll also be using the show as a chance to inform people about our TA400, which is the biggest articulated hauler we make. In terms of maximum payload, it's 10 tonnes (11 tons) bigger than the TA300."

Since August, the TA300 has incorporated the new EP320 transmission, which comes with two additional forward gears - eight in total - as well as four reverse gears. This helps to ensure smoother gear shifting and thereby superior operator comfort. In addition to this, the TA300 now delivers a 5% improvement in fuel efficiency, as well as enhanced performance,



Cover Story



productivity and operator comfort. It also now comes with long life transmission fluid, which has helped to increase the length of time between oil maintenance intervals from 1,000 to 4,000 hours. The hauler's

maximum speed has also increased to 55 km/h (34 mph), up from 50 km/h (31 mph). Ultimately, this means that customers can achieve faster cycle times, reduce the cost of operation per tonne and minimize their fuel consumption. "The TA300 is one of our staple products, hence why we worked long and hard to make it even better for our customers," says Paul. "The upgraded TA300 was rigorously tested for nearly two years internally and by operators on real job sites, working in a variety of conditions."

Growth in Germany

A glimpse into its latest products won't be the only thing that Terex Trucks will be offering at bauma 2019. The Scottish manufacturing company will also be hosting a press event for representatives of the international media on April 11th at 4:00pm. Paul Douglas, the company's Managing Director, and his team will be on site to discuss product news, market conditions and future plans. "Terex Trucks is currently expanding its presence in key markets and that includes Germany as well as the US and France," concludes Paul. "We already have three well-established dealers in Germany but we're looking to sign more — particularly in the east and north-east of the country. Bauma will be a good opportunity for us to meet and attract new customers and dealers."







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CDE, the industry-leading solutions provider of wet processing equipment, today officially opened its new global headquarters in Cookstown, Northern Ireland. The Centre of Excellence will provide a world-class environment for over 400 team members.

The new facility is the world's largest campus dedicated to the wet processing of materials in the sand and aggregates, mining, construction and demolition waste recycling, industrial sands and environmental sectors.

It will enable CDE to continue to expand its workforce in line with its current growth plan and will provide the company with a base to create a dedicated Innovation Hub later this year which will house the most advanced laboratory in the wet processing industry. This state-of-the-art laboratory will ensure CDE continues to develop industry leading products and enable their customers to extract maximum value from their resources.

The new Centre of Excellence is now home to the world's largest engineering team dedicated to wet processing technologies and provides a great environment to continue our pursuit of sustainable innovations within a New World of Resource. Sean Kerr, Chief Operating Officer at CDE, says that the facility is an ideal environment for the team to continue to thrive, "Our new headquarters in Cookstown is a perfect base to continue to expand and develop our highly-skilled engineering team with more than 600 years of combined experience. It will support the team in continuing to deliver consistent world-class, bespoke solutions for our customers."

"Having all of our engineers based in the one facility will help us enhance our solutions, products, processes, communication and team working for the benefit of our customers. Being agile as a company has been central to our success, and our new headquarters has been purpose-built to ensure that continues into the future," he adds.

CDE Managing Director, Brendan McGurgan, said: "As we continue to see strong growth in markets around the world for our range of wet processing equipment, our new headquarters provides an outstanding base from which to expand and develop our business and our workforce. We believe we have created a highly advanced facility that matches CDE's excellence, ambition and reputation."

CDE Chairman, Tony Convery, added: "Our goal is to deliver a consistent, world-class service to our customers and we now have a world-class headquarters from which to do that. It is somewhere that we are very proud to bring customers to from around the world, and which will help us to continue to recruit the very best engineers and people in the industry."

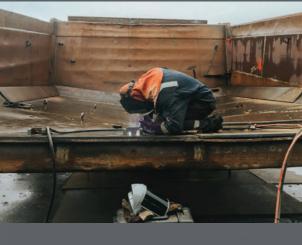
The new headquarters features the latest technology to maximise the creativity and productivity of staff. Importantly, the new space will support collaboration and team-working, which is crucial to delivering the new ideas, products and innovations that will drive CDE's future growth.

For more information about CDE, visit cdeglobal.com.



News









Thanks to Miller, Banks Mining was able to reduce machine downtime and get the 150t machine promptly back into action. "This was a large and complex repair and it made sense for us to use Miller's expertise for this project. They offered us a free onsite inspection as well as an impressively quick turnaround, which has helped us to reduce our downtime", said Andrew Palmer, plant supervisor at Banks Mining. "Miller offers a fantastic repair service and boasts a wide skill-set, while it's also a positive for us that they are a fellow north east company, as working with them ties in with our policy of investing in the local supply chain wherever possible'. We have been so happy with the job that they have done, we got a second CAT 785 skip collected by Miller and work has begun for another full overhaul," he added.





JCB is heading an industry-wide initiative aimed at improving health and safety within the waste and recycling sectors.

In partnership with the Chartered Institute of Waste Management, Biffa, HW Martin Group, EU Skills, Mentor Training and Waste Masters Hire, JCB has produced a series of five 'WasteWise' films that promote the safe and efficient operation of handling machinery at waste sites.

The films are available to watch, free of charge, via YouTube and other social media platforms from mid-February 2019.

Each video runs for approximately 10 minutes and focuses on the simple steps that machine operators should take to optimise on-site safety and productivity every day.

The films are dedicated to specific machines in the JCB WasteMaster range and cover essential pre-shift checks, basic maintenance routines and guidance on visibility and ongoing machine management.

David Banks, JCB's Sales Manager — Waste and Recycling Sector, said: "JCB is the single biggest provider of handling equipment to the UK waste and recycling market and the new 'WasteWise' videos are part of JCB's commitment to improving health and safety across the nation's waste and recycling plants.

"A steering group was formed with a diverse range of partner companies and organisations representing the sector to help highlight the key issues and some of the challenges facing the industry are addressed in the films."

He added: "The videos are designed to help develop a heightened sense of responsibility among machinery operators working in the waste and recycling sectors. We hope to create an understanding of the fact that, by taking a few simple steps, operators can greatly reduce the likelihood of being involved in an accident.

"The films also show how basic routine vehicle maintenance checks not only improve on-site safety but also contribute to significant reductions in machinery operating costs and, over the lifetime of a machine, will help to sustain residual values and, therefore, minimise total cost of ownership."

The JCB machines featured in the 5 'WasteWise' films are: the 550-80 telescopic handler; the Teletruk 35D; the JS20MH material handler; the 437 wheeled loader; and the 5CX back hoe loader.

David Banks added: "The 'WasteWise' films are designed to be complementary to existing training programmes. The content encourages operators to take responsibility for the machines they work with. By doing so, they will make life safer for themselves and their colleagues."



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The 60,000th crawler excavator by Liebherr-France SAS in Colmar

- The R 922: A machine from the latest generation of crawler excavators by Liebherr
- · Special panels designed by the Alsatian artist Jean Linnhoff
- · The Liebherr Group's historical production site in France

Colmar (France), 4 March 2019 - On Friday, Liebherr-France SAS presented the 60,000th crawler excavator to all its staff. The R 922 from the Liebherr Group's latest generation was equipped with special panels designed by the artist Jean Linnhoff especially for this occasion and to mark this historical moment.

The 60,000th crawler excavator to be produced at the Liebherr-France SAS site in Colmar was presented on 1st March. As a model from Liebherr's latest generation of crawler excavators with an





operating weight of 22 tonnes, this machine will be on show in April at the bauma trade fair in Munich and then at various Liebherr authorised dealers and sales partners in Belgium, France and Luxembourg.

Designed by Alsatian artist Jean Linnhoff

The Liebherr operator's cab remains white, while blue has been chosen as the background colour for the R 922 excavator as a reference to its country of origin, France. The illustrator and graffiti artist Jean Linnhoff from Colmar designed the panels, harmoniously combining graphical elements and design. To come up with his design, the artist spent six days working in a separate room at the Colmar site under conditions of strict secrecy.

The text "A coeur" (literally: "To heart") on both sides of the machine alludes to the collaborative partnership with the Alsatian Tourism Agency (Agence d'Attractivité de l'Alsace). A

world map across the entire uppercarriage acts as a reminder that the crawler excavator is sold all around the world from the site in Colmar. Lastly, the company employees who contributed their expertise were also celebrated; they all wrote their name on the undercarriage.

Liebherr-France SAS: The company, founded in 1961 in Alsace, was the first Liebherr Group site in France

From mines in South Africa to marble quarries in Northern Italy, via the region of origin Alsace, to California, Canada and Indonesia: The Liebherr crawler excavator from Colmar is in use everywhere.

Liebherr-France SAS has been developing and producing crawler excavators at the historical site in Colmar since 1961. At the beginning, these machines were specially designed for earthmoving applications, while the range was later extended with the addition of machinery for the mining industry. Then in 2011, a dedicated production site with a clear separation between these two areas was established: Liebherr-Mining-Equipment Colmar SAS.

This new stage is symbolic of the company's long-term strategy and the combined expertise of this specific production site for Liebherr crawler excavators from 14 to 100 tonnes. The current model series is designed for earthmoving and mining applications, material handling, demolition work and tunnel construction.

The Liebherr Group in France currently employs around 4000 staff at various companies and production sites in the mining industry, at component suppliers, in the aerospace industry and in the construction sector.



From left to right; Sean Warburton (Molson Finlay), Morris Wightman (Finlay Scotland), Tom McNeill (Finlay Scotland), Robin Powell (Molson Group), Nigel Irvine (Terex Finlay), Jason Powles (Molson Group).

Omagh, Co. Tyrone - 14th March, 2019 Terex|Finlay are pleased to confirm that the
Molson Group have acquired Finlay Scotland
Limited, a long established equipment Dealer of
Terex|Finlay products in Scotland and the
Scottish Islands. Through this acquisition,
Molson Finlay have now successfully secured
the distribution rights for the complete range of
Terex|Finlay mobile crushing, screening and
conveying equipment across Great Britain. This
acquisition by the Molson Group follows on
from their recent purchase of Finlay Plant (UK)
Ltd in June, 2018, and the subsequent
rebranding of that business in England and
Wales to Molson Finlay in January, 2019.

The current Finlay Scotland Ltd Sales, Hire and Service organisations will remain unchanged. Aftermarket parts requirements will also continue to be provided by Finlay Scotland Ltd.

Kieran Hegarty, President - Terex Materials Processing commented;

"Molson Finlay are already a valued Terex partner, with distribution rights for Terex |Finlay and other Terex lines in England and Wales. The acquisition of Finlay Scotland Ltd allows us to strengthen our relationship with this vibrant and progressive business. Terex's continued success significantly relies on working in partnership with professional and customer focused Dealers. Molson have proved to be just that in the past and we look forward to growing further with them in the future. We are particularly excited with the benefits that this acquisition will bring, both for our customers across Scotland and for our own business. Synergies within the existing Molson Finlay organisation will provide the strength in depth required to consolidate the excellent growth achieved by Finlay Scotland Ltd in recent years.

Robin Powell, Managing Director of Molson Group commented;

"We are delighted to have acquired Finlay Scotland Ltd and look forward to welcoming their experienced and committed team into our expanding Molson Finlay organisation. The success of Finlay Scotland Ltd has been built upon a customercentric philosophy to provide innovative products, services and solutions to their local market. Their commitment and dedication to exceptional customer service directly correlates with our own culture and we are delighted that they have joined our team".

Tom McNeill, Managing Director of Finlay Scotland commented;

"Finlay Scotland Ltd is one of the longest serving dealers for Terex Finlay and can trace it's roots back to the days when the business was originally owned by John Finlay. Finlay Scotland Ltd has grown and flourished over the years thanks in no small part to the commitment and dedication of our team members who consistently provide an excellent service to our customers. We are very excited for the future direction and growth expectations for this operation and we look forward to ensuring a seamless transition of business for our staff and customers.

About Terex|Finlay:

Terex|Finlay have been manufacturing a comprehensive range of tracked mobile crushing, screening and conveying equipment for 60 years. Terex|Finlay are global pioneers in tracked mobile solutions and offer a comprehensive range of equipment to the quarrying, mining, construction, demolition and recycling industries. Our range of innovative machines are manufactured to provide efficient production, low operational costs and ease of maintenance. More information about Terex|Finlay is available at www.terexfinlay.com and on Linkedin, Twitter and Facebook.

UF1200 Feeder is ready for anything with new hopper options

New options deliver powerful and portable production at 650+ TPH

McCloskey's Highly mobile universal feeder, the UF1200, now offers a number of new options for producers in the aggregate and mulch industries.

Designed to suit a number of applications, the UF1200 can significantly enhance production levels with new hopper options for maximum versatility.

The UF1200 comes with a standard Tipping Grid, and now offers a number of options including:

- 13 yrd Aggregate Hopper with remote Tipping Grid & Spill Plate
- 15 yrd Aggregate Hopper with 2 ft Hopper Extension Tipping Grid, Spill Plate and Hopper Bridge
- 19 yrd Aggregate Hopper with Extensions
- 16 yrd Mulch Hopper Extensions & Transfer Chute

The UF1200 is also available with a Live Head. The stockpile height at 24 degrees reaches 4.0m (13'-3") making the feeder an efficient partner for stackers.

Features include:

• 1200mm (48") wide feed conveyor



- Tracked or wheeled for mobility on-site and from site to site
- 48" integrated stockpiling conveyor
- Fast setup time
- Ground level access for ease of maintenance and service.

"Offering more product solutions to our customers to help them achieve greater production levels is what drove us to design these new hopper options," said Paschal McCloskey, President and CEO of McCloskey International. "This increased versatility delivers better results in any application, and for customers, and that in turn delivers success."



With the signature Lindner solutions for waste wood processing and subsequent combustion, you can go the extra mile when it comes to productivity. The combination of our patented twin-shaft cutting system for shredding wood and the made-to-match Zeta Star series' screens ensure homogeneous particles and a minimum of fines with consistently high throughputs – now that's how to make the most of waste wood.



For more information: t: 01706 838246 sales@machtechservices.com





Visit us at Bauma 2019

Be part of Bauma 2019 – where we showcase Liebherr's latest advancements and prepare you for what lies ahead tomorrow. Visit the Liebherr stands and experience the newest industry developments and innovations first hand. **Together. Now & Tomorrow.**

April 8th to 14th - Messe München Outdoor area, Stand 809-813 Liebherr components, Hall A4, Stand 326 Liebherr attachments, Hall B5, Stand 439 Liebherr training, THINK BIG! ICM Foyer, Stand 308





Molson Group are pleased to announce they have been appointed the dealer of SMP tilt rotators for England, Scotland and Wales

For over 30 years SMP have been producing a high-quality range of attachments, buckets and tilt rotators from their state-of-the-art factory in Ilsbo, Sweden. SMP design and build a comprehensive range of tilt rotators to fit excavators ranging from 3t (the ST6) all the way up to 30t (the ST28). The range is comprised of seven models, all painted in a striking blue colour.

The full SMP range is now being rolled out across the Molson Equipment, Molson Compact Equipment and Molson Young Plant Sales businesses, with units available from the 1st June 2019.

By offering the full SMP range, in conjunction with existing brands in the portfolio such as Kobelco and Hyundai, Molson Group will be able to offer customers throughout the UK a one-stop shop for anyone looking to source an excavator and tilt rotator package from an established dealer.

Molson Group have sold a number of tilt rotators from a range of brands over recent years and will continue to maintain a strong relationship with these businesses. Molson will also continue to support customers with warranty work, parts and servicing requirements on legacy units.

Jonathan Wilson, Molson Group joint Managing Director said "SMP have a great approach to business. They listened to what we explained was necessary for their product to be successful in the UK and are working with us to deliver the best possible solution. I can see that this approach, along with their excellent product design and build quality, will give us a unique offer to both existing and new customers."

Hans Hanses, SMP Parts AB Managing Director said "Molson Group offer a unique route to market for SMP. Not only do they have a large, effective sales team, they also have the knowledge, skills and scale in their aftersales team to support customers to the level required to change the current landscape of the UK tilt rotator market."

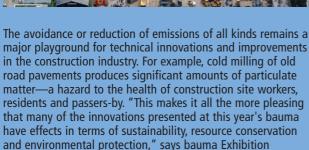
Hans went on to say "Molson Group have already had success in converting customers to adopting tilt rotator technology. This ability to educate customers to the benefits of adopting this technology, along with the ability to offer a complete package to customers using a premium quality base machine, will make it a compelling proposition."

boumo Preview

See you at Coumo 2019

By its very nature, the construction industry has a very large ecological footprint. At bauma exhibitors are going to present innovations towards sustainability, resource conservation and environmental protection. Some of the solutions have also been nominated for the bauma Innovation Award. bauma is the world's leading trade fair for construction machinery, building material machines, mining machines, construction vehicles and construction equipment. This year, it will take place from April 8 to 14 at the Munich **Exhibition Grounds.**





Bomag GmbH from Boppard/Germany, for example, has developed the ion dust shield technology to reduce the amounts of particulate matter. The system is installed in a box attached to the conveyor belt of the milling machine. An extraction system sucks the dust particles through an electric field. They become positively charged and are attracted by the negatively charged housing. This causes the fine dust to clump together permanently into less hazardous coarser particles that can be removed together with the milled material. This environmentally friendly solution has placed Bomag on the list of nominees for the bauma Innovation Award 2019.



Binding dust with artificial snow

Dusts must also be bound during building demolition, surface mining and loading processes. In countries with extreme weather conditions, it may occur that the usual water mist cannot be used due to icy temperatures. In such a case, the new dust binding machine V22Orca from the company EmiControls from Bolzano/Italy simply produces snow! The dust adheres very well to the flakes produced by this special snow cannon. Being a hybrid with a water mist and a snow mode, the device can be used at temperatures from +50°C to -25°C.

Electric drive: Fewer emissions, more efficiency

The construction machinery industry is called upon to avoid emissions not only of dust, but also, and especially, of exhaust gases and noise. An increased use of electric drives can make an important contribution in this respect. The Wacker Neuson Group is expanding its product range in this area with the AS60e battery-powered rammer and the AP2560e batterypowered vibratory plate. An interesting detail in terms of handling as well as efficiency: With the two new additions, a total of six products from the Munich-based manufacturer can now be operated with the same interchangeable rechargeable battery, which means that an exchange across machines is possible without problems.

Director Mareile Kästner.

SUPERIOR

boumo Preview





Laying high voltage lines without crop damage

Under ideal ecological circumstances, the electricity for the operation of the electric engines comes from renewable energy sources. In order to allow the green electricity generated by wind farms, for example, to actually reach every electrical outlet in Germany, the country needs several thousand kilometers of new power lines. The high-voltage direct current transmission lines should primarily be realized as underground cables. Herrenknecht AG from Schwanau/Germany is going to present a new, economical and environmentally friendly laying method at bauma 2019. The modified E-Power Pipe drilling technology enables trenchless laying of cable conduits across comparatively long distances of more than one kilometer close to the surface at a depth of two to four meters. This minimizes interference with the landscape. The jury found this solution worthy of a nomination for the bauma Innovation Award-

Raw materials instead of spoil heaps

energy policy in Germany.

not least as a contribution to the turnaround in

One key requirement for sustainable behavior and operation is the conservation of resources. Among the technologies in demand here are those that allow exploitation of raw materials in spoil heaps—such as the new shaft spiral separator SWS 3000 from manufacturer Doppstadt in Velbert/Germany. The device is able to separate strongly cohesive material mixtures, for example stones from sticky mud or clay. As a result, the volume of spoil heaps is reduced and the life of the quarry is extended by the extraction of raw materials from the original "waste".

Locally manufactured wind turbine towers

A bauma innovation that "serves" all three traditional fields of sustainability—ecology, economy and society—is the mobile manufacturing of Max Bögl Wind AG. The company from Neumarkt/Germany is known for the manufacture of hybrid towers made of concrete and steel elements for wind turbines with large hub heights. The new concept involves the manufacture of the concrete elements in a temporary factory delivered in 262 containers close to the future location of the wind turbines—upon request to almost any place in the world. For example, 90 towers for a wind farm in Thailand were manufactured as part of the pilot project launched in August 2017. Local raw materials and manpower ensure local added value and increase the profitability of the project. At the same time, a reduction of the number of heavy-load transports contributes to the protection of infrastructure, climate and environment. The globally unique manufacturing concept has also been nominated for the bauma Innovation Award.

bauma: key facts about the world's leading trade fair.

bauma is more than the world's leading trade fair: it is the heartbeat of the industry. It sets the pace. Dynamizes the market. And drives business. With one paramount goal: to always already focus on the next challenge. Because it's not just about the status quo, but about the future. Because it's not just about individual perspectives, but about the big picture: the construction, building material and mining machine industry in its full dimension.

It is the largest international meeting place and most important multiplier for the industry. The reason: bauma's global network and digital touchpoints do not only reach the trade visitors at the exhibition itself, but the entire industry around the globe. A reach that is of benefit to both exhibitors and visitors. Because to be present at bauma means to have access to all markets, to all target groups, to all decision-makers.





This is not a machine. This is patented modular technology with the ability to change the wet processing industry as we know it. The expert engineers at CDE have created a solution that can transform raw materials into high value products. This is the shape of things to come. **This is CDE.**

S –14 April, 2019

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Outdoor Exhibition Area North/East - Stand FN 1022/ cdeglobal.com/bauma2019



Together we're unlocking
A New World of Resource



World's first all-in-one wet processing system to be revealed at bauma

Industry-leading wet processing equipment designer and manufacturer CDE has announced plans to introduce its new Combo all-in-one wet processing plant to the global market.

The patented Combo™ wet processing solution will be revealed on Monday, April 8 at bauma 2019, in Munich, the world's leading trade fair for the construction machinery and materials industries.

More than plant machinery, the Combo[™] wet processing system is a technological response to the challenges faced by materials producers and is tipped to reshape the wet processing industry's landscape. A turnkey solution that delivers in-spec washed products from a wide range of feed materials, the Combo[™] can be used in the construction, C&D waste recycling, industrial sands, mining and environmental sectors. It has been designed with a focus on transferring greater reliability and efficiency benefits to customers. With all essential processes being housed onto one chassis, the Combo[™] system operates as one interconnected and preassembled unit, which incorporates an integrated control panel with one single point of operation. Designed as an ultra-compact washing solution that requires minimal civils and pipework, operators can now easily relocate their plant across sites or to remote locations.

Kevin Vallelly, Director of Engineering at CDE, said: "Our new Combo™ is the world's first wet processing system with integrated water treatment. For the customer, its bespoke, predetermined design reduces the overall footprint on site compared traditional processes. Pre-wired and pre-tested before dispatch, the plant is built for rapid assembly and set up, and can start processing material within days of arriving at the site."

Kevin continued: "Throughout the design process, our engineers focused on access for maintenance and on optimising the lifespan of the plant. The Combo™ provides safe and superior access to all areas, and in line with our 'Do it safe' ethos, complies with all relevant ISO standards. The robust design is complete with premium wear liners, which will remain operational and efficient for over 20 years. This

represents a significant return on investment for our customers."

Described as a "pre-determined" solution to boost plant utilisation, one of the many benefits of the Combo™ wet processing system is its customer-focused design and unmatched accessibility features for maintenance.

Lower power consumption compared to existing technology available on the market passes economic benefits to the customer who can process higher volume of materials through an efficient plant with reduced operating costs.

Patented swivel access to the pump, designed for single-operator use and ease-of-access for routine maintenance, is one of the defining features of the new Combo™.

Materials processing is a harsh working environment, which is why the new Combo™ washing system features components in areas of high-wear to minimise the mechanical fatigue cycle of the plant. One common area of fatigue, a result of weld stress over time, is on primary screens which traditionally use welded connections. These screens have been succeeded by the patented Infinity Screen™, resulting in greater durability and prolonging the operational life of the plant.

To maximise output for the customer and the commercial value of their aggregate, CDE's 'transfer point technology' – the material transfer points between different stations – has been utilised to eliminate high operational wear zones.

CDE Global will be exhibiting in the outdoor exhibition area North/East – Stand FN 1022/1 at bauma 2019, from April 8 – 14

A press preview revealing the Combo™ will take place at the CDE exhibition stand on Monday 8th April at 4pm.

Visitors to Bauma can also learn more about the Combo during a focussed Masterclass taking place on the stand on Tuesday 9th April.

For more information and to find out how our solutions can be tailored to meet your requirements, visit cdeglobal.com/bauma2019.







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Mineral Processing and Recycling Magnetic Separators at bauma 2019

The latest generation of high intensity Magnetic Separators will be on display on the Bunting Magnetics stand (Hall B2 Stand 133) at bauma 2019. The metal and mineral separators are used widely in the mineral processing, quarrying and recycling industries.

Bunting Magnetics is one of the world's leading designers and manufacturers of magnetic separators and metal detectors for the recycling, quarrying and mining industries. Their wide range of metal separation and detection equipment is manufactured at their Master Magnets facility in Redditch, just outside Birmingham, UK.



bauma (April 8-14, 2019) is held in Munich, Germany ever three years. There are internal and external exhibition areas displaying a wide range of equipment for construction, mining, mineral processing and recycling. A reported 583,736 visitors from 219 countries attended Bauma in 2016, seeing 3,425 exhibitors from 58 countries.

"bauma provides an ideal opportunity to meet many of our existing customers and introduce ourselves to new potential clients," explained Dave Hills, Bunting's Head of Sales.

On stand 133, the Bunting Magnetics and Master Magnets team are present to help companies with product purification or metal recovery.

High intensity Magnetic Separators are used to remove weakly magnetic particles from non-metallic minerals such as feldspar and silica sand. The Electro Magnetic Filter on display is designed to remove magnetically susceptible minerals from mineral and ceramic slurries and glazes. An electromagnetic coil is used to project a high magnetic field into a centralised cannister containing a magnetic matrix. During processing, magnetic particles are captured on the points of the matrix. A larger Electro Magnetic Filter has just been added to the Master Magnets mineral processing laboratory in Redditch UK. This provides mineral processors with the opportunity of conducting controlled tests to prove the separation capability.

The dry purification of non-metallic minerals is possible using the high intensity Rare Earth Roll Magnetic Separator. Separation demonstrations on a laboratory-scale model will take place in the stand.

The Overband Magnet is commonplace in the quarrying, mining and recycling sector and a smaller model will be on display. The Overband Magnet is mounted across permanently fixed conveyors and on mobile plant (e.g. screens and crushers) to remove larger tramp metal. There is a constant stream of Overband Magnets under manufacture at the Redditch plant, with many shipped overseas.



Commonly, the Overband Magnet works in conjunction with a Metal Detector. The Metal Detector identifies non-ferrous metals such as manganese steel. On the stand will be a Model TN77 Metal Detector, one of the most popular used in quarries and mining operations all over the world.

The need to successfully recover and recycle waste materials has never had a higher profile. Within the Master Magnets product portfolio are magnetic separators to recover ferrous metals and Eddy Current Separators for the separation on non-ferrous metals. A new generation of magnetic separator now successfully recovers stainless steel, with contracts agreed in January 2019 for the manufacture and supply of three Stainless Steel Magnetic Separators (SSSC). Demonstrations on a laboratory-sized SSSC will take place on the stand.

"The demand to successfully separating and/or recover magnetically susceptible minerals and materials has never



been greater," said Dave Hills. "We are working on many projects purifying lower grade nonmetallic minerals reserves. These include reworking mineral waste. In the recycling sector, we are continually undertaking tests to either remove or reclaim ferrous

and non-ferrous metals. bauma provides us with the ideal platform to broaden awareness of our abilities."

For further information, please contact us on press@buntingeurope.com

Premium crusher parts

by the leading crusher service provider

















RM sets new benchmark at bauma

RM NEXT generation crushers and screens...

Ever since RUBBLE MASTER introduced the first mobile crushers to the market in the early 1990s, the Austrian machine manufacturer has been setting benchmarks in Compact Crushing. At bauma 2019 (booth B2.236), customers will be able to experience the ongoing development of the RM GO! brand in the form of RM GO! NEXT. In addition to a fully integrated hybrid drive for crushers and numerous digital features, RM will also be launching a world first for mobile screens.

A fully integrated plug-in hybrid with the same machine size was presented by RM as the first plug-in hybrid crusher at bauma 2013 in the form of RM TWO GO! where the electric drive was an external option. With the fully integrated hybrid drive in the new RM 120GO!

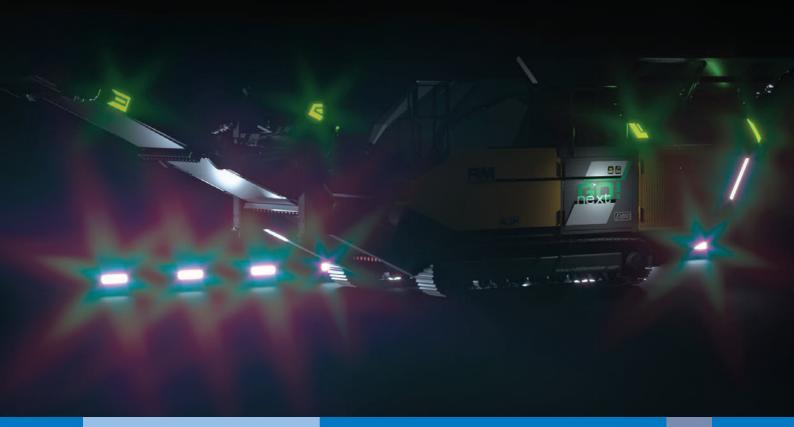
RM now combines the advantages of diesel-driven and electric-powered crushers without increasing the size of the machine. This delivers full flexibility in the type of drive, maximum mobility, quiet operation, lower emission values, higher performance (because short-term overload operation is possible) and infinitely variable rotor speed over a wide range.

The huge advantage is that with RM, the crusher still remains compact. The base frame of the RM 120GO! has only been

slightly modified to make room for the electric motor, and the weight of the crusher only increases by 500 kg with the electric motor, so it remains approximately the same. Thanks to many years of experience with hybrid crushers, the new RM 120GO! Hybrid boasts an even more powerful generator and a 50 % larger diesel tank.

RM has been "Best in Electrics" for almost 30 years

RUBBLE MASTER can look back on a long tradition and a great deal of experience in electrical drive and control systems technology. Since 1991, RM crushers have been equipped with direct drive diesel engines. While all auxiliary drives on RM crushers have always been driven electrically, only the crushing unit is driven directly by the diesel engine. RM crushers were therefore the first to do without hydraulic drives for belts and operate the vibro-channel and main discharge belt electrically. This has always saved fuel, operating costs and achieved a high degree of efficiency. RM also uses especially optimised components such as more durable generators. This experience in electrical drives and control systems technology led to the design of the first fully electric skid-mounted crusher in the mid-1990s.



Telestack bring #TriedAndTrusted solutions to Bauma

Telestack innovation and dealer expertise will feature prominently on the Telestack stand at the forthcoming Bauma 2019. Exhibiting under the theme #TriedAndTrusted, Telestack will use the Bauma exhibition as an opportunity to highlight the breadth and depth of their product range, the decades of experience that separate them from their competitors and the quality of their products backed up with first class dealer support.

Located at Stand FN.1024.1, Telestack will be exhibiting alongside their two long standing German dealers Jürgen Kölsch GmbH and Christophel GmbH. Padraig McDermott, International Sales Manager explains the Telestack journey to becoming the leading name in material handling equipment in the industry, "Our company is yards ahead in terms of experience, quality and product design that understand the needs of the quarrying and mining industries. Our competitors are launching products that we designed over a decade ago. Our experience has been earned and our understanding of the industry is reflected in our products. The products that we will display at Bauma have a common theme of improved performance, reduced operating costs and added flexibility to the Customer's operation with the ability to use the equipment across the logistics chain from pit to port."

The TC 421 Revolution is a track mounted fully mobile

Designed to work at production rates of up to 400tph, running costs could be reduced by up to 70%. Mobile crushers and screens are naturally evolving in size but their onboard conveyors will always be constrained by transport restrictions. Tracked conveyors fulfil this need by providing much larger stockpile capacity whilst at the same time improving plant mobility by removing material from the processing equipment.

The TC 421 Revolution Tracked Conveyor is typically used for stockpiling and can be used as part of a mobile system. By introducing a TC 421 Revolution into a project it removes the need for a dedicated wheel loader to constantly remove material from the crusher, screen or shredder.

The Telestack HF10T is a track mounted mobile hopper feeder designed to work at production rates of up to 300tph (330 Ton per hr.). Telestack's tracked Hopper Feeder range is designed to be loaded directly from wheel loaders, grab cranes, excavators and can be used to feed auxiliary equipment, reclaim to other conveyors, directly load ships/barges, trucks and rail wagons. Since the hopper feeder is track mounted the unit has excellent mobility on site and will eliminate double handling of material, which reduces overall costs for the operator and maintains the product quality. The HF10T is fitted with a vibrating grid to remove oversize +150mm product.



boumo Preview



The LF520 is a track mounted fully mobile conveyor designed to work at production rates of up to 500tph (550 Ton per hr.). The Telestack Low Feeder range is available in a series of designs and hopper capacities depending on feeding equipment and production rates on site. This allows the operator to directly discharge from wheel loaders/ grab cranes and excavators at a significantly lower feed in height compared to standard hopper feeders. The unique design of the hopper allows for rear and side feeding which can be beneficial when operating in constrained areas. Since the low feed hopper feeder is track mounted the unit has excellent mobility on site and will eliminate double handling of material, which reduces overall costs for the operator. This

unit has been specified with a heavy duty apron feeder that can be used to receive large, lumpy, abrasive and heavy materials under heavy impact conditions. The heavy duty design of this unit ensures minimal downtime and many years of service life. The apron feeder eliminates any choking of material and reclaims material at a uniform rate.

Commenting on the forthcoming Bauma, Commercial Director Malachy Gribben explains the importance of having the right dealer to represent the Telestack brand "Telestack have built long term partnerships across the world and these relationships are based on mutual trust and respect. Our dealer network are hand selected for their reputation, knowledge within the industry and dedication to keeping the customer at the forefront of their business. We very much appreciate the hard work and investments that our dealers make, and together we are anticipating another record-breaking year in 2019."

Beginning 2019 with the largest order book ever and building on the successes of 2018, Telestack have just recently announced their plans to extend their manufacturing capacity by building a 45,000sqft facility which will incorporate state of the art manufacturing premises, a dedicated Research and Innovative Development centre and modern office suite - all of which is central to their continued growth strategy. This is in addition to £4million investment in the last 2 years in their current Bankmore site with a state-of-the-art shot-blast, 2 paint booths and an additional manufacturing facility which have all

contributed to their impressive sales

and operational performance.

Telestack

The engineering acumen within Northern Ireland is renowned globally and the expertise within Telestack has grown and developed significantly over their tenure. In addition to their Aggregate and Mining Group, Telestack's reputation has matured within other material handling sectors, most notably the Ports and Inlands Terminals sector, designing and manufacturing equipment to load and unload dry bulk into vessels up to Panamax/ post-Panamax size. Their equipment is involved in some of the most ground-breaking, exciting and forward thinking projects across the globe with the company gaining serious traction in other industries such as the rail, power, cement and steel plants.

www.telestack.c

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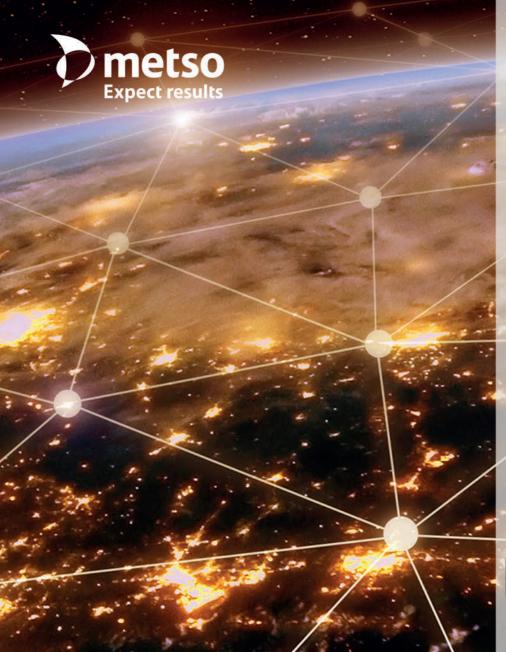
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baumaAPRIL 8–14, 2019, MUNICH

Exciting new Doosan product display at bauma 2019

Doosan Construction Equipment will be showing a wide range of new products for the first time at the Bauma 2019 exhibition. The new products include the Stage V DX27z, DX35z, DX62R-3, DX63-3 and DX85R-3 miniexcavators, the new DX250WMH-5 25 tonne material handler, the new Stage V DX300LC-7 30 tonne excavator, the new DX800LC-5B 80 tonne excavator and new 30 and 40 tonne class Stage V compliant articulated dump trucks (ADTs). Doosan will also be showing the company's new DL280-5, DL420CVT-5 and DL580-5 wheel loaders for the first time at Bauma.

The new Stage V compliant 2.7 tonne DX27z and 3.5 tonne DX35z zero tail swing (ZTS) models enhance Doosan's range of mini-excavators, providing a best-in-class mix of superb stability, smooth controllability and high digging forces, complemented by low weights for easy transportation.

As a true ZTS machine (even with the optional heavy counterweight), the DX27z offers the highest flexibility of movements when working close to walls, coupled with best-in-class 360-degree stability and a low weight for easy transportation. The DX35z is a new generation model in the popular 3.5 tonne machine class offering the additional benefits of ZTS design. This excavator provides the best possible mix of compactness, a large operating range for the workgroup, great stability and a large and comfortable operator area.

New Stage V 6 and 8 tonne Mini-Excavators

The DX27z and DX35z will be shown alongside new Stage V versions of the company's very successful DX62R-3 and DX63-3 6 tonne and DX85R-3 8 tonne mini-excavators.

The new Stage V DX85R-3 8 tonne reduced tail swing (RTS) excavator from Doosan is powered by the Yanmar 4TNV98C Common Rail direct injection diesel engine, providing 44.3 kW of power at a rated speed of 2100 rpm. The new Stage V versions of the 6 tonne DX62R-3 RTS and DX63-3 conventional tail swing models are powered by the same Yanmar 4TNV98C diesel engine, providing a massive 22% increase in engine power over the previous generation models.

Moving up in size, Doosan will be showing the new DX250WMH-5 25 tonne Stage IV compliant material handler for use in the solid waste, recycling, demolition and forestry industries. Based on

Doosan's popular DX210W-5 21 tonne wheeled excavator, the new DX250WMH-5 material handler has been designed specifically for a wide range of material sorting and handling applications such as those in the scrap metal and other solid waste and recycling industries, as well as logging.

Designed to carry out the toughest tasks, the DX250WMH-5 is built with front and rear stabilizers, and a boom and arm specifically designed for material handling tasks. A standard feature is the hydraulic cab riser, which gives the operator



better all-around visibility of the attachment and work area. When combined with the rear view camera display in the cab, the operator has excellent visibility of the job site.

Bauma 2019 will provide the ideal platform for the first view of the next generation of Doosan medium size crawler excavators in the form of the new Stage V compliant DX300LC-7 30 tonne excavator. The DX300LC-7 offers an unmatched combination of high performance, operating features, fuel efficiency, reliability and durability in the 30 tonne excavator class.

As visitors to the Doosan stand at Bauma will see, the company's 'LC-7' Stage V excavators, such as the new DX300LC-7, build on the very successful design of the previous Stage IV machines. The new LC-7 excavators



boumo Preview

Increased Comfort and Controllability

Already excelling in spaciousness and ergonomics, the new cab in the DX300LC-7 takes operator comfort and ease of operation to unheralded levels. The new cab offers more features as standard than other machines on the market, ensuring super controllability and high precision in all applications.

The new DX800LC-5B 80 tonne crawler excavator offers optimum value to the end-user thanks to outstanding productivity, high fuel efficiency, superior comfort for the operator, enhanced reliability, durability and maximum uptime. It is therefore designed to meet the needs of heavy duty mining and quarrying applications as well as major infrastructure construction projects.

Best-in-class Productivity

Built with high quality, proven main components and offering a very robust design, the DX800LC-5B enables customers to work in environments where avoiding downtime is critical. In fact, the use of superior components throughout, specifically customized for use in large equipment, ensures this new machine offers best-in-class power, productivity and durability.

The state-of-the-art designs and developments in the new Stage V ADTs have resulted from intensive market analysis, customer visits, interviews with operators and additional feedback gathered by the Product/R&D teams at Doosan's ADT plant in Molde in Norway.

In 2018, the DA30 ADT was upgraded with a range of features including a new cab, a new self-levelling front suspension and a new tandem bogie system which are all incorporated in the new Stage V model. A similar process has been applied in the new 40 tonne Stage V machine, with a new cab and a semi-levelling front suspension that adjusts itself independently depending on the operating conditions to ensure a comfortable working environment for the operator.

As well as these changes, the new Stage V models offer many more features - one of the most eye-catching is a new design for the front frame and bonnet components on the trucks, created by the Doosan Design Team in accordance with the latest trends in the market.

Complementing the striking external changes on the new ADTs, are the new Scania Stage V compliant 9 and 13 l

engines that now power the machines. The new Scania engines have undergone two years of very intensive testing in exacting construction and mining environments over the last two years and have passed with flying colours. Whilst the core of the Scania engines has not changed, the main difference in the new engines from their predecessors is the improved after-treatment system.



First Time For New Doosan Wheel Loaders at Bauma

Offering a dedicated design for waste and recycling and general industrial applications, the new DL280-5 will be shown in its full waste industry configuration at Bauma. The 'Waste Kit' includes protectors for lifting and bucket cylinders, articulation, rims, lamps, the rear engine bonnet and the front windscreen, which is tiltable for easy cleaning. The DL280-5 is tailored for waste applications, with a wide core radiator and heavy duty axles, which are approved for the use of solid tyres. The DL280-5 offers high performance and high productivity with an outstanding breakout force, tipping load and enhanced output. The DL280-5 features Z-bar kinematics with a simple lifting piston system designed for heavy-duty applications.

With a maximum bucket capacity of 4.4 m3, the DL420CVT-5 combines the benefits of a mechanical and a hydrostatic transmission in the same machine. This allows the DL420CVT-5 to automatically transition from hydrostatic power at low speed to the mechanical system to operate at higher speeds. The complete driving range, forwards and in reverse, is controlled by the CVT system, which can provide fuel savings of up to 25%.

The new DL580-5 has a bucket capacity of 6.4 m3 and a similar look to the next model down the range, the DL550-5, but features robust structural components and an advanced sophisticated double circuit axle cooling system to provide an ideal solution for applications such as block lifting and other heavier material-handling needs. To meet these requirements, the DL580-5 has an operating weight of 36030 kg and higher static tipping loads (straight/full turn 40°) of 29700 and 26200 kg, respectively.

Stand No: FM.517

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The mining industry is facing a number of challenges including declining ore grades, environmental pressures, and water scarcity. To deal with these challenges, and continue to strengthen operations, mine sites need a supplier that truly understands their business and can help drive initiatives and improvements, overcoming challenges together.

"We are much more than an equipment supplier. We have the engineering expertise, technical know-how and local support to help our customers optimise their entire circuit. Mine operators need more than just another equipment supplier, they need someone they can rely on and we take every opportunity to partner with our customers," states John McNulty, Vice President Global Engineering and Technology for Weir Minerals.

Weir Minerals believes the only way to effectively optimise a mine's process is by working closely with the customer. With over 100 service centres across the globe, Weir Minerals' expanded service network ensures the team are available throughout the entire process from installation and commissioning through to on-site maintenance.

"We are not driven by what other suppliers are doing. We are customer-centric. It's all about our customers, their businesses and our ongoing shared successes. We are doing this to be the partner of choice now and well into the future," states John McNulty.

Weir Minerals have built their entire philosophy upon this customer-centric approach which they have termed Integrated Solutions. It's a global team effort from process and service engineers, to product specialists all working together to tackle any given problem.

"Our team work with the customer to understand their vision, identify any problems and then work with them at real solutions, not remotely but on site. Wherever possible we want to be part of the entire process from the brainstorming right through to the installation. This instils confidence in our ability to deliver whatever the customer requires," states John McNulty.

Integrated Solutions is just another way of saying partnership, and when Weir Minerals partners with customers it works. This is evident across multiple projects.

Integrated Solutions Projects

In Finland, the Weir Minerals team helped Yara Siilinjärvi mine to increase its tailings storage space without expanding the mine's footprint.

Yara's existing tailings storage facility (TSF) was reaching full capacity. They conducted an extensive study for future storage of tailings and decided to go for a thickened tailings solution. The tailings would be thickened to 68-72% by weight in order to build a +2 degree deposit, thereby sufficiently increasing the storage capacity.

Weir Minerals supplied a complete pumping solution to Yara, comprising of three GEHO® TZPM 2000 pumps and



Warman® centrifugal pumps. In addition, Weir Minerals also supplied the required hydraulic actuated slurry valves, suction strainers, slurry instrumentation and helped develop the functional description for Yara's distributed control system (DCS).

The system was successfully commissioned in February 2017, with slurry solids concentrations reaching target, resulting in a slope at the TSF of approximately 3 degrees. This has extended the current life of the mine well beyond 2035.

Over in South Africa, Weir Minerals helped CNC Crushers optimise their entire process. The team were experiencing high wear on the installed conventional hydrocyclone as well as old technology Envirotech® pump, having to replace it every 120 hours.

The Weir Minerals team re-evaluated how the site operated, analysing the issues and sketching up a completely new process for the site. A Warman® WBH® 100 slurry pump, a Cavex® 400CVX10 hydrocyclone, and Trio® TC cone crushers were all installed to increase up-time and reduce maintenance costs. In addition, a spares and service agreement was put in place to ensure that maximum plant availability was maintained.

The results of this refit surpassed all expectation with a 2007% decrease in pump maintenance, a 45% increase in plant throughput, and a 100% boost in plant output.

When asked about the partnership with Weir Minerals, Carl Crous, CNC Owner stated: "Partnering with Weir Minerals increased my production output significantly and my uptime increased overnight, I should have done it long ago."

Both projects are just a few examples of how Weir Minerals' integrated solutions approach can revolutionise the operation of a site.

Visit www.problemsolved.weir to view more examples of this approach.

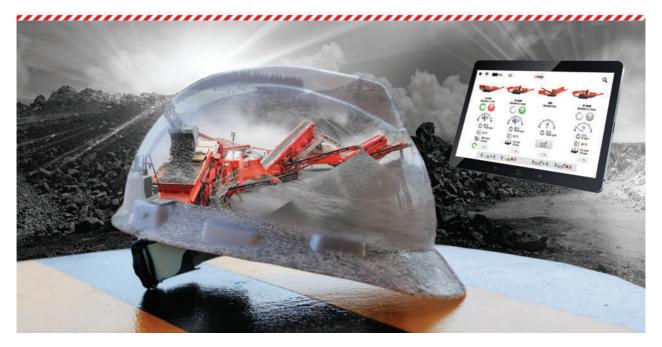
See us at bauma - Hall B2 - Stand 212



Terex | Finlay to unveil cutting-edge technology at bauma 2019







Terex Finlay will unveil and showcase the capabilities of OMNI by Terex, a revolutionary new system that will help improve jobsite safety and efficiency in operating crushing and screening equipment, at bauma 2019 on the Terex booth FM117 from 8th - 14th April 2019.

"OMNI by Terex is ground-breaking technology that will revolutionise the crushing and screening jobsite," Barry McMenamin, Group Engineering Director with Terex Materials Processing explained.

Watch, Monitor and Adjust all from the Safety of the Cab

OMNI by Terex is a tablet-based system that is fitted within the cab of a material feed excavator and provides centralized remote access to multiple machine control systems within a crushing and screening train. It has been diligently and intuitively designed to give unrivalled, easy-to-use control to the operator with information and views of the entire machine train.

The OMNI by Terex system allows the excavator operator to view working information from each machine that is connected to the system, make informed decisions about each machine's operation, and remotely manage the entire machine train to maintain high efficiency and produce the required material specification. The operator can adjust individual machine metrics or use global features, such as pausing the entire material flow across the train with one

action, allowing unprecedented levels of control — all from the comfort and safety of the excavator cab.

Additional Features

Additional features of the new OMNI by Terex system include alerts that indicate when someone on the ground is making process adjustments and camera view of up to two cameras per machine—from vantage points such as material transition points, chamber inlets, and material choke level on cones. The OMNI by Terex system offers an option for other personnel on the jobsite (such as the wheel loader operator) to have read-only system access, enhancing their efficiency through remote view of the operation and timely interaction.

McMenamin, explains, "Crushing and screening equipment operates in busy, challenging work environments with many hazards to consider—typically with one operator having multiple machine responsibility and limited process control, limited view of the process and the transition points for material, whilst another operator clears stockpiles and loads dump trucks, and has to manage both of those competing activities. We have invested in research and development to design a system that provides a level of central control, enhanced safety, connectivity and multiple-user support for the jobsite. We are excited to launch OMNI by Terex and encourage visitors to meet with our experts at bauma to learn about its full capabilities, and how it will revolutionise the crushing and screening jobsite of today and tomorrow."

Terex Finlay present new machines and capabilities at **bauma 2019**

Terex Finlay will display four machines from their crushing, screening and conveying range and will also demonstrate their innovative product support and telematics capabilities at bauma 2019. In addition to demonstrations of the industry leading T-Link telematics system Terex Finlay will also be previewing their new **OMNI** system. **OMNI** is a new revolutionary system that will change how the industry works and interacts with mobile crushing & screening equipment. Terex Finlay will be utilizing the machines on the booth to demonstrate the capability and functionality of the OMNI system.

The four machines that will be on display at the show are: NEW 883+ (triple shaft) heavy duty screener, NEW TF-75L low level feeder, TC-80 conveyor and J-1160 jaw crusher.

J-1160 jaw crusher: The second-generation Terex|Finlay J-1160 mobile jaw crusher was designed and built with the customer and operator in mind with increased under jaw clearance and all-round preventative maintenance and serviceability access. The heartbeat of the machine is the renowned and aggressive Terex 1000 x 600mm (40" x 24") jaw crusher with a proven pedigree in recycling, demolition and aggregate production applications.

883+ triple shaft screener: The NEW Terex|Finlay 883+ (triple shaft) mobile heavy-duty screener features a triple shaft screenbox that is ideal for working in dry and sticky applications including quarry, mining, sand, gravel,





construction and demolition debris and recycling applications. The triple-shaft design of this new screenbox employs an oval motion stroke to generate an aggressive screening action, reducing plugging and blinding over the screen decks to ultimately provide a quality product with high tonnage output.



TC-80 tracked conveyor: The Terex|Finlay TC-80 is a self-powered 80ft tracked stockpiler with impressive features and conveying capacities. The intelligent design allows the machine to be folded small enough to fit inside a 40ft container and be shipped cost effectively globally. Hydraulic angle adjustment and belt speed adjustment ensure optimum performance in every application. A maximum discharge height of 10.5m (34' 6") and capacities of up to 500+tph position the TC-80 as a leader in the industry.

TF-75L low level feeder: The NEW Terex|Finlay TF-75L low level feeders has been designed to maximize productivity, enhance efficiency and reduce on site operational costs in a wide range of applications and feed material types. The large 7m3 (9.2yds3) hopper with a feed in height of 1900mm and width of 3500mm enables low level feeding directly from excavators, grab cranes, and wheel loaders. For onsite safety and quick set, the hopper is fitted as standard with hydraulically folding sides. Tracked mobility and the ability to feed material from all three sides enable the TF-75L to be easily incorporated into open and closed-circuit static and mobile crushing and screening circuits.

"Our business has been built upon the core values and beliefs of delivering dynamic and innovative world class leading products that our customers can depend upon. We look forward with excitement to bauma, 2019 as we showcase new products and also demonstrate the capability and functionality of both our T-Link telematics and OMNI systems. We are confident that our new OMNI system that will be a game-changer in how the industry works and interacts with mobile crushing & screening equipment. We encourage visitors to the show to call by the booth and take in a demonstration of both our T-Link and OMNI systems." Commented Paul O'Donnell, Terex Finlay Global Business



McLanahan launches Ultrawash at bauma 19 in their largest exhibit space to date



A launch as important as the new UltraWASH from McLanahan Corporation requires a booth space to match. With the UltraWASH modular wash plant on display for the first time at a trade show, McLanahan Corporation will have their largest space to-date with over 500 sq. m. (over 5,300 sq. ft.) at booth FN.1019/8.

Experienced with modular wash equipment since the 1960s, McLanahan Corporation has taken their field-proven designs and created a standardized line that is containerized, easy-to-install, and fast to set up. Currently available in three sizes, the UltraWASH can produce up to three aggregate products and two sand products. It features a single process water feed point, as well as a single effluent discharge point. Thanks to McLanahan's recent acquisition of Anaconda Equipment, the UltraWASH feed hopper and conveyor can be upgraded to come with tracks for easier conveyor maintenance.

The UltraWASH line is available with several configurations and add-ons including:

- Feed preparation log washers, blade mills, screw washers
- Attritioning
- Organics removal
- Water treatment filter presses and thickeners

Additionally, material can be sized to meet specific requirements using the line of UltraCRUSH equipment. The UltraCRUSH modular cone crusher, which will be on display at bauma, is also containerized, easy to set up and install, and can be transported around the site or to other locations as needed

Throughout the booth will also be video displays and digital presentations to showcase McLanahan's complete range of products, including crushing, screening, washing, classifying, sampling, and tailings management equipment. McLanahan executives, process engineers, and sales/dealer managers from around the world will be in the booth throughout bauma to discuss how these solutions can help producers become more efficient, more productive and more profitable.





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Crusher Spares Ltd - Recognised Worldwide for in-depth knowledge of the crusher spares industry:





Having worked for major crushing manufacturers previously, the Garwood brothers created Crusher Spares Ltd in 2009. The family business was set up to support the many Kue Ken Brown Lenox crushers still working worldwide after the

factory had closed in 2000. Ten years later the business model is very much the same with extensive stock holding to suit most major brands across the globe with repeat business key and a testament to the products supplied, being highly competitive and proven to last.

Crusher Spares Ltd have achieved a solid customer base with 80% of business being to repeat clients, and export sales at currently over 75%. Customer satisfaction is high worldwide and clients have placed many spares orders knowing the parts will arrive on time and with flexible payment terms.

Managing director Calum Garwood explained "Even though the UK & Ireland has some long term valued customers the export market continues to grow rapidly, and being family run we can make instant decisions on key elements of the business reacting to customers' needs effectively and quickly. We also have access to a 24-hour engineering workshop which is key to fulfilling worldwide urgent orders on time for clients." A recent US client had an existing 30x20 double toggle crusher frame that they required replacing. Crusher Spares Ltd have now successfully replaced this for them with a bespoke solid steel frame made with strong backs machined from solid steel, and not castings. This will now last another 60 years.

Based in South Wales, Crusher Spares Ltd are proud to manufacture and export high quality British products.

- Used machines supplied
- Complete refurbishments
- UK and overseas repairs undertaken
- · Grizzly pan feeders
- 24-hours-a-day 7-days-a-week service
- Unrivalled knowledge of Kue-Ken parts

Crusher Spares Ltd will be attending Bauma Munich this April, If anyone should wish to meet our German and English speaking representitives please feel free to get in contact using our information below:

For more information about Crusher Spares Ltd please call Craig or Calum Garwood on +44 (0) 1443 228 329 or visit their website at www.crushersparesltd.co.uk



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Screening and crushing industry leader McCloskey International is clearly demonstrating its continued growth with an exciting roster of new products and a significant presence at bauma 2019 in Munich, Germany from April 8-14 of this year.

Located at Stand FS.1211/1 in the Outdoor Exhibition Area South, the 913m2 (9,827 ft2) space will showcase the newest products from McCloskey International, as well as serve as a venue for customers to meet and mingle with dealers from around the world. The pavilion will serve as a hub for the McCloskey Group of Companies.

NEW PRODUCTS LINED UP FOR UNVEILING

On display will be a new ground breaking screening product, which will be revealed at the show with details available as of April 8th, 2019. The new screener will be joined by the latest crushers (compact and full-size impactors), stackers, and a compact sand plant from McCloskey Washing Systems. Lippmann-Milwaukee, the most recent member of the McCloskey group, will be on-site to unveil their exciting new products to the world.

PERFORMANCE ENHANCING FEATURES MAKE AN IMPACT

Crushers will be in the spotlight, with the I54Rv3 and the I34R compact crusher lined up.

Bauma is the perfect opportunity for McCloskey International to showcase the new features and benefits of the I Series impact crusher line, particularly well-suited for aggregate and concrete recycling applications. The I54RV3 crusher has been enhanced with production boosting features, including a new main conveyor, new impactor transfer chute, prescreen with a steeper bottom deck for enhanced material flow, and a simplified rear profile for the impactor chamber. The I54Rv3's radial return conveyor features full length dust suppression control, allowing operators to recirculate oversize material from the screenbox back to the feed hopper or radial a complete 90° while running.

SMALL FOOTPRINT - BIG RESULTS

The I34R Compact Crusher, McCloskey's newest member of the impactor family, is the perfect solution for projects with small footprints but big requirements. These compact, mobile crushers are suited particularly to construction and demolition recycling, asphalt recycling, and aggregates.



The compact impactors deliver high performance and expanded versatility in a highly mobile lineup to customers around the world. With their fast set-up time and ability to nimbly move around in tight spaces, the crusher's small footprint is uniquely suited to the recycling, demolition and smaller scale construction projects where space is at a premium, and maneuverability is key. The compact transport dimensions (less than 2.5m wide) allow easy transport from site to site.

MAKE THE SWITCH WITH THE NEW ST100TF **RADIAL**

bauma visitors are getting a first look at McCloskey International's new tracked radial feeder stacker - the ST100TF Radial – with an innovative Patent Pending* design that allows the switch from track to radial mode in seconds.

Built-in levelling indicators allow operators to position the stacker regardless of the ground evenness, with independent hydraulic jack legs to stabilize once in place. A level gauge allows operators to position the stacker for maximum production. The tires on the ST100TF Radial have an aggressive tread pattern for better traction in rough

All the new radial stackers feature a patented rear counterweight that counter balances the tracks and wheels, enabling a much higher stockpile capacity and delivering greater stability to the stacker while in operation.

The ST100TF Radial's unique tool free transport design allows the equipment to move freely from site to site without needing to remove the wheels, delivering true portability for multi-site projects and operations.

MWS COMPACT SAND PLANTS STEP INTO THE SPOTLIGHT

McCloskey Washing Systems will present the CSP120 at bauma 2019, which delivers superior separation efficiency, produces the driest, drip-free final washed sand product in its class, and produces up to two in-specification sands, to desired grade, at up to 120 total tph.

As with all McCloskey products, the plant has been designed with the machine operator in mind. In addition to the highest level of quality and performance, significant benefits include simple and fast assembly times, ease of operation, low maintenance and an overall reduced footprint.

The CSP range can be tailored to suit any sand application, regardless of desired tonnage, ranging from 40 tph - 300 tph.

LIPPMANN-MILWAUKEE MAKES DEBUT ON **WORLD STAGE**

During its expansion over the past twelve months, McCloskey acquired Lippmann-Milwaukee in the third quarter of 2018. Lippmann is a leading manufacturer of aggregate crushing equipment for processing applications. Headquartered in Milwaukee, Wisconsin, USA Lippmann was established in 1923 and has dedicated itself to producing the highest quality crushing equipment on the market.

Since its inception, Lippmann has become synonymous with highly productive and reliable heavy-duty jaw crushers that are built to last. Recent product introductions, including a tracked product range, the 4800R closed circuit crushing plant





and the 3055 jaw crusher demonstrate Lippmann's continued focus on designing and building the best crushers for customers worldwide.

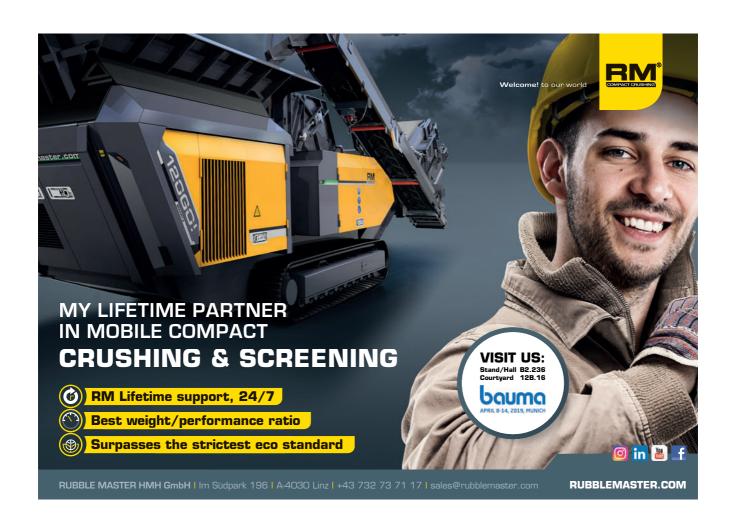
McCloskeyTM designs and manufactures innovative crushers, screeners, stacking conveyors and washing systems. Since 1985, McCloskey International has been exceeding expectations with reliable, durable and high performing products. McCloskey equipment is used across industries including aggregate, mining, construction & demolition, waste management & recycling, landscaping and composting to help achieve profitable volumes for customers around the world. For more information on McCloskey visit mccloskeyinternational.com.

A division of McCloskey International and operating in more than 100 countries, McCloskey Washing Systems has built a solid reputation in the international market by leveraging its more than 100 years of experience in designing, manufacturing and delivering innovative washing equipment. McCloskey Washing Systems operates with the highest levels of quality, safety and technical expertise, integrating a full range of washing equipment offered by McCloskey Washing Systems, visit mccloskeywashing.com or you can follow MWS on LinkedIn



Over its 95-year history, Lippmann has developed a gold standard reputation for heavy duty stationary and semi mobile products. Lippmann builds the heaviest, most reliable jaw crushers on the market along with offering an extended line of proven aggregate processing equipment designed to increase productivity while reducing costs. The Lippmann product line includes jaw and impact crushers, feeders, recycle, two-stage crushing systems, and an extended line of ancillary products. For more information on Lippmann-Milwaukee please visit lippmann-milwaukee.com.















Metso to launch groundbreaking innovations for aggregates and mining industries at bauma 2019



Metso is introducing a number of new, state-of-the-art solutions for the aggregate, construction, and mining industries at bauma 2019, the industry's leading tradeshow in Munich, April 8-14. The launches include technologies and services that enable improving productivity and driving down costs. The preview of the new solutions will take place at Metso's booth FS.1111/2 on April 8 at 11.00 a.m.



"Metso continues to invest in the development of solutions for aggregates and mining segments and we are extremely excited to be able to launch these latest innovations at bauma," says Olli-Pekka Oksanen, vice president, West Europe market area at Metso. "Many of the developments we are showcasing at bauma are based on our customers' feedback on product capabilities and their business requirements. These solutions help our customers to improve the performance of existing operations and to control cost per ton."

Along with the new crushing and screening solutions, Metso will unveil a groundbreaking innovation for off-highway trucks, enabling mines and quarries to haul more with less. This major product launch will expand Metso's offering into completely new territory and help customers reach a higher payload while lowering their operating costs.





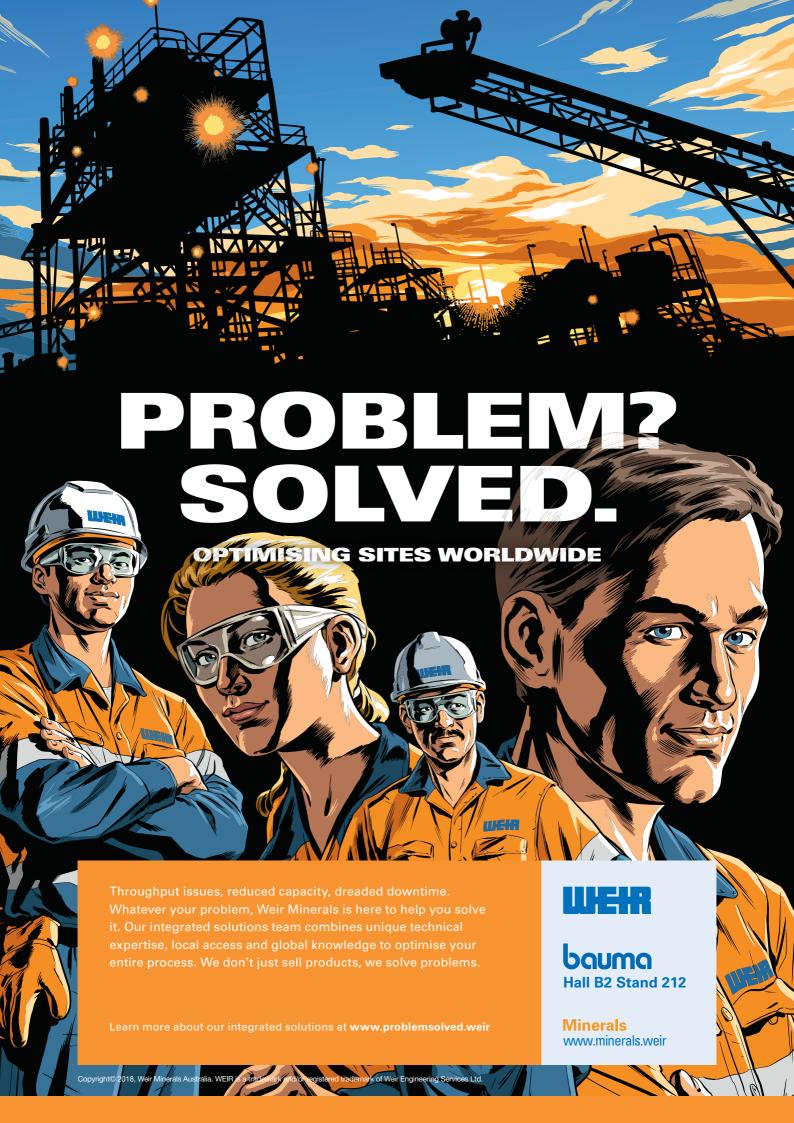


In addition to the key launches to be published at the event, Metso will showcase a broad range of equipment, wear and spare parts as well as services designed to help make operations more efficient and assets work harder. The solutions to be featured will include:

- The Metso Lokotrack® LT200HP mobile cone crushing plant designed for secondary and tertiary crushing operations such as producing aggregates for railway ballast, road construction, asphalt, and concrete fractions. The LT200HP complies with European Stage V emission regulations.
- The Metso MX[™] cone crusher with patented Multi-Action crushing technology designed to cut the operational costs of crushers and to provide more uptime compared to traditional cone crushers. Since its introduction in 2017, Metso has sold 50 MX crushers worldwide.
- The Metso Lokotrack® Urban™ range revolutionizes crushing in densely populated environments, such as city centers. It enables up to 60% better noise protection and cuts dust emissions. This can make the environmental permit process easier and opens new opportunities for the crushing business.

- The Metso slurry pump range is optimized for maximum uptime and reduced operating costs. Our slurry pump maintenance slide base offers fast, safe and easy wear component change or pump inspection. Leaving the suction and discharge pipe undisturbed during inspection, the entire rotating assembly and motor configuration is slid back.
- Financial services make investing in new equipment simple. Metso's leasing models allow you to better match your costs with your production revenues.
- As part of the Metso Life Cycle Services for Aggregates, Equipment Protection Services (EPS) brings you added protection for your most valuable assets. This comprehensive plan includes extended warranties, scheduled inspections with Metsocertified technicians and Metso Metrics Services for remote monitoring and data visualization.
- High-performance Poly-Cer wear lining enabling up to four times or more wear life compared to traditional steel lining. This long wear life in combination with quick and safe change-outs keeps downtime to a minimum and results in the lowest operating costs over time.
- Metso's screening media are optimized for every application, ensuring long wear life and high operational open area.

Metso and our distributor Fischer-Jung are looking forward to welcoming bauma visitors at our booth FS.1111/2. For more information on Metso's featured solutions at the event, please visit our website.





bauma Preview

Q: The Kinshofer Group has a new spot at Bauma. What's new on the stand?

TF: Our engineers have developed such a wide array of new products across so may sectors, we decided not to show our whole range of attachment products as we did at Bauma 2016, instead focusing solely on showcasing innovations, redevelopments and new versions of attachments.

Q: Will choosing to show only innovations limit your overall product offer at Bauma?

TF: Quite the opposite - we have more than 3000 active products, way too many to talk about all of them. By focusing on the innovations made since the last Bauma, we're showing how hard we, and our subsidiary companies, have worked to make the last few years such a success.

Q: Kinshofer makes such a big effort to attend Bauma. Is it worth the all the investment?

TF: Every three years Bauma gives you the opportunity to present the business to an international audience. It is not so much about making orders, more about developing new international partnerships. This year Kinshofer has so many new developments that we've completely concentrated on showing our innovative power. We aim to demonstrate that concerning attachments, there is always room for fresh thinking. Together with our customers we constantly work on new ideas and products and are very proud to present the results at Bauma. Effectively, we're a global 'one-stop supplier', offering a complete range of products for every part of the construction industry. From construction to landscaping, handling of materials and demolition, rail and utilities, to the recycling and waste industry – throughout worldwide markets.

Q: Is there one highlight from the 128 innovations on display at Bauma that stands out for you?

Highly interesting are the Tiltrotators - we're showing a completely new control system for NOX Tiltrotators at Bauma. Partial automation is a very important point which leads to significant benefits for our customers. We'll also be showing two completely new sizes within the NOX range. There will also be new HPX products with their proven benefits, for example, low maintainence and constant closing force. We step into new markets with two new HPX Demolition and Sorting Grabs for excavators betwen 27t and 37t operating weight.

Q: Where are the new products designed and produced?

TF: Together with our 14 strong design development department, the 'specials' department and the production department at our Waakirchen HQ, all aquired subsidiaries and their employees are involved in the development and production of our attachments. All together there are 34 design engineers within the Group who are constantly dedicated to innovations and redevelopments.

Q: Everyone knows the Kinshofer name. But what makes up the Kinshofer Group, how big is it now?

TF: This is currently 7 company brands, owned and managed by Kinshofer. The global headquarters is centred at the Bavarian town Waakirchen-Marienstein. The Kinshofer Group includes 17 companies in Germany, Austria, Czech Republic, Great Britain, France, the Netherlands, Sweden, Italy, Canada, USA, China, New Zeeland and Australia - employing more than 730 staff. Besides the German speaking market, we also serve international markets — an area that grows with each acquisition.



The KHC25 is ideal for efficiently compacting surface ground.



Q: The Kinshofer Group seems to be growing constantly. The latest acquistion was the Italian family-owned business Hammer. How does Hammer fit into Kinshofer Group?

TF: When we acquire a company, we take great care to ensure that their products are not in conflict with products we already have. Acquiring the product ranges from Hammer means we are now able to play in the highest league concerning Hydraulic Breakers. We've effectively closed the last big gap in our product portfolio. The other attachments Hammer offers, like the demolition processors and grabs, add product options to our portfolio that sit outside the premium class. They are perfect for customers who's main task may not be demolition as such, and therefore need a more cost-effective option.











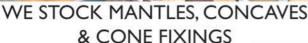




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Customers are the main priority in everything we do at MDS. Their feedback drives us to solve their problems by designing trommels that are fit for their needs! MDS has been developing a totally modular trommel: The M518R!

This trommel can be fitted with different bases and has a variety of drums to choose from. These options are easily interchangeable which gives the customer the options for their different needs. These are just some of the many features packed into this powerful machine. This allows us to serve many applications in different sectors. The M518R will be unveiled at Bauma Munich! We will also be bringing our M412 trommel to the show, which is also a very powerful yet compact tracked trommel that is ideal for cleaning stones, especially removing sticky clay from rocks!

Make sure to visit us at our stand at Bauma!



Rapid to Exhibit Innovative Track-Mounted Mobile Continuous Mixing Plant at Bauma Munich 2019



From 8-14 April, Rapid will offer a unique opportunity to experience its latest innovation, Trakmix, track-mounted mobile continuous mixing plant at Bauma, Munich, 2019. The machine will be on display at Rapid's stand, located in outdoor area FS, number 907/1. Information on the newly updated Rapid Reclaimer, reclaiming unit for the recovery on unused concrete, will also be available.

This September, Rapid, will celebrate its 50th year of delivering innovative mixing technology to the concrete, construction, mining, tunnelling and environmental sectors. Established in 1969 in Northern Ireland, Rapid's comprehensive range of equipment includes static and mobile batching plant, mobile continuous mixing plant, pan, planetary and twin-shaft concrete mixers, high pressure mixer washout systems, concrete reclaimers and spare parts.



Product innovation

Core to Rapid's continued success is product innovation. The company aims to release a new product or redesign/update an existing one on an annual basis. In 2019, the Rapid Reclaimer will be reintroduced to the market. Originally launched in 1991 and featured on BBC's 'Tomorrow's World' for its ground breaking innovation, the Rapid Reclaimer recovers unused concrete, enabling reuse of aggregate, sand and grey water. The newly updated unit will feature a redesigned trommel to improve throughput and efficiency and new material infeed system to accommodate concrete pump filling. Further information about the all-new Reclaimer will be available on stand at the show.

Application expertise

Previously once heavily focused on concrete mixing technology, Rapid's expertise has since diversified into other specialised mixing applications, such as tunnel finings, mine back-fill, and port dredging. The Rapid Trakmix has recently been successfully used to stabilise a fluid material for reuse, excavated during a tunnelling project in Northern England. Another recent application involved the processing of mine tailings for a backfill application in Tanzania

Flexibility for a wide range of site types

Trakmix, is a track mounted, totally mobile and self-contained, fully weighed high volume mixing plant. Trakmix was designed in response to the growing demand for a mobile continuous mixing plant which provides easy, cost effective transportation and eliminates the need for special transformational permits. Customer demand also indicated a need for a machine providing more options on outputs on a different platform, offering flexibility for a wide range of site types and applications.

Patent pending features

Trakmix features a number of innovative, patent pending features, including a superior controls system that weighs all materials and double hopper cement weighing system. Other cutting-edge features include low friction surface lining on hoppers, bottom conveyor for easy cleanout and outloading conveyor for easy discharge. Trakmix offers outputs of up to 250 tonnes per hour via a high volume continuous Rapid Twin Shaft mixer and 12.0m3 aggregate hopper, which includes a division plate for two different types of aggregates. The Rapid designed continuous twin-shaft mixer (pugmill) is the largest and fastest continuous mixer on the market, with specially phased shafts and paddles ensuring a homogenous mix for a variety of applications within the concrete, construction and environmental industries.

Full mobility and weighing capabilities

The Trakmix has been designed with ease of mobility and set up in mind. The machine possesses an entirely self-contained design mounted on tracks including on-board genset, providing mobile flexibility.

Full weighing capabilities are provided via an integral fully automated control system. Adjustable feeder gates from the aggregate bins are provided in addition to a variable speed belt feeder to aggregate weigh belt. Powders are fully weighed via a twin hopper system with twin-screw discharge and flow-meter provides metering of the water. An integral 600 litre water tank and provision for admixtures is also included.

Trakmix is recommended for applications where all types of binders or neutralising powders are required in the mixing process, including road construction, road paving, ground works/civil engineering, environmental stabilisation projects, aggregate recycling and many more.

Global leaders in mixing technology

"Bauma brings together the biggest and best in the industry and is the perfect platform to connect with our customers and unveil the latest exciting new product developments. We look forward to welcoming both new and existing customers on stand. Since the last Bauma, Rapid has experienced a growth surge and continues to solidify its position as one of the global leaders in mixing technology. " says Jarlath Gilmore, Sales & Marketing Director at Rapid.

See Rapid at outdoor area FS, number 907/1 at Bauma 2019, Messe Munchen, Munich on 8-14 April.



BIG OR SMALL





CRUSH IT ALL

McCloskey offers robust and reliable mobile crushers for the materials processing industry. The high performance range of jaw, impact and cone crushers combine productivity with outstanding durability to achieve the most efficient levels of product reduction across primary, secondary and tertiary crushing applications.

VISIT US AT BOOTH FS. 1211/1 Loung APRIL 8-14, 2019, MUNICH

McCloskey International

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Terex Ecotec to showcase latest environmental solutions at **bauma 2019**



Industry leading wood processing, biomass and recycling equipment manufacturer, Terex **Ecotec look forward to showcasing their product** offerings, innovations and expertise to a global audience at bauma 2019, taking place in Munich from 8th - 14th April 2019.

Having achieved significant growth and development in recent years, bauma will provide visitors with the opportunity to see first-hand the innovative products Terex Ecotec have to offer which are the result of their drive and ambition to design and manufacture truly unique machines which not only process traditional waste types but provide new solutions to the ever changing world of material recycling.

Tony Devlin, Business Line Director for Terex Ecotec commented, "Terex Ecotec are delighted to be exhibiting at bauma once again and look forward to meeting with existing and potential customers to discuss business opportunities.

Our product range has rapidly expanded to meet both market and customer needs as we continue to strive to remain at the forefront of the recycling equipment market."

On static display on the impressive Terex stand, FM.117 will be the highly versatile TTS 620 Trommel, with a 2 metre diameter drum and advanced hydraulic control it will be sure to capture the attention of passing visitors. With an easy change drum system and swing out engine cradle the TTS 620 is one of the most user friendly trommels on the market

Terex Ecotec representatives with vast product and application knowledge will be available to discuss specific requirements and the comprehensive product range available.

To learn more about Terex Ecotec's full product range visit www.terex.com/ecotec



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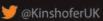
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Join the conversation









Bell Equipment at bauma 2019 Global ADT Specialist

International ADT specialist, Bell Equipment, will use the platform of Bauma, the largest construction equipment exposition in the world, to display both new and proven models of its leading E-series truck range (Hall B5. 148). Focal points will include the conversion to new emission regulations, model specific improvements, and the group's worldwide commitment to pro-active customer support strategies.



Tristan du Pisanie, Bell Equipment ADT marketing manager

Newcomers and long sellers

In addition to the world premier of its latest "crossover" model, the Bell B45E 4x4, the company's 6x6 range comprising seven models with payloads from 18.0 to 45.4 tonnes, will be represented by the Bell B20E LGP (Low Ground Pressure) — a new addition to many market regions — and the proven Bell B50E.

First launched two years ago in the UK, the Bell B20E LGP is based on the small B20E truck, which has been successful in the domestic African markets for more than three decades. These 6x4 trucks with a payload of 18 tonnes are used in medium-sized earth moving and civil engineering projects, as well as a base for numerous customised solutions, most notably in forestry and agriculture. This base machine has been tweaked for worldwide distribution for use in extremely muddy or soft, sandy underfoot conditions. The Bell B20E LGP has three driven axles and extra wide 800/45 R30.5 tyres (with 20.5R25 available as an option). The power of the Mercedes-Benz/MTU (OM 924LA/4R 1000) in-line fourcylinder engine has been raised to 170kW, an Allison sixspeed automatic transmission provides an integrated retarder, while the front and centre axles feature encapsulated wet brakes. All other equipment meets the E-series' high standards, including the spacious Bell cab, standard on-boardweighing (OBW) and numerous driving and loading assistants.

There has been impressive market acceptance in the UK, where the Bell B20E LGP has emerged as a highly specialised rental machine, in addition to being popular with Bell Equipment's more traditional customers. This was followed by a successful launch in the US market. More recently, demand from mainland Europe – particularly Scandinavian countries where the B20E with 20.5 tyres is road legal – resulted in Bell Equipment relocating production of the B20E LGP to its European assembly plant in Eisenach, Germany in autumn 2018.

Seventeen years since its premiere in 2002, the Bell B50E remains the only 6x6 fifty tonner on the market.

"The introduction of our own and other 60 tonne Articulated Dump Trucks definitely raised awareness of larger ADTs and the result is increased customer interest in the B50E," comments Tristan du Pisanie, Bell Equipment ADT Marketing Manager. "With its superior power-to-weight ratio and the lowest ground pressure available in the 50 and 60 tonne class, it remains the ultimate solution for high production and economical earthmoving on rough terrain." >



With 20.5 standard tyres, the smallest Bell 6x6 model is suited as a





This applies to both heavy earthmoving in large infrastructure projects, as well as mining or quarrying in extreme weather conditions or difficult underfoot conditions: "Crucial in earthmoving is choosing the right equipment for the job to ensure availability of all machines and their productivity, even under widely varying conditions. As early as the project evaluation phase, many customers recognise that the B50E can be smoothly integrated into existing hauling schemes in terms of volume, payload and necessary track maintenance. In direct 'cost per tonne' analyses, the higher payload gives it an immediate advantage over 40 tonne ADTs. This is combined with low fuel consumption, a traditional strength of Bell ADTs, to give a great result for our customers. The demand in the mining sector continues unabated and where very soft underfoot conditions mean that our B60E 4x4 is less suited, we're able to offer a reliable and economical solution with the proven B50E."

Updates and Upgrades

In Munich, Bell Equipment will update the market on the transition of its truck technology from emission level EU Stage IV/Tier 4f to meet the new EU Stage V regulations that became effective at the beginning of 2019. This impacts engines from long-time Bell partners Mercedes-Benz/MTU.

These engines compiled with EU Stage IV in combining integrated cooled exhaust gas recirculation (EGR) and selective catalytic reduction (SCR) adding urea (AdBlue). The new after-treatment process now adds a diesel oxidation catalyst (DOC) and a diesel particulate filter (DPF). The technology was developed by Mercedes-Benz in the OM93x/47x series for the introduction of the Euro 6 on-road truck emission standard (2014) and optimised by MTU in the corresponding 1000-1500 non-road engine series. All exhaust after-treatment components, including the diesel particulate filter, are installed in a compact one-box-solution behind the cab.

"As an OEM, both Mercedes Benz and MTU kept us informed of the development as well as listened to our needs. This means that we could already factor in the present concept during the design of our E-series. This has ensured a reliable and, above all, economic upgrade," continues Tristan. "The power characteristics of the engines have remained unchanged, while Mercedes Benz have confirmed a three percent improvement in fuel consumption. Ease of maintenance is ensured by a comprehensive integration between the Mercedes Benz/MTU and Bell electronics, as well as by good access for all serviceable items."

The other big change occurs on the high-volume model Bell B30E, which includes the introduction of the new Allison 3400 XFE transmission (6F / 1R).

"The transmission has closer and more evenly spaced gear ratios to ensure the better use of power and torque even at low engine speeds for further fuel savings. The transmission retarder will be replaced by the automatic retarder function of the wet brakes, which features automatic downhill speed control found on the larger Bell trucks, as well as the automatic Hill Hold feature. With Hill Hold the brakes are automatically applied if the operator takes his foot off the accelerator pedal while driving up an incline to prevent the truck from rolling backwards. When the accelerator is activated again the brakes are released when there is enough engine torque to pull away smoothly. Every customer that I have shown the Hill Hold feature to gets out of the truck amazed," adds Tristan.





As one of the best-selling models of the Bell E-series range, the Stage V generation of the B30E will be upgraded with new drive-line features that will improve productivity and fuel efficiency.

Separate circuits for brake and axle oils, with efficient cooling and filtering, allow the use of the optimal oil for each function, ensuring higher lubrication/braking performance with less maintenance.

Global customer support

In Munich, customers from around the world will be informed about the latest developments in Bell Equipment's aftermarket services. This includes new features of the satellite-based fleet management system Fleetm@tic® (which celebrates its 10th anniversary), financing programmes, and new repair and maintenance offerings that can be tailor-made for each type of application and customer profile.

Bell Equipment will also focus on the latest investments in its worldwide parts logistics. The new European Logistics Centre (ELC) opened in Alsfeld, Germany in September 2017 and the establishment of its American counterpart, the American Logistics Centre (ALC) in North Carolina in mid-2018, form important steps to support Bell Equipment's fast-growing Northern Hemisphere markets. Both new bases improve regional customer and dealer support through best parts availability, while also optimising worldwide procurement in collaboration with the Bell Global Logistics Centre (GLC) in Johannesburg, South Africa.

The next step will be the opening of the 12,000m² factory extension at the group's European ADT assembly facility in Kindel-Eisenach in mid-2019. This will cover bin fabrication and bonnet assembly and will optimise transport logistics and general production efficiencies to further reduce lead times and allow greater flexibility regarding customer needs.

Stand: Hall B5 148

Terex Washing Systems to present live washing demos at bauma 19

Game Changer in Wash Recycling...

Terex Washing Systems (TWS) are excited to announce that they will present live washing demos of their game-changing AggWash 60™ during bauma 2019. This showcase, in conjunction with their German distributors Kolsch and Christophel, is being hosted at Mittermeier (Kolsch customer site), located next to Hall FN 1024 / 1, from Monday 8th − Sunday 14th April 2019.

The award-winning AggWash 60 wash plant, referred to as a 'Game Changer in Wash Recycling', incorporates screening, scrubbing, sizing and recovery of sand on one modular chassis and produces up to six grades of saleable sand. The live demos of the plant will be located alongside bauma showgrounds, offering visitors the opportunity to see a working wash plant processing construction and demolition waste. Visitors will also have the opportunity to speak to the TWS team of experts across engineering, applications and sales.

Screening, scrubbing, washing & sand recovery on one modular chassis

Commenting on the forthcoming event, Oliver Donnelly, TWS Product Line Director, said "We are delighted to be in a position to showcase a working wash plant to the visitors of bauma, the world's largest event for our industry. The AggWash 60 is an award-winning product and was the world's first modular solution, comprising screening, scrubbing, washing and sand recovery on one easily transportable chassis."

AggWash 60

The AggWash™ was designed to address requirements for recycling customers and quarry owners, particularly in the

construction, demolition and excavation waste recycling market. The high performance solution has been designed to maximise yields from feed materials with efficiently designed system processes that keep running costs at a minimum. While it's readily portable format makes it particularly suitable for green-field applications, contractor use and temporary planning permission sites, operators more used to static installations will still appreciate the small footprint and minimal site preparations required.

Paul McWilliams, TWS Engineer Manager comments on the design, 'In all cases, installation time is significantly less than conventional builds thanks to the high level of factory prefitting and connections. The no-compromise design ethos ensures maximum serviceability and performance despite numerous innovative features, including easily removed pumps, ready access to screening media and intuitive controls."

TWS is the premier provider of advanced plant solutions for material and mineral washing needs in aggregates, recycling, industrial sands and mining, with an unrivalled heritage of over 60 years development experience and expertise in the washing solutions industry. TWS are committed to bringing market products that deliver value to our customers and offer solutions that serve their needs.

This event, open to all visitors at bauma, will feature demos at Hall FN 1024 / 1 that will be ongoing for the duration of the bauma show, Monday 8th — Sunday 14th April 2019. No booking is required.



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Ace Plant launch Bunded Bundie Store

Late 2018/early 2019 saw the launch of the new Ace Plant Bunded Bundie Store - a fully bunded, lockable and safe method of storing 1000L IBC's. Ace Plant (home of the Bundie Bowser) launched this product as a method of reducing the risk of spillage, theft and contamination of liquids from plastic IBC's on

Whilst similar units in the market place have a sump or drip tray the Bundie Store is fully bunded so if the 1000L IBC was to leak, the bund would hold all the liquid in one safe place without overflowing. This makes this unit incredibly beneficial to the environment, especially if the IBC is storing an environmentally harmful substance such as AdBlue.

If AdBlue is being stored in the IBC for example, this is a liquid that must be free from contamination and kept out of direct sunlight to avoid crystallisation. The Bunded Bundie Store fully encapsulates the IBC; protecting it from airborne dust/debris as well as long exposure to direct sunlight and UV.

Complete with fork pockets & safety pins as well as lifting eyes the unit can be safely transported and relocated site to

The Bunded Bundie Store is manufactured from 4mm thick steel which increases the durability and life of the unit itself.

With fully opening doors and lid this not only enables ease of access for the user but also enables the IBC to be easily positioned (or removed) using a forklift or telehandler.



Recent developments of the Bunded Bundie Store have resulted in the design and manufacture of a similar unit but instead of fork pockets the store can be lifted using a loading shovel bucket (similar to that of the Ace Plant Bucket Bundie Fuel Bowser)

As you can see from the images of this unit – it can also be used for smaller 20L containers, tools and other small items that need to be kept safe on site.

To discover more about Ace Plant and their range of innovative products please call 01908562191 or email info@aceplant.co.uk

DUO Equipment improve sand processing at Binnegar Quarry



Located on the Puddletown Road, near the town of Wareham, Dorset Binnegar Quarry is managed by **Raymond Brown Quarry** Products Ltd (RBQPL), a division of the Raymond Brown

Extraction and processing of sand was previously in operation on the north side of the road on a larger site of 100 hectares for a number of years which finished in September 2018.

Prior to that RBQPL had applied for a licence to continue extraction on the south side on a smaller site of 20.75 hectares which contained reserves of 2.6 million tonnes. This will in effect be worked over the next 10-15 years with possible extensions at a later date.





A successful tender:

With the project awarded to the English and Welsh dealer for Terex Washing Systems (TWS) industry leading specialist DUO Equipment (part of DUO Group Holdings Ltd) can offer innovative wash plants and water management solutions which are also complimented through their dealership of Spanish manufacturer – Advanced Mineral Processing Systems (AMP).

As material at Binnegar consists of predominantly differing qualities of sand with lignite present DUO Equipment based their plant design around the Terex® Aggresand™ 165 Modular Wash Plant and as there were quantities of lignite on-site a single TAK Lignite Hydro Classifier was included to remove the lignite element from the fines fraction. Additionally, to achieve a desired finer end product an AMP Compact Fines Sand Plant was included in the specification to achieve this.

Sharp Sand Processing:

Capable of 150tph the plant is currently operating at 120tph; as-dug material is fed into the 12m³ remote control tipping grid which is then fed up an inclined feed conveyor onto the top deck of the 4.9 x 1.5m Double-Deck Rinsing Screen. Fixed at an 18° working angle the top deck acts as a relieving screen to keep the pressure off the bottom deck. With none of the gravel fraction being sold, oversize (+20mm) is fed onto a side conveyor to stockpile. The main product, sand then falls through the bottom deck which is then pumped up to the twin hydro cyclones of the sharp sand plant. Consisting of a high-energy 3.7m x 1.5m dewatering screen and one 200/150 pump for sharp sand the specification is completed with one 750mm AMP conical bottom hydro cyclone hydro vortex. A second unit, a 750mm AMP flat bottom hydro cyclone hydro vortex enables an alternative blending process which eliminates any overloading on the AMP Fines Sand Plant and cuts the sand higher up the grade.

A specially designed rubber-lined underflow box allows a single concrete sand fed via separate conveyors to stockpile. All screen media (polyurethane modules) was supplied by Tema Isenmann.

Lignite Plant

Situated above the lignite removal plant the hydro cyclones then remove the ultra-fine particles, taking them from the top and feeding a concentration of sand into the TAK. When the sand settles in the TAK a clean water upstream current is introduced from the bottom and then by moving the set point, up or down you can then control precisely what the grading is at the bottom end of the sand and how much you float off.

AMP Compact Fines Sand Plant:

The plant at Binnegar also incorporates an AMP Compact Fines Sand Plant to provide the desired finer end product. The plant consists of three main modular components – a pump set, twin hydra cone assembly and a dewatering screen.

John Collins – Technical Director for DUO, comments, "The AMP Compact Fines Sand Plant incorporates an inverter drive which allows the pump speed to be altered to suit the feed, making it more economic to run and a huge benefit when you want to boost production.

"Material is fed to the pump from where it is then fed to the hydro cyclones, which recover down to 30μ and eliminate undesirable particles (clay, silt, etc.). The washed product discharged from the hydro cyclones is then delivered to the dewatering screen to reduce the moisture content of the final product and thus obtain an easy-to-handle, top-quality material. The hydro cyclone overflow containing rejected particles is discharged to the settling pond or can be reprocessed in the subsequent clarification and filtering stages, thus minimizing environmental impact and reusing the water employed in the process."

At Binnegar water is recirculated through 3 lagoons. Everything is sent back up to the plant from the main silt lagoon which weirs over into a polishing pond and subsequently over into the fresh water pond.

Quarrying







Cutting Edge Control System:

The control system for the Binnegar AggreSand™ wash plant is stored in a centralised cabin on the site which is one of the options offered by DUO Equipment through TWS on all AggreSand™ installations. Alternatively, the panel can be mounted onto the machine, all of which are pre-wired. This option exemplifies the flexibility of TWS and DUO and the AggreSand™ concept to suit individual customer needs or preferences.

A successful project:

Simon Pinto - OM, commented, "DUO did very well with the plant build, we had a very small tight time frame and as soon as our local contractors had laid the civils the plant was delivered and erected very quickly. Apart from a few minor tweaks we were processing in a very short time.

"We were extremely pleased with their professional approach, work ethics and H&S, we really couldn't fault them at all. The fitters were brilliant, very helpful and friendly and paid great attention to detail. A stress-free project from start to finish with the plant processing as required."

Simon, continued, "We supply to concrete plants and we have been selling a lot of washed animal bedding sand to local farmers."





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Mansfield Sand Meets Production Goals with McLanahan Hydrosizer™ Plant



Mansfield Sand Company Limited has been quarrying sand in North Nottinghamshire, England for more than 170 years. They are known countrywide as a supplier of materials for top class sports and sporting venues across the United Kingdom and Ireland. They supply sand material to 16 Premier League Clubs, 16 Championship Clubs and 120 other football league and nonleague clubs for use in their stadiums and training ground facilities.

Besides sand for football stadiums, Mansfield Sand also produces a wide range of products for landscaping and equestrian uses, including

championship golf and world class show jumping arenas, as well as asphalt sand, foundry sand, and sand for concrete and brick products.

Challenge

In 2014, Mansfield Sand wanted to upgrade their plant and control system to process a new deposit. They required a plant that would process 300 metric tons per hour of -65mm sand to manufacture their various products.

In addition to this requirement, the local planning commission also set a noise restriction in place so the new plant would not disturb some rare birds nesting near the boundaries of the site.

It was at this time that Neill Rowland, McLanahan Applications Engineer, knocked on Mansfield Sand's door. He explained that McLanahan could offer them a Hydrosizer™ sand plant that would produce five different products in one pass.

Solution

McLanahan installed a Hydrosizer™ plant incorporating McLanahan Pumps, Sumps, Hydrocyclones, Separator™ Dewatering Screens and Blending System with the ability of blending to 1% accuracy to help Mansfield Sand meet the strict specifications required of their final products. The final products are discharged at less than 15% moisture, which creates stockpiling efficiency and allows for further drying processes.

To meet the requirements set forth by the planning commission, the entire plant is housed within a galvanized structure, clad and insulated to reduce the noise level. The plant's components are also lined with rubber to protect them from the abrasiveness of the sand.

McLanahan also provided an Ultra Fines Recovery System to recover fines down to 40 microns to extend the life of Mansfield Sand's lagoon system.

Results

Since commissioning the Hydrosizer™ plant, Mansfield Sand Company has not received a single customer complaint due to the performance of the equipment. The plant's modern control system gives Mansfield Sand the ability to adjust the product to meet consumer demands.

In four years of operation, the Hydrosizer™ plant has proven to be both stable and reliable. It produces a consistent 280 mtph, and to date, the plant has produced 2 million tons of sand for Mansfield Sand Company. Furthermore, the Ultra Fines Recovery system has doubled the life of their lagoon by allowing Mansfield Sand to capture the fine material.

Overall, Mansfield Sand is pleased with the Hydrosizer™ plant and Ultra Fines Recovery System.

"Our process plant continues to manufacture our premium quality sands to Mansfield Sand's exacting standards," said Richard Abraham, Managing Director of Mansfield Sand. "The partnership between Mansfield Sand and McLanahan has rested on the McLanahan team's awareness of the importance we place on the reputation of our products and our respect for their experience. The partnership had a lot to prove, and it proved to be a great success.







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Proud to be the largest independent manufacturer of mobile crushing and screening equipment in the world, the last 10 years has seen year on year growth for McCloskey with over 100 machines sold annually in the South of England alone.

McCloskey are targeting rapid growth within the market and aim to even better impact and serve their customers.

The best testimonial for the McCloskey brand is that from their existing customers themselves.

Cowdenbeath based Collier Group recently took delivery of a new McCloskey J50 Jaw Crusher for their Goathill Quarry. Renowned for having one of the hardest Granite stone quarries in the country (average PSV value of 68), following extensive trials of all the brand leading machinery, the McCloskey J50 Jaw proved to effortlessly achieve production rates of over 320 tons per hour, easily surpassing the capacities of their existing equipment.

Duncan Collier, Founder and MD of Collier Group commented, "I must be honest and say I had never really considered McCloskey products previously even though I had heard good reports. Historically I have simply placed repeat business with our previous supplier. We had a J50 Jaw Crusher on trial and even before it was taken off the low loader the build quality shone through."

He added, "I really didn't expect the J50 to perform to the levels it did, as I had trialled various machines from different manufacturers that had struggled to deal with our seriously tough granite. I obviously listen to my machine operators when purchasing new equipment and we were all over the moon with not only the production rates, but the build quality and simplicity of the controls and also with the professionalism of McCloskey. I've been so impressed that I have also ordered the R155 Screener."

Another happy McCloskey customer is Airdrie based JCH Plant Hire. The firm recently took delivery of a new McCloskey J45v2 Jaw Crusher which is one of two new machines ordered for their Contract Crushing Operation.

James Currie, owner of JCH stated, "We ended up trying a J45 in our crushing yard and were impressed to say the least, not only did the machine stand out as being of way better build quality to our existing machine, but it totally out performed as well". James went on to add, "we had obviously heard of the McCloskey products previously but had limited knowledge. Having seen one in action, we had no hesitation in ordering 2 new machines to keep up with our ever-increasing work load".

Another advocate for the McCloskey products is McCloskey's new Scotland territory manager. Chris commented, "I have served the crushing and screening industry for many years representing the competition, but McCloskey have proved to be a breath of fresh air. As often recognised by our customers, the products are built extremely well. Not only does the quality speak for itself, McCloskey have a strong focus on customer satisfaction, after market and customer support come first. Not only do we have a superior product in terms of build quality but the production rates and cost per tonne are often unrivalled."

With a number of other McCloskey machines working throughout the country, the team are excited to continue their growth and are looking forward to continuing to exceed customer expectations with reliable, durable and high performing products including Crushers, Screeners, Trommels and Stackers.

For further Information, contact McCloskey on 0800 085 0445 or sales@mccloskeyequipment.co.uk

Sandvik QJ341 with Security+ gives SJ Walchester a major boost



A leading specialist recycler of construction and demolition waste from Stoke on Trent has received a major boost in

operational productivity and efficiency. SJ Walchester's recently acquired QJ341 tracked jaw crusher from Sandvik has impressed all at the company with its reliability, effectiveness and ability to crush asphalt and tarmac even in warm weather.

Stoke-on-Trent based SJ Walchester Ltd is a specialist in demolition, earthmoving and recycling. From the initial enquiry, through to completion of the job, the company aims to deliver on all projects the highest of standards of professionalism, provide quality workmanship and ensure health & safety is paramount in everything it does. Being particularly noted for its demolition work, the company takes into account all factors ranging from the age of the building to the presence of asbestos, providing its customers with the perfect bespoke solution.

Furthermore, once the building has been demolished, Steve Walchester and his team will recycle the resulting debris, where possible, turning the waste materials into valuable and environmentally friendly aggregates and other building materials. In fact, SJ Walchester Ltd is well-known for supplying an extensive range of quarried and recycled aggregates for domestic and commercial projects across Stoke-on-Trent and the Potteries, whether it is MOT Type 1 aggregate, building sand, or large quantities of crushed stone, the company can supply it

Recycled aggregates

As a company, Steve and his team at SJ Walchester have strict procedures which are implemented on site. Accurate waste segregation means the company can recycle a huge proportion of waste generated from demolished buildings. Implementing a full dust suppression system on site throughout the works further enhances the environmental credentials of its modern and professional crushing and screening

Being both proud of its hard-won reputation, and appreciative of the need to use the most advanced and effective equipment, Steve

Walchester recently sought a new crushing solution for his recycled aggregates operation. To this end, the company is now operating a Sandvik QJ341 tracked jaw crusher, basing its decision to use a Sandvik machine due to the performance of the crusher during its demonstration, and the exceptional back up and support.

"We've used various crusher brands over the years, but from the initial demonstration the QJ341 was very good. It did more than I was expecting it do, and we got a lot greater output with it," says managing director Steve Walchester. "In fact, what the crusher can do is a lot more than it said on the 'tin'. The different functions on the crusher are very easy to flick between making it a very userfriendly machine."

Security+ for peace of mind

No matter how good a crusher is, it is only as good as its support. Here Steve found again that Sandvik exceeded his expectations. "If the crusher was to break down it would cost us hundreds if not literally thousands of pounds in lost downtime, wages and revenue. That is not to mention the damage to our reputation which is based on supplying customers with a high-quality product, when they need it, at a fair price.



That is the reason Steve decided to take the Sandvik Security+ Gold service agreement when he purchased the machine. This is Sandvik's extended warranty programme offered through a service agreement which lasts for a duration of 2 years with the Gold+ package. Through 4 inspections throughout the year, preventative maintenance and inspections are carried out by a qualified engineer to ensure the unit is running at peak performance.

"My service and support experience are that Sandvik is 2nd to none. We had a problem the other week; I phoned Sandvik and within 3hrs Sandvik was on site and had fixed the problem."



Quarrying



each day from a variety of sources. The arisings mainly come from demolition work, with the materials consisting of demolition waste, reinforced concrete, bricks and 300mm lumps of asphalt. Much to Steve and his teams delight, even the latter has proved not to be a problem for the QJ341.

"I've used crushers from other manufacturers on asphalt and tarmac, and the QJ341 is the only jaw crusher I've experienced which will process it without problems. This is by its very nature sticky - especially when it melts in summer with the hot conditions we experienced last summer being a case in point. Our previous crusher wouldn't touch it and kept jumping the jaws. The QJ341 is simply able to be put into reverse and crushes as well as it does when set 'forward'.

"We are the only company in the city (Stoke-on-Trent) with a crusher than is able to deal with asphalt and tarmac. This has meant that other demolition and road maintenance companies bringing their asphalt and tarmac to us for recycling. The Highways Agency is one of our regulars!"

Value for money

When push comes to shove, Steve believes he's got what he paid for, plus more. "When we came to buy a new tracked jaw crusher the QJ341 wasn't the most expensive we looked at, but it was by no means the cheapest either. However, I'd give it 100% for value for money with no hesitation. Pound for



pound it's been an excellent investment, and the material it processes for us has paid dividends. "I would have no hesitation in recommending the QJ341 to anyone in the market for a tracked jaw crusher: one, for value for money, and two, for Sandvik service and after care. I am now 100% committed to Sandvik. I'm so impressed with both the company and QJ341 that I am actually in the process of buying a new one.



A global leader in conveyor belt cleaning technologies has introduced a new design specifically for applications where space for installation is limited. The new SQC2STM RM (Reduced Mini) Cleaner from Martin Engineering is a compact secondary belt cleaner that allows installation in close quarters, built with a narrow profile that resists material buildup. Patented rubber buffers maintain cleaning pressure on the new design, engineered to deflect and allow splices to pass without damage to the belt or cleaner, even on reversing belts. The rugged construction incorporates individually-cushioned stainless steel blades with tungsten carbide tips for effective cleaning with negligible risk to belt, splice or blade, and it can withstand even punishing operating conditions, including corrosive environments, high-speed belts and high-tonnage loads.

"The blades conform to the belt profile, adjusting individually to deliver continuous contact across the belt," explained Dave Mueller, Conveyor Products Manager at Martin Engineering. "In a perfect world, bulk materials would load uniformly, wearing the blade evenly, but that rarely happens. By having multiple segments attached to a single rigid assembly, the tension can be maintained and adjusted accurately, quickly and safely."

Like the other designs in the SQC2 product line, blade removal and replacement is a simple operation by removing the lock pin from the main support assembly and sliding out

SQC2S RM is a compact secondary belt cleaner for installation in tight spaces

the cartridge. The lock pins are a key component to Martin Engineering's "no-reach design," which allows workers to conduct their lockout / tag-out procedure more safely. The

unit is one of Martin Engineering's Safety First $^{\mathsf{TM}}$ family of products, helping customers achieve OSHA compliance.

The tensioners allow simple adjustment of blade-to-belt pressure to maintain cleaning efficiency, regardless of blade wear. The SQC2S RM is expected to find utility in a broad range of applications where installation space is at a

Martin Engineering is a global innovator in the bulk material handling industry, developing new solutions to common problems and participating in industry organizations to improve safety and productivity. The company's series of Foundations reference books is an internationally-recognized resource for safety, maintenance and operations training -with more than 20,000 print copies in circulation around the world. The entire 500+ page

volumes can also be downloaded as free PDFs from the Martin web site.

> Martin employees take an active part in ASME, SME, VDI, CMA and CEMA,

and the firm played a pivotal role in writing and producing the 7th edition of the

CEMA reference book, Belt Conveyors for Bulk Materials. Martin Engineering products, sales, service and training are available from factory-owned business units in Australia, Brazil, China, Columbia, France, Germany, India, Indonesia, Italy, Mexico, Peru, Russia, Spain, South Africa, Turkey and the UK. For more information, contact us at info@martin-eng.com, visit www.martin-eng.com, or call (800) 544-2947.



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Quarrying

4's the magic number for **M** B Wilkes

Dorset based, family owned Sand and Gravel quarry M B Wilkes Ltd take delivery of four new Hyundai HL960 loading shovels after having a great experience with their last Hyundai loaders.

From their large quarry hidden in the hills of the Dorset village of Wimborne, M B Wilkes offer customers a huge range of sand and aggregates throughout the Bournemouth, Poole and Dorset areas. Thanks to producing almost all of the products available on site and running some of the latest technology, M B Wilkes are able to offer very competitive rates and stand by an Honest Pricing Policy.

This latest investment which sees four Hyundai HL960 loading shovels replacing their predeceasing model, the Hyundai HL760-9A also supplied by the Hyundai dealer, Molson Group. The latest machines are being put straight to work in a variety of applications throughout their expansive processing facility in their Hophym Quarry in their Henbury Quarry.

With a host of developments from the previous model, the HL960 is a versatile and durable loading shovel. Weighing in at 18,800Kg and capable of an impressive 24.5 mph top travel speed this HL960 is able to cover the space between working areas efficiently and safely, whilst having the grunt required to perform whatever task is required.

In Henbury Quarry three of the machines have been supplied with the standard 3.4m3 (non-heaped) general purpose bucket and one has been supplied with the 3m3 rock bucket with nine specially designed teeth to assist the bucket in digging through compact material such as aggregate stock piles. Other additional options on the M B Wilkes shovels included a 6l auto-lube system to reduce the time required to perform daily maintenance checks, as well as safety features such as green safety beacons and blue rear strobes to comply with their high safety specification requirements.

These shovels act as the heartbeat of the M B Wilkes operation, moving feed stock material and the processed aggregates into stock piles, allowing their production machines such as their Terex Finlay 883+ three-way screener to work as efficiently as possible. With over twenty items of plant spread throughout the site, a lot of material needs to be moved to keep production flowing smoothly.



Quarrying



Adrian Cutler, M B Wilkes Operations Manager said; "We can't afford for a loading shovel to go down. Due to the high levels of production, if one goes down it can easily cause significant disruption throughout the site. Because of this, we needed to know we were buying shovels that are well built and reliable, along with a back-up service that we know we can trust. After the great performance of both the Hyundai HL760's and Molson's back-up we had no hesitation in calling Danny to discuss replacing them with the latest models".

Daniel Guibarra, Molson Sales Manager said; "The Hyundai loading shovels have really improved over the latest generations. In addition to the improvements in engine technology that see the latest models fully Stage 4f compliant and deliver a substantial fuel saving to customers, they have also made improvements in durability and operator comfort. What frequently happens is that as soon as the operators get to sit in one, the hardest task is getting them out".

The Hyundai HL900 series of loading shovels also offer a range of ECO functions such as their unique ECO Pedal. When operators use the accelerator pedal, the ECO Pedal can distinguish between economical operation and power operation based on a number of factors around the machine (including bucket load and ground conditions), delivering maximum power when needed, but delivering substantial fuel savings on operators with a heavy right foot. Operators can also see how economically they are driving thanks to an ECO Gauge featured on the intelligent and wide touch screen display cluster.

Two Liebherr R 984 Cs chalk up 34,065 operating hours

Over the last decade, the use of large excavators in quarries has declined. Fewer than a handful of UK quarries are now using 150 tonne plus machines for extraction works with many opting for navvies around the 80 - 120 tonne mark. But across the Humber Estuary there is a quarry using a pair of large Liebherr excavators on full-time extraction work.

The machines in question are still going strong in the quarry where they first went to work more than ten years ago. Operated by one of the UK's most respected names in earthmoving, Alf Kitching Ltd, the two Liebherr R 984 C excavators continue to keep up with the demands of a modern-day quarrying operation. Despite clocking up a combined 34,065 hours they still appear to be in excellent shape considering the tough environment.

Since day one, the two machines have been excavating chalk in the South Ferriby Quarry, which supplies the cement plant on the same site. The R 984 Cs have to achieve this without the assistance of blasting to guarantee the driest possible material for the cement kilns and because there are properties nearby: they rely solely on their immense breakout force to get the job done.

Launched almost 30 years ago, the R 984 C has proved to be one of the best sellers for Liebherr with over 1100 units sold worldwide. Weighing approximately 120 tonnes in this particular mass excavation specification, Alf Kitching's two R 984 Cs are still producing the quantities required by the cement plant thanks to the excellent aftersales support and parts availability currently in place.

The excavators are powered by a Cummins 18.9 litre, six-cylinder engine that can deliver 675 HP. 'Liebherr has been extremely good with supporting the engines,' Managing Director Paul Kitching explained. 'We have suffered with occasional reliability issues but the service response from them has been first class.' Overall, the reliability of both machines has impressed their owner and the quarry management: 'Apart from the usual servicing requirements, the machines have given us exactly what we have asked of them,' Paul said. 'We have undertaken some remedial works to address small cracks to the booms on both machines but this is down to the work they are expected to undertake. We have been extremely

The R 984 Cs cabin is well laid out and a comfortable place to work and the Liebherr Litronic engine management system provides the excavators with four power settings from LIFT and FINE to ECO and POWER. Alf Kitching's two R 984 Cs are mostly operated in POWER mode due to the nature of the material being extracted.

pleased with them both and with the support we get from Liebherr

themselves.

Quarrying

One of the machines is equipped with a Liebherr guick coupler and ripper tooth attachment to loosen some of the harder seams found at the quarry. And as the hardness of the material being excavated varies across the site, the two machines are regularly moved around with the ripper-equipped machine tackling the tougher, more stubborn areas of chalk.

Immense force is exerted through the machine when digging and ripping the virgin material and both excavators remain firmly planted to the quarry floor thanks to the heavy-duty undercarriage. The mass excavation equipment gives the Liebherr a maximum reach of almost 14 m at ground level and a potential dig depth of up to 8 m, which is ideal for maintaining the bench heights at the quarry.

The 5.5 m3 buckets were specially designed following a visit to site from the technical team from Liebherr's excavator manufacturing facility in Colmar, France, to ensure that they gave maximum durability and breakout force.

The R 984 C has now been superseded in the Liebherr product portfolio by two machines: the R 9100 with an operating weight of around 110 tonnes and an R 9150 with an operating weight of around 130 tonnes. Both models are fitted with Liebherr D 9512 V12 engines, achieve Tier 4i emissions standards and deliver significantly stronger breakout forces. Last year Alf Kitchings Ltd placed an order for two R 9150 B excavators the first of which arrived to site early March 2019 with the second following closely behind.











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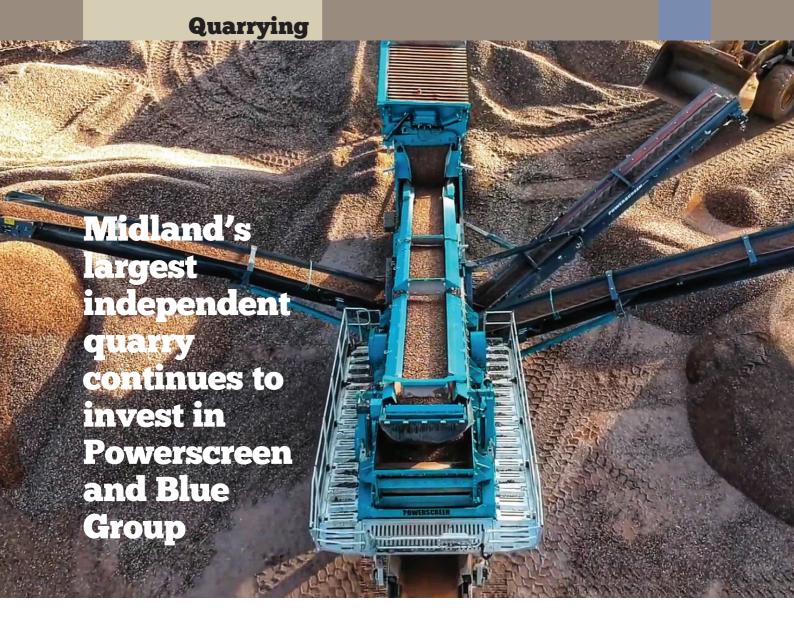
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JPE Aggregates has purchased a Powerscreen Chieftain 2200 that incorporates two triple deck screen boxes as demand for their products increases.

JPE Aggregates is a midland based aggregate supplier specialising in the delivery of sand, recycled aggregates and soils to the construction industry. JPE supplies and distributes from their own strategically located quarries, allowing the company to develop a reputation as leaders in delivering earth and aggregate solutions across the Midlands, as well as the UK. The business has been in existence for over 25 years, developing a reputation for providing the highest levels of service and a commitment to supporting sustainability in the construction industry.

JPE's Shire Oak Quarry is one of the largest independent quarries in the Midlands and is located within minutes of the M6 toll. The site offers an extensive range of sustainable aggregates and sand products, using their state-of-the-art washing plant, and several Powerscreen machines also supplied by Blue Group. With increasing demand for the products produced at Shire Oak, the company required another mobile screen to increase the efficiency of their operation.

The Chieftain 2200 was an obvious choice for Steve Birch, Director at JPE Aggregates, since the 2200 has been specifically designed for operators looking to process large volumes and a variety of high specification final products. Its two highly versatile triple-deck screen boxes has enabled the quarry to produce four saleable products and has significantly increased the site's production rate.

Despite its size the Chieftain can be set up in as little as 30 minutes, as it boasts hydraulic folding conveyors and track mobility. Other key features include; a revolutionary patent pending drive system which allows for switching between 2 and 4 bearings with bolt-on parts and hydraulic screen tensioning.

Pete Perryman, Quarry Manager at Shire Oak, who was heavily involved in the decision process explains why JPE chose the 2200, "Reliability of the machine was a big factor in our decision, we know how well the machine works, it is easy for the guys to work on and to set up. It is also incredibly powerful, and we did look at other machines, but they do not match the 2200 on power or size. So, it was an easy decision to stick with Powerscreen.'

Pete Perryman also commented on the positive experience he has had with working with Blue Spares over the years "I have dealt with Blue Spares for some time now and they are absolutely grand. I deal with Heather mostly, who is always helpful and gets back to me promptly.

Mark McMullan, Blue Machinery Salesman commented, "The Chieftain 2200 three deck is perfectly suited to the requirements and objectives of this site. Blue Group's longterm relationship with JPE has resulted in the firm purchasing several Powerscreen machines over the last few years, which are an integral part of their business.'





New Volvos arrive at Sheephill Quarry, Dumbarton

Breaking with its traditional brand of loading shovel, Thompson Quarries, a division of William Thompson & Son (Dumbarton) Ltd has opted for a brace of Volvo L180H wheeled loaders for its quarrying activities for the first time.

"Moving to the Volvo brand has been a great experience so far," says Managing Director, Andrew Thompson. "Our operators certainly appreciate the comfort and responsiveness of the machines which already are proving to be the optimum sized shovels for our operations at Sheephill Quarry, returning high productivity with good fuel economy."

The two machines have been equipped with heavy-duty L5 tyres and 6.0m³ rehandling buckets, one with a straight edge rehandling material at the wash plant and the other with teeth working at the face, the material being a hard whinstone basalt. Both machines benefit from Volvo's Copilot load assist option which is the very latest in weigh loading sophistication allowing the operator to calibrate either his bucket or block handling forks via the touchscreen pad in the cab. Bucket loads and the number of buckets filled can be recorded in addition to the system storing a whole array of product menus. The Co-pilot touchscreen automatically becomes a rear view screen when the machine is put into reverse, interacting with the rear view camera. Furthermore, the Co-pilot system is linked in with the Care Track system – Volvo's telematics system which can feed back information to a remote location.

Powered by a 13-litre stage-IV final engine developing 334hp in a relatively low rpm range of between 1300 and 1400 rpm, the twenty-five tonne L180H, complete with its large capacity rehandling bucket offers a generous full turn tip load of 17.3 tonnes and is fully optimized for moving high tonnages in the quarry as well as loading road-going vehicles in just two passes.

Established in 1946 as a horse-and-cart coal delivery service on the banks of the river Clyde, William Thompson & Son are now a fourth-generation family quarrying business serving the whole of Glasgow from Coatbridge to Paisley.

Besides its quarrying activities, William Thompson & Son (Dumbarton) Ltd provides additional services including recycled aggregates, crushing, landfill and recycling, concrete and ready mix, as well as plant hire and general haulage.

SMT GB markets Volvo Construction Equipment products which include wheeled loaders, articulated haulers, hydraulic excavators, Volvo utility equipment and Volvo road equipment products in Great Britain. There are eight strategically placed Customer Support Centres, a dedicated National Used Equipment Centre and a network of utility equipment dealers to ensure high quality customer support is maintained throughout the country.









We had a ground man that did nothing but constantly clean up; that was his job. Now we don't have a ground man. We haven't shoveled the tail wheel or cleared anything out from under the conveyor since we installed these cleaners. I'm amazed by CleanScrape®, it's been on for a year now and I haven't touched it. This material is sloppy, it's just muck that we're running. And then you look at the return side of the belt and the proof is right there. Absolutely phenomenal. Try it out for yourself, it's amazing.

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PROFESSIONAL - RELIABLE - COST EFFECTIVE - QUALITY

Terex Trucks' TA300 hauler - more fuel efficient than ever before

Simple to operate and easy to maintain, the TA300 is a proven performer that delivers low total cost of ownership and high productivity. Since August, the machine has incorporated a new transmission that leads to a 5% improvement in fuel efficiency.

The TA300 articulated hauler from Terex Trucks is a popular choice on quarries, construction sites and infrastructure developments. The 28 tonne (30.9 ton) workhorse offers a heaped capacity of 17.5 m3 (22.9 yd3) and is powered by a Scania DC9 engine, which develops gross power of 276 kW (370 hp) and a maximum torque of 1880 Nm (1387 lbf ft). The TA300's fuel efficient engine range is globally emissions compliant and meets the requirements of EU and North American legislation without the need for a diesel particulate filter (DPF). This is achieved via the latest generation selective catalytic reduction (SCR) technology, combined with exhaust gas regeneration (EGR) and a variable geometry turbo (VGT).

Product improvements

Since August 2018, the TA300 has been manufactured with the latest EP320 transmission. The updated machine now delivers a 5% improvement in fuel efficiency, a 5 km/h (3.1 mph) increase in speed to 55 km/h (34 mph), an extended maintenance period and enhanced performance when compared with the previous model. All of this means that customers can be more productive, achieving faster cycle times, lower cost per tonne and reduced carbon emissions.

The TA300's new transmission comes with eight forward gears as well as four reverse gears, higher overall gear ratio spread, equal ratio steps between gears, and optimized gear shifting with partial load shifts. These features mean that the upgraded TA300 offers lower fuel consumption with smoother gear shifting and thereby higher levels of operator comfort. The TA300 also now comes with long life transmission fluid, increasing the length of time between oil maintenance intervals from 1,000 to 4,000 hours.

High power, maximum comfort

The TA300 is equipped with true independent front suspension as standard, further enhancing operator comfort and enabling excellent traction control and maximum productivity, even in challenging conditions. The TA300 also has fully enclosed, oil-cooled, multi-disc brakes at all six wheels. These are supported by both the engine brake and the transmission retarder, giving the operator superb control and increasing safety and stability while providing a low cost of operation.

Helping to ensure high levels of operator comfort and productivity, the TA300 has a spacious, ergonomically designed cab with pressurized properties, which ensures operators are comfortable when behind the wheel. Acoustic insulation helps to minimize noise levels inside the cab while a high performance and easily adjusted heating, ventilation, and air conditioning (HVAC) system ensures a stable temperature. Other features that help to deliver a comfortable work environment include a tilt/telescopic steering wheel, an adaptive air suspension operator's seat with adjustable armrests, anti-vibration mounts for the engine and cab, and cushioned stops on the steering cylinders.

For safe, easy servicing, the TA300 has ground level test points, a fully tilting cab, an electronically raised hood and a full suite of on-dash diagnostic and machine health check readouts which help to maximize uptime.

TA300 specifications		
Maximum payload	28 tonne (30.9 ton)	
Heaped capacity	17.5 m³ (22.9 yd³)	
Gross power	276 kW (370 hp)	
New EP320 transmission specifications		
Forward gears	8	
Reverse gears	4	
Maximum forward speed	55 km/h	
Maximum reverse speed	14 km/h	
Automatic Transmission F (ATF) maintenance interva		
Integral transmission fluid retarder		
Hydraulic power-shift inter-axle differential lock		







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Solid business foundations are formed around good people, and as we look back at a nostalgic era stretching back 34 years, we also progress forwards into an exciting and freshly energised new generation.

Mark Haywood, Sales Manager for Surface Drills & Rock-Tools and Tunnelling, retires 31st March 2019 having joined Anglo Scandia on the 5th February 1985 and Sandvik in 1989, when Sandvik acquired the company. "34 years of drilling holes!" says Mark — he adds "It has been a privilege to work in the industry and on some of the most interesting and challenging projects in the UK & Ireland, from the Channel Tunnel to Crossrail, Cornish Tin Mines to Irish lead / zinc mines, the road tunnels in Northern Wales, to the Glendoe Hydro Recovery Project in Scotland. The customers have been just as interesting and varied including many Quarries and Drilling and Blasting Contractors! Great memories"

Mark's successor is no stranger to Sandvik, with over 11 years' service, mainly within crushing and screening, Chris Murray takes the baton from Mark from the 1st April 2019, though he has been working very closely with Mark over the past few months as part of his succession training and development into the role.

Chris is a lively and tenacious character who is bursting with energy and enthusiasm and as he embarks upon the fresh challenges the new role will bring, the deeply engrained Sandvik core values of customer focus, fair play and a passion to win will serve him very well.

Amongst these progressive times, we are also pleased to announce a newly appointed Parts and Services Manager, Oliver Calland.

With a customer focussed and engineering-based background, having served a Mining Service Engineer apprentice with Sandvik, Oliver has gained over 7 years' experience within the company, and is following a naturally progressive career path, having held the position of Customer Service Centre Lead, to his new role as Parts and Services Manager, where he will be supporting Surface Drill customers as part of his remit.

We wish Mark all the best for a long & happy retirement, and the new guard of Chris and Oliver good luck and they of course will receive the full support from the UK/Ireland team to help them to succeed in their new roles.



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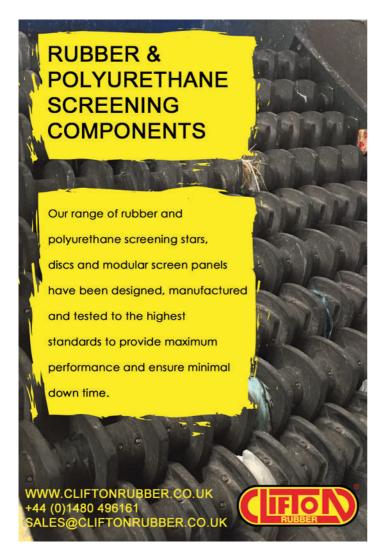
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Come and visit the **HUB-4** stand at **LetsRecycle LIVE to** pick up your free copy of the May/June issue

22 - 23 May 2019 Stoneleigh, Coventry



Sandvik releases non-cabin Ranger™ DXR series surface drill rigs: unbeatable productivity in difficult ground conditions

In response to customer requests, Sandvik Mining and Rock Technology is expanding its Ranger DX series of surface top hammer drill rigs with two non-cabin Ranger DXR versions for improved safety in the toughest quarry and construction applications.

Ranger DX series of surface top hammer drill rigs, suited for construction applications, quarries and open pit mines is now expanded with two new non-cabin drill rigs based on the Ranger DX600 and DX800 models, named Ranger DX600R and DX800R respectively.



New Ranger DXR drill rigs can reach places that are off-limits to operators and where other drills fail to operate. They essentially offer the characteristic of conventional Ranger DX series drill rigs, reliability and large drilling coverage area from the standard 17.6m2 (189ft2) to an optional 26.4m2 (248ft2), in a lighter and more mobile package — a superior solution for hazardous conditions where safe and productive drilling requires advanced radio remote control capabilities.

The non-cabin Ranger DXR drill rigs flourish on unstable benches and deep cuts typical to applications such as road and railroad construction, foundation drilling, trenching and pipeline contracts. The most hazardous of these extremely demanding jobs can be downright impossible without efficient remote radio control, which allows the operator to always



choose the best position in terms of safety and visibility. The remote control panel also includes tramming control functionalities for fast hole-to-hole movements and precise hole spotting.

The revolving superstructure offers unbeatable drilling coverage and superior stability, thanks to the innovative counterweight solution, and provides a solid foundation for drilling even on extreme terrain. In terms of productivity, the revolving superstructure turns Ranger DXR truly to a powerhouse enabling up to 60% more holes to be drilled per set-up compared to conventional top hammer drill rigs. Together with powerful rock drills and Rock Pilot+ drilling control system the Ranger DXR series represent the highest productivity in non-cabin drill rigs.

Ranger DXR series drill rigs are designed for 64 to 127mm (2½"–5") hole size range, with drill rod sizes between 38mm and 51mm (1½"–2"). The standard configuration of the machine can be further boosted with more than 30 useful options, such as extended superstructure turning radius, advanced measurement systems and upgraded dust control.

Contractors active in urban areas are likely to find a particularly attractive option in Noise Guard, a simple and rugged cover structure offering a total noise reduction of more than 10dB. It could be a decisive advantage when competing for contracts with strict noise limits.

Technical data	Ranger [™] DX600R	Ranger [™] DX800R
Recommended hole diameter	64 - 102 mm (2½ – 4 in.)	76 - 127 mm (3 - 5 in.)
Drill rod diameter	38, 45 or 51 mm (1½, 1¾ or 2 in.)	45 or 51 mm (1 ¾ or 2 in.)
Hydraulic rock drill	HL650 17.5 kW (23.5 hp)	HL820T, 21 kW (28 hp) HF820T, 23 kW (30.5 hp) (optional)
Engine	CAT C7.1, 168 kW (228 hp) / 1 800 rpm (Tier3 / Tier4F)	CAT C7.1, 168 kW (228 hp) / 1 800 rpm (Tier3 / Tier4F)
Flushing air capacity	6.2 m³/min, up to 10 bar	8.1 m³/min, up to 10 bar 9.1 m³/min, up to 10 bar (optional)
Transport length	11.3 m (37 ft)	11.3 m (37 ft)
Transport width	2.45 m (8 ft)	2.45 m (8 ft)
Transport height	3.2 m (11 ft)	3.2 m (11 ft)
Weight	15 600 kg (34,392 lb)	15 600 kg (34,392 lb)

Plant, Machinery and Equipment in focus at Letsrecycle Live



With around two months to go before the inaugural Letsrecycle Live, we take a look at some of the innovative recycling equipment and machinery that will be on display at the show.

Taking place on 22 – 23 May at Stoneleigh Park, Coventry, the brand new exhibition and conference features both indoor and outdoor areas, as well as live equipment and vehicle demonstrations which will encompass the entire waste and recycling sector and helps to address opportunities and challenges across sustainability and the circular economy.

LIVE DEMONSTRATIONS

Across the two days, equipment in the live demonstration area will be moving, shredding and sorting wood and organic waste, enabling visitors to make informed decisions about what might work best for them and their business.

Visitors will see a range of material handling equipment in action including the Fuchs MHL331F, the Volvo EW240E, the Sennebogen 830 and a selection of machines from JCB including a Wheeled Loader and Material Handler.

Processing machinery includes; the Eggersmann Teuton Z55 shredder and Terra Select trommel screen; the Lindner Urraco 750DK Mobile shredder and Zetastar ZS75F mobile screen; Doppstadt Inventhor Type 9 shredder and a shredder from German manufacturer Arjes.

Commenting on the event, David Ingham one of the directors at Mach Tech Services (sole UK & IE distributor for Lindner) said, 'The ability to show our equipment, especially the Urraco, to prospective clients in an operational capacity is something that has been missing from UK based trade shows, so we are all quite excited about it'.

In addition, fire suppression experts Fireward will be running live fire suppression tests to demonstrate the latest dry chemical vehicle automatic fire suppression systems.

NEW PRODUCT LAUNCHES

Within the indoor Plant & Machinery Zone, a host of businesses will be showcasing their wares.



One of the UK's leading recycling plant manufacturers, Kiverco, are eagerly making preparations to unveil an innovative new product at Letsrecycle Live 2019. While full details cannot yet be revealed, Kiverco's new machine will be a "game changer" for operators in the recycling market and will transform the way companies process waste.

Sensor based sorting specialist TOMRA will be presenting their static display and speaking ahead of the show, Gavin Russell, Sales Engineer said, "Letsrecycle Live looks set to be a fantastic networking event, bringing together a vast range of professionals from across the waste management industry. For us, the event provides an ideal platform to highlight our latest innovations in sensor-based sorting for the UK's waste reprocessing sector. We look forward to welcoming current and prospective customers to Hall 2 Stand D3 where our experts will be on hand throughout the two-day event."

Letsrecycle live is taking place at Stoneleigh Park, Coventry. To see a full list of exhibiting companies and to register, visit www.letsrecycle.live

For more information about visiting or exhibiting, contact info@letsrecycle.live or call 0207 633 4518

Are you complying with legal operating waste requirements?



Is your site operating under an Environmental Agency (EA) permit? Did you know that you are required to employ a Technically Competent Manager and gain an approved scheme certificate, such as WAMITAB under the regulations of your permit?

Whether you are just responsible for your own recycling, an industrial manufacturer that produces harmful substances or a mobile plant site manoeuvring landfill waste, you must have technically competent people on-site that have the right knowledge and skills needed to ensure that the site complies under the Environmental Permitting Regulations.

Each different waste management site will have their own permit. This may be a standard rule permit or a bespoke permit however they all operate under the same strict rules and if not controlled correctly, it can lead to enforcement action by the regulator or cause accidents and ill-health.

Recent figures from the HSE show that the waste sector is increasing in ill-health impacts and workplace accidents, but could this be better monitored and reduced with more of the correctly trained personnel on site?

Yes. Assessing the situation and finding out how to become competent on a waste-site will not only keep your permit intact, but create a safe, efficient workplace for your staff.

Primary and Continuing Competence

To meet the requirements of the CIWM/WAMITAB Operator Competence Scheme, technically competent people must demonstrate Primary Competence by completing a qualification, units and/or training programme(s) which demonstrate that they have the knowledge and skills to ensure waste sites comply with Environmental Permitting (England and Wales) Regulations. A Continuing Competence test must then be taken to demonstrate that their skills have kept pace with the changes made across the waste management industry e.g. the introduction of new legislation, technologies and/or techniques.





Waste Management

The process of disposing waste including the collection, transport and treatment starting from recycling through to landfill disposal is known as waste management. All sites are tightly regulated under the same guidelines with some sites including multiple waste management elements.

Businesses that only have one element of waste and resource management may have fewer hazards, for example a site that has only a single element, such as personal recycling. Having a Technically Competent Manager on site is still vital; it is still important to assess the health and safety impacts on site. Sharps, fire hazards, ingestion or inhalation can still be present and still pose a threat to the workforce. If a site combines more than one element or if there are numerous sites for different types of waste in the business, the Technically Competent Manager may be required to carry out multiple qualifications. Our courses may be combined to limit the number of units undertaken if there is a crossover.

Levels of Risk

The EA classifies all waste under a waste risk tier table with all facilities falling under one of the following categories; low, medium or high risk. Low risk sites typically include electronic waste storage, inert physical treatment of waste and the use of waste in construction and high-risk sites include open and closed landfill sites, hazardous clinical waste treatment and the recovery of hazardous waste.

The waste risk tier table, which can be found on the WAMITAB website, will allow you to see what qualification is needed for the operational environmental of your site or business and allow you to have the right competence on site.

All WAMITAB qualifications are tailored to the risk and operational functions of your site.

Following the integration of SERAC UK, Mentor can now provide a full remit of waste qualifications and we are keen to promote and support the correct safety elements in the waste sector through effective and accredited training and assessments.

For further information and support or for guidance on booking a qualification, get in touch with the training advisors at Mentor today – 01246 386900.

Robert Gibbs invest in more Atlas material handling power

Based in Hoddesdon, Hertfordshire the Robert Gibbs (Contracting) Co Ltd (RGC) have recently invested in an Atlas 350MH Material Handler.

Supplied by the Atlas dealer -TDL Equipment, the 350MH is a 17-metre reach machine and is fitted with a E761 grab providing a 700ltr capacity. With an operating weight of 36 tonnes the machine is driven by a Tier 4 Final AdBlue Deutz engine outputting 226hp (180 Kw).

Robert Gibbs:

RGC have a 50-year history in the scrap metal business and over that time has gained a reputation as a name to trust.

In an industry not known for its environmental awareness, RGC's reputation for the highest standards certainly stands out. Priding themselves on setting a high bar within the scrapmetal market, they take their responsibility to protecting the planet seriously. All the RGC offices and sites are constantly monitored for processes, cleanliness and safety, with a regular programme of improvements where necessary. The Hoddesdon site is fully bunded and RGC work closely with Thames Water to ensure their trade effluent is monitored closely. As a result, RGC sets the benchmark for others to reach.





An Atlas fleet:

The company currently have 7 Atlas scrap handlers in operation between their 6-acre Hoddesdon site and their satellite 1-acre Evesham site.

Recently the HUB team visited the RGC operation at Hoddesdon and we sat down and spoke to Director David Maskell who gave us the lowdown on the business.

David took up the story, "The company originally started off in the sixties using Poclains and as we grew, we progressed to Atlas. We have had two new machines in the last six months from TDL which has now brought our Atlas fleet up to seven machines."

The Hoddesdon facility operates 5 ½ days a week and employs 61 personnel with a fleet of 30 vehicles, servicing 3,500 roll-on-offs and skips for factories and the motor and aviation industries.

Processing around 8,000 tons per month the Atlas handlers constantly segregate the scrap and feed the shredding machines, shears and balers and load containers.

Each month 1,500 tons of non-ferrous and 6-8000 tons of ferrous alongside minimal waste forms of wood and general rubbish are dealt with by the hard-working fleet.

David, added, "All the handlers except one are fitted with grabs which are perfect to do the job. We are very happy with the machines and TDL are very flexible and prompt with servicing and will fit in with a gap in processing to keep the machines in good working order.

"Initially we did look long and hard at all the other OEMs and came to the opinion that overall Atlas Machines do the job for us. We have invested a lot of money in the brand, with TDL providing each machine with a full warranty and service package. They offer great residual value and we know that TDL will guide us through the process when we buy a new machine.



"Servicing is straight forward too, and we know we can rely on the TDL back-up and if spare parts are required, we know they will be with us within 24 hours."

David commented further, "When a new machine arrives at the yard, TDL always send an engineer who will spend a whole day going over the whole machine with our driver. Every driver has his own dedicated machine at RGC even the truck drivers. They all take pride in their machine and its essential that they understand the machine."

Recycling

The company also operate a satellite yard at Evesham where a 350M handles all the incoming metal from the Midlands area filling the skips for delivery to Hoddesdon for processing.

RGC supply many UK foundries and currently a lot of metal is sent to India via their own dock facility in Barking which is operated by their sister company who operate two 50-ton Atlas handlers



David, concluded, "If we decide to export more to Asia then further investment will be required in another machine. It's a huge investment as it means another operator and a container lift which will eventually pay for itself in the returns. Obviously, the choice will again be Atlas because of the very professional relationship we have with TDL Equipment and our faith in the brand!"

Certainly, RGC understand the benefit of good work tools and a quality German workhorse like the Atlas range of material handlers.





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CRJ Services announces the full integration of Matpro Machinery



Following a successful period of partnership, CRJ Services Ltd ("CRJ") and **Matpro Machinery** Ltd ("Matpro")
have announced
the full
amalgamation of the two companies into a single brand.

CRJ Services Ltd is an industry leading hirer of mobile recycling equipment, offering machine servicing and spare part sales

alongside their hire fleet of over 80 machines.

Matpro Machinery Ltd is a leading UK and ROI distributor of recycling equipment for world renowned brands; HAAS Recycling, Steelweld, Weima, Ecostar and Nihot.

As of the 1st of April 2019, the Matpro Machinery brand will cease, and will instead function as the sales arm of CRJ, 'CRJ Sales'. This change follows two and a half successful years of Matpro Machinery operating alongside CRJ Services, which saw both companies pool physical and human resources to bolster their offerings. The decision to fully integrate the two companies comes as a result of the successful utilisation of their operational synergies over this period. By operating as a single company, CRJ will be able to streamline internal processes which in turn will allow them to meet customers' demands more effectively.

"Since Matpro's inception in 2014, it has always been our aim to keep our business structure lean and controlled; allowing us to offer our products and services at value. We feel it important to become as efficient as possible by consolidating both companies into a single brand, encapsulating all of our business streams." Said Ben McQuaid – Director at Matpro Machinery.

As part of this strategy, the CRJ brand has been developed to house a number of sub-brands to reflect these business streams. This will allow for the new structure and capacity to be clearly communicated to their customers and the wider

Under the overarching CRJ brand, will sit five sub-brands which clearly denote each aspect of their offering; CRJ Hire, CRJ Sales, CRJ Parts, CRJ Service Support and CRJ Organics.

Thanks to their previous and ongoing successful collaboration the transition to a single entity, from their customers perspective, will be seamless. The Matpro website and contact channels will all be automatically re-directed to their new

This change of structure will make customers dealings with CRJ / Matpro more efficient and clearer in cases where both companies have collaborated on customer projects.

"We are all very excited to take this next step in CRJ's development. Following the successful partnership with Matpro, it was the obvious progression to incorporate both companies into a single brand. Both our customers and employees will be benefit of the simplified arrangement." Comments Rob Symons – Director at CRJ



Ecohog - 3-levels of 'stand-alone' mobile metal separation

Ecohog Ltd, a family owned manufacturing business based in County Tyrone, is dedicated to offering a high quality range of separation equipment to the Recycling industry.

The company has worked closely with waste processors for several years to understand their unique requirements and then tailor solutions to suit. The core product range started with their EH1500 Windshifter and EH81 Airhog suction systems designed for removing light from heavy materials.

As the company grew the management team identified the potential to supply a complementary range of equipment in terms of further waste separation through use of magnets.

This led Ecohog into the development of the HogMag ECS 1500 mobile Eddy Current Separator (ECS) designed as a mobile solution for recovering valuable non-ferrous metals from different waste streams. Now in 2019 there are three key equipment styles in the Ecohog magnetic separation range available to customers in the Recycling industry; THM ECS 2000, HM ECS 1500 and SHM ECS 2000.

THM ECS 2000 - Fully tracked mobile ECS

The Tracked HogMag (THM) ECS 2000 launched in 2014, is Ecohog's flagship product and market leader in mobile metal recovery. For separation it features a 2m wide High Gauss ECS, accompanied by a Vibratory Feeder for even material



delivery and a range of Magnetic Drum Separators to recover ferrous metals as well. Ecohog also offer their EH81 Airhog suction system as a patent pending feature on the machine to remove light materials such as paper, foil, plastic bags and cloth.

The THM ECS 2000 has become a core product in the Recycling industry with machines working in Biomass, MSW, Trommel Fines, Glass cullet and Scrap Metal processing.

Ecohog have designed a range of mobility features for the machine to best suit the rigorous environments of Recycling. These include; onboard diesel generator, 3 foldable stock piling discharge conveyors, Air compressor and air lines for cleaning, hydraulic Powerpack and heavy duty Crawler Tracks. All this makes the THM ECS 2000 the quintessential mobile metal separator for the modern waste processor!



Recycling



HogMag (HM) ECS is designed to be a cost efficient comprise mobile ECS. The whole machine sits on a skid mounted frame with casters and hook lifting point for easy mobility around site.

Once in position 6 support legs, operated hydraulically, drop down to lift the machine into position at the required feed height. Again with options for; onboard diesel generator, 3 foldable stock piling discharge conveyors, Air compressor and Hydraulic Powerpack, the HM ECS 1500 allows users to tailor their metal separation solution to their needs.



SHM ECS 2000 - Site mobile ECS

The SHM ECS 2000 is Ecohog's answer to the complications that can arise with static machinery installations. It's designed to be a standalone metal separation system capable of high capacity waste processing whilst negating the requirements





for planning permission and permits that typically come with static plant setups. It features the same High Gauss ECS, Vibratory Feeder and Magnetic Drum Separators as the rest of the range and is typically supplied as 2m wide system.

Instead of crawler tracks or hook loader skid the SHM sits on 6 adjustable height support legs and can be easily lifted and re-positioned around site. It includes a full access platform with stairs, 10m residual product stock piling conveyor and diesel generator as standard. The SHM ECS 2000 is the evolution of static machinery offering waste processors a low cost system with many of the benefits of mobile machinery.

Dedicated to continuous improvement and ongoing development the company are also currently involved in a range of R&D projects, indeed a number of new products will be launched later this year. Dedicated to development and innovation in products, Ecohog apply the same practice in their digital strategy. Given the strength of the Ecohog name within the waste and recycling industry and the natural progression of Ecohog within the industry, the Windshifter is no longer the sole product thus the need for an imminent change in the name and brand. Ecohog have now changed their domain from ecohogwindshifters.com with ecohog.com. The new and improved website ecohog.com is now live and it is fully mobile and easy to navigate creating a user friendly experience on both desktop and mobile devices.

To discuss your metal recovery needs and for further information on any Ecohog products contact the team directly on: (0044) 2880761295.

Or for Mainland UK enquires contact agent Warwick Ward: (0044) 1226 869589

Added Benefit

The EH81 Airhog suction system can be added to all ECS versions as an additional benefit, to ensure all light contaminants are removed, giving a better quality product as required.

Ecohog ECS range Suitable for:

- **Biomass**
- **MSW**
- **Trommel fines**
- Glass cullet
- Scrap metal processing







Green

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Chinese import ban encourages new ways to improve recycling efficiency

Kiverco, the recycling plant manufacturers, recently completed a multi-million pound installation of a new, state-of-the-art recycling facility at McQuillan Environmental in Dundrod, Co. Antrim, N. Ireland. One of the drivers for this new recycling plant was to dramatically improve the quality and "purity" of the waste products produced, which has become increasingly important since China's new restrictions on waste imports.

"CHINESE NATIONAL SWORD"

The "Chinese National Sword", which came into effect in February 2018, has been introduced due to the poor quality of waste imports China was receiving which made them more difficult to recycle. China's own landfills are filling up quickly and they also drastically need to improve their air quality and reduce pollution from dirty or hazardous waste.

Along with the ban of 24 types of foreign waste, the country has set tougher standards for contamination levels in other types of waste it does accept, such as plastic, zorba and other metals. This means an increase from 90-95% purity to 99.5%. Ronan McQuillan from McQuillan Environmental says, "Rather than look at the China ban as an obstacle, we took the decision last year to invest in new equipment and treat this as an opportunity. This new, intelligent recycling equipment from Kiverco allows us to separate the waste more efficiently, so we not only can ensure high purity levels of our waste, but we are now able to gain a real competitive advantage in the market place. There is already a trend towards the demand for cleaner, higher quality materials in the industry."

USING EQUIPMENT TO OVERCOME THIS BAN

By using the latest in waste recycling equipment, manufactured by Kiverco, McQuillan Environmental have been able to ensure their dry mixed waste products have the lowest contamination and highest purity levels to be accepted in China.

A BESPOKE SOLUTION

Working closely with McQuillan Environmental Kiverco designed a tailored solution - a recycling plant that would fit into their existing building and would meet all their requirements. As well as Kiverco's own manufactured equipment, they also incorporated market leading technology from around the world which would ensure the efficiency of the new recycling plant.

Kenny Hull, Technical Sales Manager at Kiverco says, "The recycling industry at home and abroad is changing dramatically. In the past year, we have had customers tell us how their products have been turned away at Chinese ports due to not meeting correct purity levels. As a supplier to this industry, we must ensure that we can help our customers by offering intelligent equipment that they can rely on to do the job effectively.

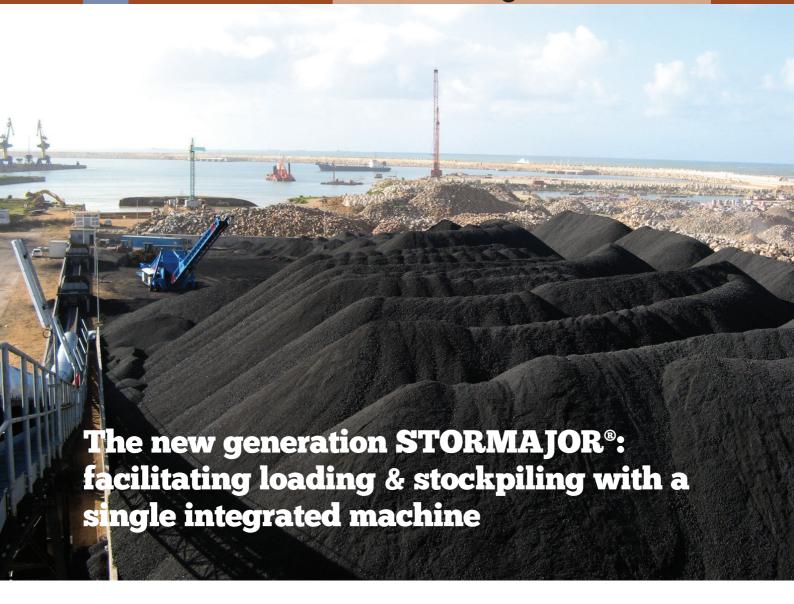
We have a great team of people who, with their extensive knowledge, can advise customers, not only on the product but also changes within the industry. We have been building recycling plants for over 25 years and our product design has had to constantly evolve with changes in the marketplace. A lot of our sales come from around the world, so we were delighted to have this opportunity to help a local company gain advantage in this highly competitive market."











The new generation STORMAJOR® provides a fully integrated system to receive directly from trucks or front end loaders and discharge to vessels, rail cars or stockpile without the need for any supplementary equipment. This integrated system eliminates double handling which protects the quality of the material being conveyed whilst limiting the generation and spread of dusty particles.

Environmental protection and maintaining air quality is paramount. The STORMAJOR® offers operators a variety of dust and pollution control measures. Full enclosures are available at truck reception and around the outloading boom in conjunction with on-board dust extraction equipment for operation in sensitive locations.

These machines are fully mobile and mounted on either tracks or wheels depending on application and site requirements. On a daily basis quick and easy repositioning of equipment is vital in maximising opportunities on multipurpose sites and the new range of track mounted STORMAJOR® units can also travel with a residual material load in the reception area if required.

The STORMAJOR® is ideal for stockpiling. Its radial boom generates a high stockpile with minimum machine movements whilst its compact design allows for utilisation of irregular storage and stockpile areas. The ability to produce stockpiles with minimum movement means this equipment can be used for stockpiling in warehouses as well as outside.

Mobile equipment provides increased flexibility for port operators. The STORMAJOR® is adaptable and can load barges moored off the river bank, small ships up to 10,000 dwt as well as provide a feeding system for high-level SAMSON Shiploaders when loading larger ships. This flexibility facilitates a quick response to trade variations in import and export of dry bulk materials.

Three STORMAJOR® Series are available; the 380 Series for materials with a bulk density of ≤ 1 t/m³ such as cereals, fertiliser or alternative fuels; the 450 Series for materials with a bulk density from 0.9 to 1.6 t/m³ such as additives, light minerals, aggregates or fertiliser and the 800 Series for materials with bulk densities from 1.5 to 2.1 t/m³ such as heavier minerals, aggregates or ores. Each series can be tailored to the requirements of the particular operation with specific power and mobility options, reception options, dust containment and reduction and discharge options.

SAMSON is proud to be part of the AUMUND Group which provides customers with access to a network of bulk materials experts and service and maintenance options across the globe. Premium support service is also available through the group wide PREMAS Scheme (Preventative Service and Maintenance).

www.samson-mh.com



In December 2018 Elite Precast Concrete were contacted by Richard Roseveare, owner of specialist groundwork and civil engineering company C-Shore Ltd to discuss what might be the quickest, easiest and most cost-effective method of stopping further coastal erosion at a site in Cornwall.

A 45m stretch of the coast line was gradually being eroded by the sea which was in turn threatening to wash away sections of three back gardens above the cliff line.

The base of the cliff was only accessible from the beach at low tide so a solution that was both quick to install as well as being incredibly durable and able to withstand the harshest of stormy Cornish winter weather was needed.

Richard chose Elite's largest range of high strength interlocking blocks (which have a design life of over 100 years) for the job and having settled on the design he and Elite set about planning the work. Such was the remote nature of the construction site the blocks had to be delivered to a nearby holding area from where Richard could take them one by one to the foot of the cliff. So having cast the steel reinforced foundation slab using 'no-fines' concrete Richard set about installing the blocks.

Working quickly to avoid the incoming tides C-Shore were able to lay the blocks in a matter of days and of course without the need for shuttering, formwork, steel fixers and pumping large volumes of ready-mixed concrete.

The result is three very relieved and happy home owners who are safe in the knowledge that their gardens have been protected for many years to come by Richard's ingenuity and Elite's high strength Legato blocks.

For more information on C-shore's specialist coastal erosion prevention services email Richard at c.shoreprojects@gmail.com or Elite Precast Concrete sales@eliteprecast.co.uk







May/June19



PLANTWORX Exhibition Preview
WASHING & SCREENING – static & mobile
washing, hoppers, conveyors, cyclones, pumps,
trommels, log washers, filter press, plate press,
flocculants, scrubbers, separators, lignite plant,
dewaterers, classifiers, H&S, lighting systems, bulk
storage bays, land conveyors, weighbridges, belt
weighing, contract washing, plant hirers, rail
services.

Editorial copy deadline 6th May 2019 Advert copy deadline 15th May 2019

July/August19

MRF'S & RECYCLING PLANT – IBA plants, biomass plants, autoclaves, picking stations, hoppers, conveyors, magnetic separation, eddy current separators, air separation, shredders, optical & robotic separation, balers, fork lifts & telehandlers, compactors, crushers, screens, spare parts, material handlers, lighting, H&S, bulk storage bays, weighbridges, belt weighing, dust suppression, wear parts, rail services, attachments, buckets, metals recycling, wind shifters.

Editorial copy deadline 5th July 2019 Advert copy deadline 15th July 2019

September/October 19

ASPHALT PLANT, BITUMEN & CONCRETE

PLANT – mobile & static plant, asphalt storage, dryers, burners, control systems, hot oil heaters, spare parts, RAP equipment, modified bitumen, H&S, bulk storage bays, concrete plant & equipment, concrete mixers, weighbridges, belt weighing.

Editorial copy deadline 5th September 2019 Advert copy deadline 16th September 2019

November/December 19

MOBILE PROCESSING EQUIPMENT – mobile stackers, mobile conveyors, mobile radial stockpilers, mobile tracked conveyors, mobile crushers, shredders.

Editorial copy deadline 5th November 2019 Advert copy deadline 15th November 2019





further silo project

Gloucester based dry bulk materials handling specialists, SN Engineering, were contacted by their client back in early 2018 to assist in evaluation of an additional storage & loadout facility.

Having successfully completed our 3000m³ single silo storage facility back in summer of '16 (Hub4 Iss 40), they were the obvious choice.

"..... due to their quality of equipment, safe & efficient site works & proven track record of bringing projects in on time & on budget, partnering with SNE again, for this project, was one of the easier choices I had to make" commented the clients European Chief Operating Officer.

Having assisted us in successfully increasing our GGBS storage & distribution facility back in late 2016, when it became apparent that our Anhydrite facility needed significant investment to keep up with the ever increasing demand & to ensure customer availability, a call to SNE was initiated.

Anhydrite

An evaporate mineral used as a soil treatment and to produce construction materials

What is Anhydrite?

Anhydrite is an evaporate mineral that occurs in extensive layered deposits in sedimentary basins where large volumes of seawater have been evaporated. It is typically interbedded with halite, gypsum, and limestone in accumulations that can be up to hundreds of feet thick. On a much smaller scale, anhydrite can form in shoreline or tidal flat sediments from the evaporation of seawater.

Anhydrite also occurs as a vein-filling mineral in hydrothermal deposits. It is deposited from solution, often along with calcite and halite, as gangue in sulphide mineral deposits. Anhydrite is also found in the cap rock of salt domes and in cavities of trap rock.

Anhydrite is an anhydrous calcium sulphate with a composition of CaSO4. It is closely related to gypsum, which has a chemical composition of CaSO4.2H2O.

The worldwide abundance of gypsum greatly exceeds the abundance of anhydrite.

Anhydrite receives its name from the Greek "anhydrous" which means "without water." It readily converts to gypsum under humid conditions or in contact with groundwater. This transition involves the absorption of water and a significant change in volume. That expansion can cause deformation in the rock units. If gypsum is heated to about 200°C, it will yield water and be converted to anhydrite.

This reaction occurs much less often.

Uses of Anhydrite

Anhydrite can be substituted for gypsum in some of its uses. Both minerals are crushed for use as a soil treatment, and in this purpose anhydrite is superior. One ton of anhydrite has more calcium than one ton of gypsum - because gypsum is about 21% water by weight. This yields more calcium per ton in a soil application. Anhydrite also has a higher solubility, which helps it benefit the soil quickly.

Small amounts of anhydrite are used as drying agents in plaster, paint, and varnish. It is also used along with gypsum to produce plaster, joint compound, wallboard, and other products for the construction industry. Anhydrite has also been used as a source of sulphur in the production of sulfuric acid.

The Brief!

Client brief was for some c 1000Te additional storage with direct, dust free, tanker loading to compliment their existing facility.

An agreed location was determined, adjacent to existing, thus ensuring their existing traffic management system could be adhered to as this large plant has a high volume of traffic movements therefore site safety was paramount.

SN Engineering initiated a design, in conjunction with clients preferred civil contractor, utilising 2 No SP490 (490m³) series sectional bolted silos from their 7.6mØ range c/w raised super structure for direct drive under loading.

As previously, due to the exposed site location, the silos & structures were designed for 45m/sec peak wind loads. This exposed environment also meant the steelwork had to be finished to 'C5'—Marine spec for enhanced longevity. An

element of future proofing was also catered for within the initial design such that possible future use of these silos for direct offloading from ship was also built in to the design.

At the beginning of May, civil contractors commenced removing an old weighbridge, which was to be recycled & extended for this new facility, and making good the ground adjacent to the clients existing & very busy facility. Fortunately, for CDM compliance, a relatively easy site works demarcation could be achieved and a dedicated site ingress / egress system could be employed thus zero hindrance to the clients working site could be achieved.

At this point, SNE installed a time-lapse, high definition, camera to the bottom of the site—this allowed for the whole project site to be captured for future reference, but more importantly for live continual monitoring throughout the various project phases.

During this initial civil works, SNE could complete the 3D modelling—having already agreed the design principle & loadings for passing to civil & piling contractors - ensuring the tight manufacturing timeline could be achieved.

SNE's in-house 3D modelling not only enables our engineers to check finite detail, thus ensuring everything is covered before manufacture commences & more importantly a trouble free site installation.

The obvious added benefit is to the client who can view these 3D drawings, with colleagues &/or stakeholders, to assist better in visualising what they are getting from their investment.

The design also had to cater for 2 wrap around high level platforms, for accessing silo outlet components, and had to be combined with ease of operator access to tanker hatches at a lower level. A unique 1 piece, twin deck, design allowed for both easy access to silo outlet components, including easy access to the loading bellows, combined with integral step down to a suitable tanker access height where a pair of specially commissioned counter balanced drop down stairs could be fitted. These balanced drop down stairs c/w integral perimeter hand railing allow for operators to safely access the top of the tankers whilst being fully protected by the hand railing, which is hinged to work in unison with the up / down action of the drop down stairs. These can be easily & safely locked in desired position thus caters for variations in tanker heights.

Late August saw the deployment to site of the initial crew of 4, this would be increased to 6 as the project naturally evolved. This coincided with the 1st 3 (of 7) artic deliveries to site. All our silos, even our 12.5mØ range are fully transportable via standard road haulage &/or shipping containers, thus can be shipped to any part of the globe.

The silos were each equipped with a pair of high capacity, high efficiency, fan assisted dust plants to ensure all introduced dust laden air is safely managed, with only prefiltered air being released to atmosphere. With the silos each having a working capacity of approximately 500m³, stock inventory is maintained via a continuous level device; utilising the latest radar technology available to constantly feedback data to the clients existing system via a 4-20mA interface. Pressure relief valves and mechanical high, and ultimate high levels, complete with continuous ground testing capabilities, have also been installed as additional safety devices as part of our 'belt& braces' approach.



Once the new bulk silos have been charged with the Anhydrite, direct from the process, the product is discharged through an electro pneumatic, extra heavy duty cast iron slide valve. Integration of the weighbridge controls allow for the electro pneumatic butterfly valve to regulate the flow—particularly at the end of loading and nearing target weight for the tanker. Dust free tanker loading is achieved via SNE's ever popular Series 8000, heavy duty loading spouts c/w integral high efficiency dust filter & extraction fan. These units come pre wired, only need mains power source, with 2 individual electrical panels 1 @ 415V & houses all necessary motor starters; overloads & contactors etc.. With the 2 @ 110V or 24V which houses the pre-programmed mini PLC which operates all the functionality of the unit. Additional I/O's are also available for client integration into their system when required. These heavy duty units have twin bellows & internal steel wear chutes as standard offering longevity in the field & are suitable for loading powder &/or granulate at up to 250m3/Hr.

The whole project was run to a very tight timeline, with utopia for handover by end of October.

SN Engineering's specialist installation crew commenced the mechanical installation at the beginning of September, under full CDM regs, and were able to handover the plant, as agreed, to the client at the end of October. Supervision of the site was via on-site foreman, weekly project engineers site visits and all overseen by a time-lapse camera installed for the duration of the project, from 1st breaking of ground > 1st tanker loading.





The big advantage, apart from historic video at the end of the project, is that both SN Engineering's personnel & client management / stakeholders can monitor progress; safe working etc remotely at anytime, anywhere in the world Clients ECOO, Rowan Elliott,

further remarked: "Getting this project off the ground as soon as possible to meet our customer needs was crucial in order to enhance our Anhydrite offering.

SN Engineering again delivered this project on time, on target cost, and most importantly, with zero harm and all in compliance with UK CDM requirements. The completion of this project is the culmination of many months of hard work by the LKAB Minerals' Runcorn-based team, SN Engineering and a set of highly skilled contractors. Expanding our Anhydrite offering is great news for us, and more importantly, great news for our customers too as we can further ensure continuity of supply of our quality assured product."

For further information on SN Engineering including project evaluation or a site survey – contact: info@sneng.co.uk

Atlas Copco launches mobile electric Variable Speed Drive compressor range, made for tough environments

Throughout 2019, Atlas Copco will introduce several mobile electric Variable Speed Drive (VSD) air compressors to its E-Air range: from 250 up to 1100 cfm. These plug-and-play, electric-powered compressors are the ideal solution when working in a low emission zone. The absence of diesel emissions, combined with the low noise levels (as low as 61 dB(A)), make the E-Air range the perfect match for underground applications like mining or tunnelling, as air ventilation is a part of their running costs. While the fixed-speed electric compressor needs a start-up current peak, the VSD electric range offers best-in-class versatility.

Efficiency is further aided by the optimal combination of the Variable Speed Drive and permanent magnet motor. Finally, it offers many features that are required in tough environments. A full range of VSD electric compressors will be launched at Bauma 2019.

noise levels and no diesel engine emissions, the benefits of going electric within specific applications cannot be overstated. The new Variable Speed Drive electric compressor range is a game changer when it comes to clean drive technology for rough and dusty environments like underground tunnelling and mining. We have the experience to protect your investment in these circumstances.'

Versatile electric Variable Speed Drive technology

The compressor's integrated VSD-driven permanent magnet electric motor requires only low power for start-up, so there is no need to oversize the power supply. In addition, there is also no need to oversize the pneumatic tools. The Variable Speed Drive and permanent magnet motor also make an important contribution to efficiency. Combined, they offer best-in-class efficiency at partial load. Furthermore, the smart socket system on the E-Air H 250 VSD model provides end users with the flexibility to use the same machine with multiple outlet sockets (63, 32 and 16 Amp).

Increased power, without the diesel

The absence of diesel emissions is not only relevant with regard to the new Stage V diesel emission regulations. When working in a residential area or an enclosed space such as a subway, tunnel or mine, the E-Air range provides a reliable flow of compressed air without any diesel emissions. This significantly affects the need for air ventilation in any underground application, which comprises a significant part of the running costs when using diesel air compressors. An additional benefit in these environments is the low noise level. The new VSD E-Air H 250 can operate as quietly as 61 dB(A); a lower level than a conversation.

VSD E-Air compressors are smaller and lighter than equivalent diesel air compressors. For instance, the E-Air H 250 weighs less than 750 kg, which means it requires no special driving





licence to tow it in Europe. The advantages of using an electric-powered mobile air compressor are clear: there is no need for refuelling, while users benefit from increased autonomy and plug-and-play capabilities. While the electric motors require no servicing, service intervals for the compressor are at a very low level: only once every two years or 2000 hours.

The new VSD E-Air range features Atlas Copco's PACE system (Pressure Adjusted through Cognitive Electronics). This enables users to control the pressure between 5 and 12 bar, in precise 0.1 bar increments, and thus adjust the flow to the optimal level required for their application. Therefore, one compressor can handle various jobs that previously would have required multiple compressors.

Reliable in the toughest working environments

Hendrik Timmermans, Vice-President of Atlas Copco's Portable Air division, commented: 'From enhanced efficiency to improved

Compared to conventional industrial compressors, Atlas Copco has designed the VSD E-Air range for tough working environments. The compressors come equipped with potted motor windings to prevent dust and water ingression, the proven HardHat canopy (for the VSD E-Air H 250 and 450), an IP65-rated controller, a water-cooled drive (IP67-rated), a single-sheet steel, non-welded undercarriage and three-layer anti-corrosion paint system.

In addition, the standard spillage-free frame offers 110% fluid containment, increasing peace of mind when it comes to possible spillages on site. The VSD E-Air range is also equipped as standard with an after-cooler, providing high-quality air for applications like sandblasting.

These features not only protect an end user's investment, but also ensure they have a reliable compressed air source for their application. The VSD E-Air range is therefore perfect for back-up applications, temporary extensions of compressed air systems, or to provide reliable compressed air flow when a stationary compressor installation is undergoing maintenance.

Compliant with any diesel emission regulation

For 146 years, Atlas Copco has been innovating with its customers in mind, while focusing on sustainable solutions. By launching a full range of VSD electric mobile compressors, it goes beyond updating the existing diesel air compressor portfolio to comply with the new Stage V diesel emission regulations. Atlas Copco introduced the first mobile electric air compressor in 2016: the fixed-speed E-Air T900. In 2019, Atlas Copco will launch not only two additional fixed-speed electric compressors (the E-Air T400 and the E-Air T500) but also three new VSD electric compressors: the VSD E-Air H 250, the VSD E-Air H 450 and the VSD E-Air V 1100. The full range will cover all air demands from 250 to 1100 cfm.





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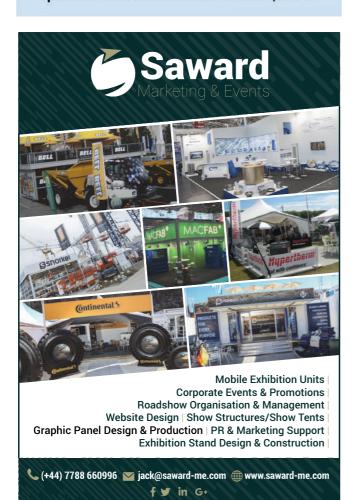
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Diary of **Events**

letsrecyclelive

Lets Recycle Live

NAEC Stoneleigh 22-23 May 2019



Plantworx 2019

East of England Arena, Peterborough 11-13 June 2019



RWM Exhibition

NEC, Birmingham 11-12 September 2019



Conexpo **Con/Agg 2020**

Las Vegas, NV 10-14 March 2020

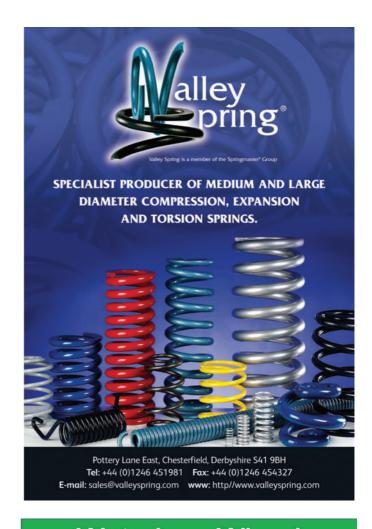


Hillhead 2020

Hillhead Quarry **Buxton UK** 23-25 June 2020

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Waterless Wheel Cleaning



The DriveOn V-Tech Dry Wheel Cleaning System from Ecogreen Plant Hire Ltd

- No water to provide, waste or dispose of
- No water course contamination, or freezing or icing
- No power required and no emissions
- No extra kit to hire no pumps, generators, bowsers, lances etc
- No supervision required, and no breakdowns
- Reduces road sweeper hire, and it doesn't make more mud!
- Up to 60% less surface area than other dry types

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