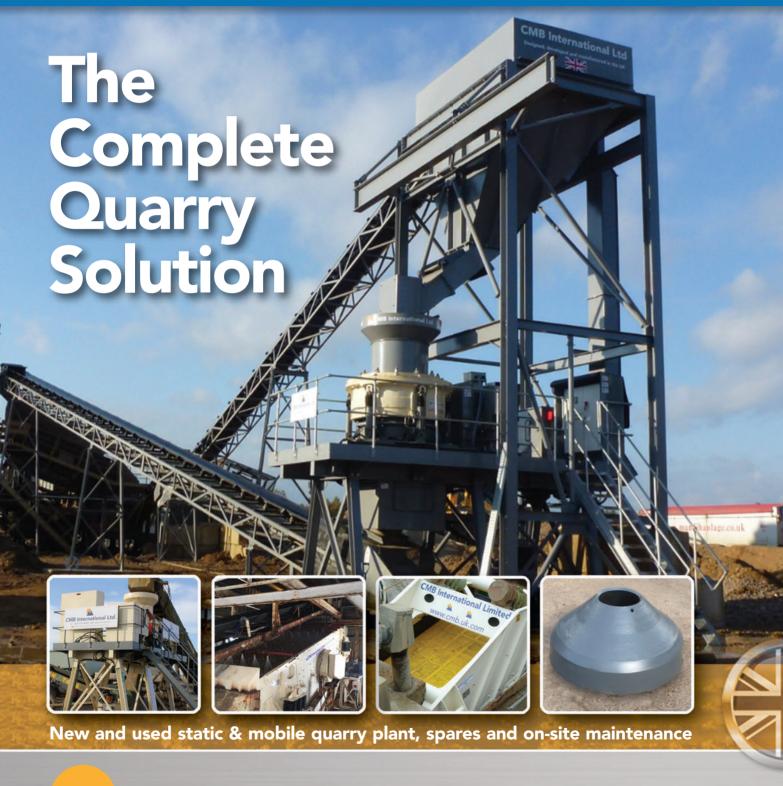
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November / December 2020 | Issue 65

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LIEBHERR

## Liebherr at the double

After experiencing problems with his wheeled loaders, James Greenwood needed something more reliable to cope with higher production levels. Liebherr provided it...twice

James is managing director of Ready Mix Tees Valley and with a move to a new yard on the banks of the River Tees enabling a step-up in production, keeping the batching plant supplied with material was crucial. But there was a 'but'.

### 'The interaction with everyone in Liebherr was excellent from day one'



"We had used a number of shovels for stocking the plant since we started operations," he explained. "Both manufacturers' products had caused us some issues with reliability and build quality. That was something we couldn't afford with the increase in production from the new batching plant."

That was the cue for Michael Atkinson, Liebherr-Great Britain's wheeled loader product

specialist, and area sales manager Carl Longhorne to step in. They suggested a trial of an L 550 XPower, and its miserly fuel consumption of less than 6 litres per hour, cab comfort and productivity all provided a convincing argument to seal the deal.

The human element was also important. "We have been extremely impressed with everything about the deal," said James. "The interaction we've had with everyone in Liebherr has been excellent from day one. They have been honest and open, something we don't always see in this industry, and as a family company like ours, the way they approached the deal was refreshing."

Tees Valley has joined forces with another local family-owned firm, Shire Aggregates, which occupies part of the large yard area. It imports aggregates by ship from around the UK from which are then screened, with more than 80% used by Tees Valley for concrete production.

As the largest concrete supplier in the area – 50,000m³ last year – the introduction of the Liebherr loaders has made a real impact on the its operations.

The company was launched in 2008 when James gave up his position with a major pharmaceutical company to invest in concrete. He's now running two depots on the banks of the Tees with another just getting underway in Leeds where his equipment demands are similar. Guess what he's bought for that site? Yes, a second Liebherr L 550 XPower.



As well as the two loaders, Tees Valley has bought four HTM 905 Liebherr mixers, mounted on Mercedes-Benz chassis and provided by Northside Truck & Van which has a rolling stock mixer truck programme with Liebherr.

The mixers are highly specified and include user-friendly features such as remote grease points, sub-frame covers and the Litronic EMC Controller.



# Concrete firm set for growth with Liebherr fleet expansion

Ready mixed concrete supplier The Ashcourt Group has returned to Liebherr-Great Britain for additional equipment to satisfy increased demand for its products.

The company already runs a Betomix batching plant, a number of HTM 404, 704 and 804 mixers and a mobile concrete pump operating at its Hull headquarters but with major expansion in the pipeline has added a second batching plant for a new site in Pocklington.

Ashcourt is the leading independent supplier of ready mix throughout Hull and the surrounding area, a position it has achieved just four years after forming a concrete division. The group also has interests in construction, civil engineering, aggregates, plant hire and waste management.

The site in Pocklington has seen the company significantly expand its operations, explained Marketing Manager Luke Stocks. "The centralised location puts both York and Hull within easy reach and also gives us the chance to increase our coverage around the outskirts of both cities."

The plant is identical to that at Hull which has served the company well over the past four years. Capable of batching up to 100m³ per hour, the Betomix 2.5 plant relies on a 2.5m³

twin shaft, mixer to deliver a steady and consistent flow of material. "We have been very pleased with the way in which the Liebherr plant has operated," said Ian White, General Manager for Concrete Operations. "The two plants are the largest in East Yorkshire and are indicative of the service the concrete division gives to its external customer base and for the work it undertakes within the group."





### **Feature Story**



The batching plant has been joined in the fleet by a pair of new HTM 805 truck mixers, both mounted on Volvo FMX tridem chassis. "The tridem chassis is a new departure for us," said lan. "It matches the Liebherr drum well and ensures we are correct on our axle weights at all times. The rear steer axle really adds to the agility of the unit."

The HTM 805 is designed for a full 8m³ load but to ensure the vehicles remain within the 32-tonne limit, Ashcourt limits them to a 7.5m³ load. "We have been impressed with the build quality of the Liebherr products, especially the mixer drums," Ian added. "Our operators love the Liebherr drums. saying they are robust and very easy to use."

That robustness is due partly to the high-quality lightweight LICRO 500 steel used in the drum's construction. Optional Litronic-EMC mixer controls were specified for both units and allow demand-based control by the operator of the truck's engine speed and torque, returning significant fuel savings and reduced wear on the carrier's drive train. Constant Speed Drive, with its ability to reduce the amount of revolutions the drum requires, also helps extend service life.



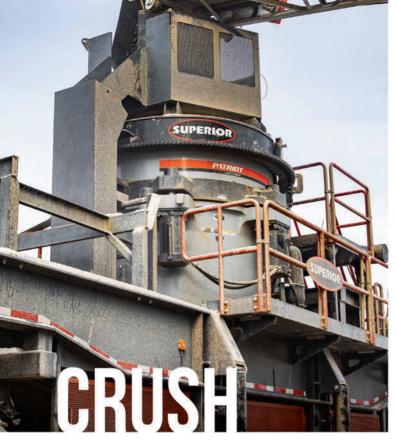
Following the successful performance of an initial 37 XXT model, a pair of new concrete pumps have also been added, offering 24m and 35m vertical pumping heights. Both are mounted on Mercedes chassis, the smaller on a 6x4 configuration and its bigger brother on an 8x4 set-up.

A narrow boom construction allows it to be fed into buildings through very small openings while the XXT outrigger layout on the larger model has various support positions for work in tight locations. "The Liebherr concrete pumps are in high demand for us," lan said. "They are very well-made products and extremely easy to use."

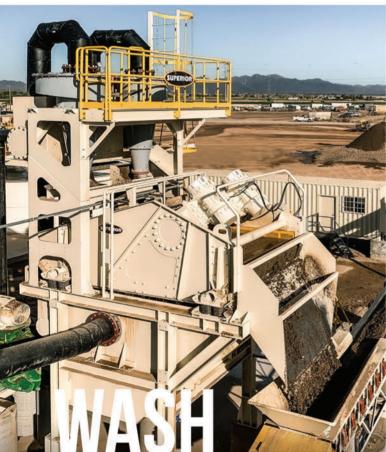
With the narrow support option, the front outriggers can be extended up to the front of the vehicle to enable a greater working range, including pumping over the cab. A radio control system allows the operator to fully control the flow of the material exactly at the point it is being discharged.

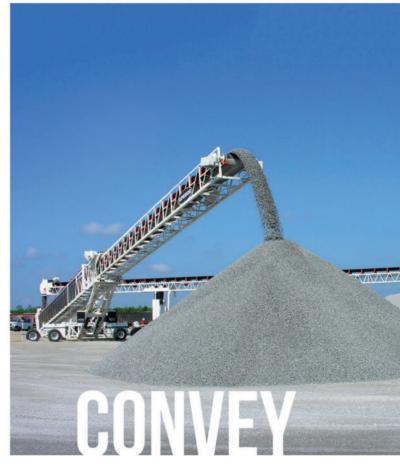
"Over-all, we are very pleased with the build quality of the Liebherr equipment we run," Ian added. "They may cost more to start with, but the quality and reliability means there is very little to worry about over the life of the equipment."













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# Welcome to issue 65

Welcome to issue 65 and part two of 'Made in Northern Ireland' featuring some of the leading OEM's in the province it makes interesting reading.

With this the last edition of the year we are all reflecting back on 2020. It has certainly been interesting, especially for the publishing industry in general it has been a rollercoaster year. Here at HUB-4 we have continued to report all the latest news from the Quarrying, Recycling & Bulk Handling Industries never missing a 'beat' publishing our bimonthly editions on time. Our weekly e-newsletter has also maintained its weekly schedule regularly reporting all the latest news from the three industries.

With 2021 now firmly on the horizon our editorial schedule is now available and is available on request, or via - https://hub-4.com/pages/advertise-with-us

We are also busily scheduling web and e-newsletter advertising, which is already being taken up, so do not delay if you wish to secure a premier position.

Site visits are always available on request for all your projects that you wish to promote, a full comprehensive package is offered by the HUB4 team – just contact john@hub-4.com

Finally, all that remains is to wish everyone a better year in 2021, have a good Xmas.

### **John Edwards**

Editor





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# Angle Park Sand & Gravel increase their efficiency

Based close to Ladybank, Cupar, in the Howe of Fife, Angle Park Sand & Gravel Ltd (APSG) is an independent business that has been producing high quality sand and aggregates for the construction industry, precast manufacturing, asphalt production, sports surfaces and drainage works since 1961.

Incorporated in 1961 by founder Frank Cuthbert to produce and supply sand and gravel supplies for the construction of the new town of Glenrothes; today the business is run by Ian, his son Peter and daughter Kerry, representing the second and third generation who manage their two sand and gravel pits at Melville Gates and Mountcastle.

In 2012 APSG acquired the adjacent Mountcastle site which contained reserves of approximately 1.6 million tonnes of sand and gravel. Following the acquisition, the company installed a sand and gravel plant to produce a course concrete sand and 4 gravels.

Today, this third-generation family-run business is as busy as ever supplying high quality and respected products to domestic and commercial markets throughout the central belt of Scotland.



### **Upgrading the wash plant:**

Having replaced a primary screen earlier in the year at the Mountcastle site a decision was made to replace an ageing final sizing screen and bring the 170tph plant up to date.

Peter Cuthbert, Director APSG, takes up the story, "Back in January, CMB International had installed a primary wash screen for us and it was such a seamless project that it made sense to ask them to quote for this replacement as well!



### **Cover Story**







Following an acceptable quotation and on-site survey CMB designed, manufactured, and installed a new bespoke 12 x 6, 2-deck final sizing screen with fan sprays for a final material wash which was duly installed including new spring and motor mounts within the original framework. The whole project was completed and commissioned over a period of 3 days in September.

The new CMB screen is fitted with polyurethane deck panels and polyurethane fan sprays and features a lower deck split in half for sand and 6mm, with the upper screen taking the 14-20mm. Material after screening is then fed to three stockpiles of 8/14/20mm.

Peter concluded, "Yet again CMB have stepped up to the mark and delivered on time a great product and have provided yet again another first-class experience."

### **About CMB International:**

CMB International supply new and used quarry plant, bespoke fabrication, spares, and repairs.

CMB was established in 1996 by Martin Brough, who working as an experienced site service engineer, realised that there was a lack of quality service support for cones, jaw crushers and screens within the quarry industry. With an ethos to provide effective on-site plant maintenance and help customers get the best possible production from their plant, the CMB philosophy has always been and remains customer driven.

From day one the philosophy of CMB International has continually evolved, aiming to meet and exceed the requirements and expectations of you the customer.

"Customers appreciate our knowledge, flexibility and our ability to respond to a problem with immediate effect."













2019 Powerscreen 1000 MAXTRAK Tracked Cone Crusher (267 Hours)

2018 Doppstadt DW3060K Tracked

Slow Speed Shredder (716 Hours)



2018 Powerscreen PREMIERTRAK 400X Tracked Jaw Crusher



2017 Sandvik QI341HS Impact Crusher c/w CAT 9.3 Engine



2019 Doppstadt AK635K Tracked High Speed Shredder (512 Hours)



2018 Doppstadt SM620K Tracked Trommel Screen



2012 Gemsa GEMEX MP750 Multi-Purpose Drill Rig

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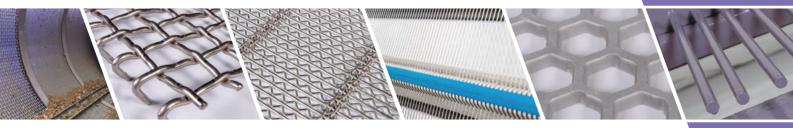
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# World première: Liebherr presents the new generation of articulated dump trucks

- Digital product presentation: Liebherr unveils the new TA 230 Litronic within the framework of an online event
- New generation with specially developed components, sophisticated technology, and modern design
- Convincing in every aspect top quality right down to the finest detail
- Liebherr is now a full liner in the earthmoving area



On the 29th October, Liebherr-Hydraulikbagger GmbH unveiled the first representative of the new generation of articulated dump trucks within the framework of a digital product presentation. The TA 230 Litronic has been redeveloped from scratch on the basis of comprehensive market and customer

market and customer analyses, designed with state-of-the-art technical implements and tested to the limits in extensive



highest quality standards. The result: An excellent product with a new design, which represents maximum quality and reliability, impresses in terms of performance and efficiency and at the same time provides the utmost comfort.

With the introduction of the new generation of articulated dump trucks, Liebherr becomes a full liner in the earthmoving area. Apart from a comprehensive product portfolio of earthmoving machines for diverse applications, a Liebherr dump truck is now available to customers with the new TA 230 Litronic.



### News

### New machine concept: Maximum performance in challenging off-road applications

The new TA 230 Litronic convinces with a clever machine concept, which has been developed specially for challenging off-road applications. New designs in the front-end area create maximum ground clearance for superb off-road performance. For example, in the TA 230 Litronic the powershift transmission is positioned safely and compactly under the operator's cab and the exhaust gas aftertreatment is safely installed behind the operator's cab in a space-saving manner, whereby a large slope angle could be generated.

The newly designed, solid articulated swivel joint creates excellent off-road capability: It allows independent movements of front and rear end, thus ensuring maximum manoeuvrability. The robust and positive-locking swivel joint with tapered roller bearing is perfect for the shear stresses arising during use, withstands maximum loads and provides optimal force distribution.

The front and rear axles of the machine are secured via sturdy A-rods at the articulated swivel joint and at the rear end. Also here the focus was on maximum ground clearance in the development: Both the front axle suspension with A-rods and shock absorbers at the articulated swivel joint and the position of the separate and oscillating A-rods of the rear axles at the rear end provide maximum ground clearance.

for the TA 230 Litronic: As soon as slip occurs at an axle, the torque is cleverly transferred to the axle or axles with traction. The new Liebherr dump truck impresses with an excellent driving performance and enormous pulling force, even in the most difficult ground conditions and on challenging gradients. Maximum safety is always guaranteed thanks to optimal adhesion

## Increased productivity: More material movement in a short time thanks to optimised trough

The large and robust trough of the new TA 230 Litronic is designed for the effective transport of a 28-tonne payload. Numerous improvements have been made for quick and efficient loading and unloading, as well as safe transport of the material. The front of the trough is straight, and the sills are low so that loading with a wheel loader, for example, is easily possible across the entire length. A standard, innovative weighing system shows the current payload during the loading process on the display in the operator's cab. An optional loading light on both sides at the back of the operator's cab shows the loading level outdoors.





## Powerful drive with maximum traction: Superb driving performance and combined pulling force

A powerful 6-cylinder construction machinery engine with 12 l displacement and 265 kW / 360 hp is installed in the new TA 230 Litronic, which complies with the requirements of exhaust emissions standard V. A robust and efficient drivetrain with automatic 8-speed powershift transmission ensures optimal force distribution. With the actively controlled longitudinal differential locks, automatic traction control is also available

In order to accelerate the release of the material during unloading, the inner edges of the new trough are tapered. Thanks to the optional trough heating with exhaust gas management, unloading can also be easily realised at cooler temperatures. The two tipping cylinders at the side give the TA 230 Litronic high tipping pressure. The load can be tipped against the slope easily and quickly. During transportation, the long chute at the end of the trough ensures minimal material loss. The trough volume can be increased with the optional tailgate. Thanks to the large opening width, tipping of large and bulky transported material is easily possible. Even with the tailgate the overall width of the TA 230 Litronic is still below 3 m — this allows the machine to be easily and quickly transported on the low-loader.

## Newly developed operator's cab and lighting concept: Optimal visibility and safety

The newly developed, spacious operator's cab of the TA 230 Litronic provides ideal conditions for comfortable and safe working. Thanks to the excellent panoramic windows without any annoying struts, as well as the short, inclined bonnet, the machine driver always has an optimal view of the driving, working and articulating area of the machine. A touch display with integrated rear camera also increases transparency in the rear area. In the soundproof cab ergonomically arranged control elements facilitate intuitive operation of the machine. Various trays and storage spaces greatly expand the spatial offering. The offset steps, as well as the large driver's door, also make possible convenient and safe access to the operator's cab.

### News

The new lighting concept with LED headlights ensures improved visibility and safety — both for the machine operator and everyone in the outdoor area. For example, dipped-beam headlamps with integrated high beam illuminate the road and the extra powerful, optional LED headlights on the front of the can illuminate the entire working area. The lighting at the rear of the trough and another light package at the mudguards light up the manoeuvring areas at night. The modern LED design light provides additional visibility of the Liebherr dump truck and thus increased safety on the construction site. The new Liebherr dump truck also has an optional LED access light which provides extra safety when getting into the operator's cab.







### Modern assist systems and adaptive steering system increase comfort and safety

The modern assist systems installed in the new TA 230 Litronic support the machine operator, thus increasing safety and comfort during operation. Apart from a hill start assist, a speed assist is also available. With the hard stop function, the end position damping of the trough lifting cylinders can be activated or deactivated at the touch of a button. The trough lift is limited for work in a height-critical area with the aid of the height limit.

The speed-dependent steering provides additional driving comfort: The adaptive steering system continuously adapts the ratio of the steering movements to the current speed. This makes possible easy and accurate manoeuvring at low speeds, but also accurate steering at higher speeds, as well as fewer steering corrections when cornering or taking bends.

### Maintenance-friendly machine design

With the intelligent machine check-up and a service-oriented machine design, the new TA 230 Litronic boasts an optimised maintenance concept. The Liebherr dump truck automatically performs the daily check itself thanks to the clever sensor technology: The machine runs through an inspection catalogue at the start, where levels of engine oil, coolant, the central lubrication system, for example, are checked for the nominal state. Any deviations are shown on the display in the operator's cab. As a result, the daily set-up times can be reduced, costs can be saved, and the durability of the components can be extended.

The electrohydraulic opening bonnet, as well as an integrated, folding ladder with non-slip steps, provide easy, safe, and clear access to the entire engine compartment. All relevant service points are visible and easily accessible. Maintenance work can be performed comfortably and safely from a platform. Refuelling with fuel or urea solution is also done easily and safely from the ground.

### Key performance data of the TA 230 Litronic in standard version at a glance:

- Empty vehicle weight: 24,600 kg
- Payload: 28,000 kg (metric tons)
- trough capacity with tailgate: 18.1 m<sup>3</sup>
- Engine power (ISO 9249): 265 kW / 360 hp
- Exhaust emissions standard V
- Driving speed: 57 km/h (forward) / 16 km/h (reverse)

## Molson Green increase their machine portfolio

Founded in 2016 by Johann Doppstadt, who is seen by many as one, if not the leading creative minds in the industry. His latest creation under the J. Doppstadt brand is the GT 130A De-Stoner which will be marketed in the UK by the Molson Group under their recycling focused Molson Green division.

Recently, Molson Green held a VIP demonstration event of the Doppstadt De-Stoner to introduce this versatile machine to the recycling market and the HUB-4 team were invited to see the De-Stoner within a processing line-up.

The two-day event was held at Laverstoke Park Farm (LPF) which is spread over 2,500 acres of rolling Hampshire countryside near Overton. Owned and run by ex-racing driver and Formula One World Champion Jody Scheckter, one element of the LPF business is green waste recycling which involves the supply of compost to biomass facilities.

Currently the business processes in excess of 30,000 t/year of green waste which originates from landscapers, hedge trimmers and municipal contracts.

Efficiency is always a key element in any processing function and the current operation at LPF required some improvement which led to a trial set-up to demonstrate how more efficiency and hence the increase in saleable material could be achieved.

### **Demonstration machine line-up:**

With a trial in place it was also agreed that Molson Green could hold a VIP COVID compliant demonstration for a selected number of guests.

Four machines were supplied for the trial, a Terex Ecotec TSS 390 Single-Shaft Slow-Speed Shredder, a Terex Ecotec TSS 620T Trommel, a Doppstadt GT 130A De-Stoner and a Sennebogen 821E Material Handler. All these machines being available through Molson Green.

For the purpose of the trial the Terex Ecotec TSS 390 Shredder was fed green waste by the Sennebogen 821E Material Handler.

Processing in excess of 63tph green waste is shredded into a course material which in the full production process would then be put into windrows where it rots into compost.

After that process, the material is then put through an existing on-site trommel, taking out the fines then passing through an existing star screen which aggravates it further, taking out more fines and some lights.

This 8-60mm material (pre-processed) for the demonstration is then loaded by the 821E Material Handler into the Terex Ecotec TSS 620T Trommel which then screens out any -10mm saleable fines via a side conveyor. The oversize - clean organic and stone (up to 40% of the total mass) is then fed at a steady rate into the de-stoner immediately at the back end of the hopper



"The bottom auger is located in a long tube structure, which can be operated in either direction at variable speeds at a variable torque rate. In comparison the top auger is significantly bigger in terms of the width of the screw and has fewer spirals to efficiently lift up the light materials. There is a small gap in between the mesh and the top auger, which is designed to allow a little slippage, so you don't have an issue with for instance a large stick, consequently alleviating the possibility of any jamming. Machine set-up is dependent on feedstock, which obviously dictates on how long you want it in the water to avoid over scrubbing."

Looking at the operation it is obvious that water usage plays a very-large part of the process and the Doppstadt GT 130A De-Stoner is a leading exponent in its field proving that it is extremely efficient in this respect.

Being very efficient on water usage means significantly less water, subsequently eliminating any issues processing dirty

water. With low consumption it is therefore from an environmental point of view a clear winner.

Essentially fed by a screening machine the De-Stoner's task is to separate material mixtures from floating and non-floating materials (wood, stones, glass) which it achieves by a separation process with water (floating/sinking technique); separated material is then stockpiled through side (heavies: gravel/stones) and end (lights: wood) on-board conveyors. Separated material also does not require long drying periods therefore allowing a quicker turnaround.

Offering a 15-20tph throughput it can be supplied with one of three drive types, diesel, hydraulic or electric.

This launch of the Doppstadt GT 130A De-Stoner certainly compliments the Molson line-up of equipment, again reinforcing their stance of being a sole source of supply which allows clients to maximise on their buying power and simplify their supply chain. With 75 engineers on the road and 13 service locations Molson offer a high level of service back-up that is virtually incomparable in the UK.

# STADLER celebrates history of pioneering innovation with milestone of 1,000th ballistic separator

STADLER has reached an impressive milestone with the production of its 1,000th ballistic separator. The machine was purchased by Vaersa, a company providing waste management and remediation activities in the Valencia region, in Spain. The STT5000\_6\_1 ballistic separator was delivered to the Vaersa light packaging sorting plant in Castellón on September 28th, where it just started operation.

STADLER won Vaersa's public tender for the supply of the ballistic separators with the score. "We are pleased to be working with STADLER. We already knew of their excellent reputation and that it is a brand of reference in the waste sorting sector," stated Noelia Almiñana, Head of Vaersa's waste management department.

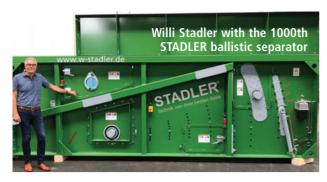
"The demand for ballistic separators in the Spanish market has risen very fast, driven by the automatization of recycling plants, which have also significantly increased their capacity," explains Luis Sánchez, Director of Operations at the Spanish STADLER Selecciona SLU. "Without ballistic achieve these twin objectives. As a result, today more than 75% of recycling plants in Spain rely on these machines. At STADLER, we pioneered this technology and have constantly improved and upgraded its performance over the years. That is why companies like Vaersa choose our ballistic separators. The STT5000\_6\_1 is a perfect match for the sorting plant in Castellón and it delivers the benefits of remarkably low maintenance costs."

### Pioneering ballistic separators lead to longlasting partnership

A global market leader in ballistic separators, STADLER has pioneered this highly efficient and cost-effective solution. Development started in the early 1990s, and the first four STT2000 units were delivered in 1992 to Fischer for its sorting plant in Ravensburg, in Germany.

"Today our ballistic separators are very effective and extremely durable, but the initial development wasn't easy," explains Willi Stadler at STADLER. "It was very difficult at the time to build a machine robust enough to endure the challenges of waste. We didn't have a specially developed shaft, so we purchased one from the agricultural sector. However, this shaft was not designed for use with waste and wasn't as durable as we would have liked."





Mr. Hans Fuchs, who was Plant Manager at Fischer at the time, was impressed with STADLER's approach to resolving the issue: "In the beginning we experienced some problems because the shaft was not specifically designed for garbage use. STADLER was a pioneer in the field of waste sorting at that time, and pioneering work is always difficult. It is understandable that it takes a certain amount of time to solve all the problems that arise, which STADLER then did very well."



In fact, the team at Fischer were so satisfied that they purchased two further machines for their sorting plant in Villingen-Schwenningen. This was the beginning of a lasting relationship with STADLER, which continues to date. Fischer was later acquired by Remondis, which remains a loyal customer.

"Today the STADLER ballistic separators are flawless and fulfil their purpose excellently," says Mr. Fuchs, who has remained with the company and is now employed by Remondis. "Our machine from 2012 has clocked many more operating hours than STADLER guarantees and the shafts still work perfectly and have never had to be replaced."

The reasons for such a strong and long-standing relationship also lie in the quality of support and advice STADLER has provided over the years: "During the several renovations and optimizations of our paper sorting plant, STADLER has been at our side with help and advice," explains Mr. Fuchs. "They have always found the best solution for us to make the line even more effective. The service around maintenance and spare parts is also always very good. In the 2000s, we started to develop a concept for plant inspections together with STADLER in order to avoid damage and problems during high material times (such as Christmas or Easter). As a result, we had never had a system downtime or major repairs."

### The first ballistic separator with 100% STADLER components

In 1996 STADLER introduced its first ballistic separator featuring a shaft developed in-house and 100% original components. The machine was purchased by Böhme, in Germany, again starting a lasting relationship.

Stefan Böhme, CEO of Böhme, states: "In our first light packaging sorting plant, the two STADLER ballistic separators operating in parallel always fulfilled the core task of material classification after the screening drum, which was still very simple at the time. The ballistic separator was, and remains to this day, the only mechanical device capable of separating so efficiently three different fractions at the same time when sorting light packaging."

STADLER's ballistic separators play an important role in the company's sorting plant: "Reliable separation of fines and the separation of 2D and 3D material are the standard here. For a long time, we have been using air support to discharge the 2D material to generate a large part of our film fraction for manual re-sorting. A very big advantage for the overall sorting quality is also the excellent material distribution for subsequent units, which is generated by the ballistic separator."

For Mr. Böhme too, STADLER stands out not only for the quality of its products but, very importantly, for its capacity to help Böhme's operation evolve and grow to meet the changing demand of the sector over time: "STADLER has excellent products, a high level of planning expertise and, last but not least, a wealth of experience in the implementation of large-scale plant installations or conversions. I particularly appreciate the adherence to schedules and the expertise with which the construction measures were implemented. The teams make targeted use of their experience and the contact with the project manager also leaves nothing to be desired. The fast and reliable spare parts service is also impressive: even for older components, a solution is always found".

### **Continuous innovation anticipating customer requirements**

STADLER is constantly searching for ways to improve its machines' performance and efficiency. In 2000, it introduced two important innovations: the patented pivoting frame, which eliminated the need to tilt the entire machine and adjust the conveyors, and the paddles with screened perforation.

In 2002, STADLER extended its offering of STT2000 ballistic separators with a new model developed specifically for separating paper and cardboard, featuring its patented Z-shaped paddles. The same year, having identified a new market requirement, it launched the STT5000 for heavy materials, such as MSW and industrial waste. This machine featured a shaft designed to withstand moist waste and extra robust paddles for processing flows of heavy materials.

Most recently, STADLER identified a new demand for processing extra heavy material, a fast growing recycling sector due to environmental concerns and pressure to reuse materials. To address this requirement, it developed the STT6000 specifically for sorting construction and demolition waste, landfill mining, and even MSW with large impurities.

Assistant Head of Research and Development at STADLER, Mr. Christian Nordmann, highlights the key advantages of the machine: "There is no need for pre-sorting or pre-shredding the input. Also, differently from screening drums, which separate the material only in two fractions, the three-fraction output of the STT6000 means that impurities can be easily removed, as they are still in their original size."

STADLER ballistic separators are extremely flexible and can be adapted to match very specific requirements. For example, the company has designed ballistic separators with fewer paddles to fit in the small spaces available in sorting plants in Japan. It has also created machines with longer paddles to address very particular needs. It can also assemble up to three ballistic separator modules on top of each other or serially to achieve better output fractions.







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# Telestack lead the international mobile bulk handling market

Leading the international mobile bulk material handling market, Telestack supply some of the largest blue-chip companies in the aggregates world. Telestack have recently extended their capacity by building a phase one 45,000sqft factory on a green field site (Doogary facility), close to its current Bankmore facility (120,000sqft), which incorporates 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.

The engineering acumen within Northern Ireland is renowned globally and the expertise within Telestack has grown and developed significantly over their 35+ year tenure. In addition to Telestack Aggregates and Telestack Mining Groups, they have naturally matured within another material handling niche in the Ports and Inlands Terminals sector, designing and manufacturing equipment to manage stockyards as well as to load and unload dry bulk onto vessels up to Panamax/ post-Panamax. 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.

Telestack have invested heavily in their premises over the last 5 years having spent over £4million in their current Bankmore site. This included a 12,000 sq ft shed to house the automated saw-drill line, a state-of-the-art shot-blast facility, 2 paint booths and additional manufacturing facilities. The further

www.hub-4.com Nov/Dec 20 - Issue 65



£5million investment in the Doogary facility has also been matched by investment in the talent required to drive further growth and ensure that the factory operates at optimum level



Director of Operations,
David O' Neill, comments
"this has been an exciting
yet somewhat tumultuous
time for Telestack as we
navigate the challenges of
Brexit and Covid. We like
every other manufacturer
have had to remain agile
whilst still remaining
committed to being totally
customer centric in every
aspect of operational
excellence and we
continue to reinforce this
message! Our new facility
has provided us with a

message! Our new facility has provided us with a blank canvas allowing us to strive towards world class manufacturing standards throughout our operation and I am happy to say that we, and our customers, are reaping the benefits.\*





The Telestack range caters for all needs and requirements within the bulk material handling industry from smaller producers seeking market entry equipment right through to demand for high performance conveying systems from the larger industry player. Telestack are unique in terms of being a "one stop shop" for aggregate

producers globally offering a range of conveying systems from pit to port, pit to plant and port to plant for load and haul, shiploading and unloading, stacking and reclaiming and rail loading and unloading applications.

Malachy Gribben, Commercial Director, explains "At Telestack's core is our emphasis on trust and integrity. This has been the driving force that has allowed us to develop strong partnerships with our global dealer network who share these values. We have a proven track record with many returning global blue chip producers including CEMEX, CRH, Heidelberg, Lafarge, and well as regional and local producers. Telestack have consistently demonstrated that we are a trusted advisor and partner which is evident throughout our relationships with dealers, customers and EPC alike. Our Voice of the Customer program holds us all to account. The marketplace is inundated with companies who can manufacture any amount of equipment – that's the easy bit. We have been in the game long enough to know that it's not enough to pay lip-service to the Customer. Without our Customer, all of us cease to exist and our investment in people and facilities are to ensure that every process operational and otherwise – results in a customer who is pleased with their product and ultimately pleased to recommend Telestack as a true partner."



Telestack's international portfolio is vast and varied, and with over three decades of experience, they certainly are not afraid to use their experience to design truly innovative solutions. The quarrying and aggregate industry, like many others, is driven by required reduction in the cost per tonne processed. The mobility of the Telestack mobile bulk material equipment offers a much more cost effective solution for moving material from A to B when compared to the more traditional method of wheeled loader and/or haul truck. By using a mix of mobile conveying systems, the cost of moving material is significantly lower whether it is stacking aggregate, stockyard management or loading or unloading ships or barges. Further benefits are the reduced need for planning permission, a lower Capex investment, reduced labour requirements and improved environmental and safety metrics.







Telestack have also experienced a huge rise in producers moving bulk material by the coastal network, rivers and rail and the mobility and flexibility means that the mobile equipment can be used as and when required along the full length of the logistics chain. The Telestack global portfolio has reference sites across the world to demonstrate the breadth of their product range from ship loading aggregates in the UK, barge unloading in the Philippines, extensive stockyard management in Russia and stacking sand in North America — and everything in between! The size, features, throughput and expenditure is determined by the Customer, their application, their commodity and conditions specific to their operation.

Telestack mobile bulk material handling systems are available direct from Telestack or from their network of global dealers and agents. They also collaborate with many OEMs to offer complete solutions for their end-user clients. Telestack can offer resale support after a client has finished their project if they wish to sell the equipment on, as the global resale market for mobile bulk material handling systems is very strong and Telestack have the worldwide contacts to enable this.

In response to continuous engagement with their Customers, and the challenges that they face in their daily operations, Telestack look forward to launching a range of exciting new products in 2021 to better serve our customers, long-standing and new, from the crushed aggregate, sand and gravel and cement product industries. Telestack are committed to continuing to lead the market through innovation and intelligent bespoke designs backed up with a strong infrastructure to support the customer from concept to the field.







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# Hilltop Aggregates increase production with Dernaseer

Located deep in the Co. Tyrone, N. Ireland mountains Hilltop Aggregates was founded in 2012 by brothers Donal and Michael Donnelly to provide sand and aggregates to concrete producers and builders in the local area. In 2016, the company had installed a Dernaseer washing plant and since that time their business has continued to go from strength to strength with their reputation for producing quality materials.

Due to the increase in demand for materials Hilltop recently expanded their washing plant. As they had been pleased with the performance of their washing equipment they decided to to work with Dernaseer for the plant expansion.

The new extended plant involved installing a new 6m x 1.8m 2-deck primary washing screen. This screen scalps off the +40mm which is stockpiled for later crushing and produces two sand fractions which are fed to two DSP compact sand plants. This screen replaced the original 5m x 1.5m washing screen which has now been utilised as a rinsing screen in the new plant. Also, the original plant had produced two grades of sand in a single DSP compact cyclone sand plant but in order to double sand production a second new DSP120 sand plant was installed with one sand plant producing building sand and the other producing concrete sand respectively. The DSPs feature Linatex slurry pumps, Linatex rubber-lined



hydrocyclones and galvanised high-frequency dewatering screens.

As Hilltop had worked into their deposit the clay content had increased so a twin shaft DLW502 Logwasher has been installed to scrub the +5mm-40mm aggregates to ensure clean aggregates. The DLW502 Logwasher consists of twin rotating shafts fitted with heavy-duty abrasion resistant paddles. The paddles conveys the material through the logwasher where the stone on stone action scrubs it clean and breaks up any clay conglomerates which are then floated off through the back. Scrubbed aggregate exits the logwasher onto the 5m x 1.5 rinsing screen to rinse and size a range of aggregates.

For more information on Dernaseer's product range please email info@dernaseerwashing.com or call +44 (0)78 098 64869



PLANT SOLUTIONS FOR MATERIAL WASHING IN SAND & GRAVEL, AGGREGATES AND RECYCLING



# Money in Metal, Money in Waste, recover both with Ecohog!

In a fast paced world, reliant on resourceful metals, society has an ongoing duty to reuse and recycle secondary materials such as; metals to preserve natural resources, landscapes, conserving energy whilst reducing emissions and unnecessary waste streams going to landfill.

The Waste and Recycling sector in particular are tasked with designing, manufacturing and installing innovative technology and equipment capable of effectively recovering scrap metals from various waste streams. In theory the majority of metals have the ability to be recycled into high quality 'better than new' metals. The UK scrap metal industry contributes significant value to UK based manufacturing as well as the export market as a major player in exporting of scrap metal.

#### **Money in Metal and Waste Recovery**

As specialists in the field of Density and Metal Separation Equipment, the Ecohog Team are conversant in waste separation challenges facing processors. Working in conjunction with Waste and Metal processors, Ecohog are continually testing and analysing applications with the objective of supplying equipment proficient in achieving high quality separation. Ecohog are focused on retrieving multiple segregated waste materials with resalable value for potentially more than one commodity, ultimately diverting recyclable waste and profits from landfill. There is money in metal and in waste making perfect sense to recover both.

#### The Ecohog Solution

The Ecohog core product range comprises of HogMag Mobile Eddy Current Separators (ECS), EH-1500 Mobile Windshifters and Airhog Suction/Blower systems.

Ecohog have developed the HogMag ECS metal separators to offer waste processors maximum Ferrous and Non-ferrous metal recovery. Each machine utilises a Vibe Pan Feeder to spread incoming material, leading to a Powerful Magnetic Drum to recover ferrous metals such as Steel and tramp iron, and then a high Gauss ECS to recover valuable non-ferrous



metals such as Aluminium, Copper & Brass. The remaining material can often then be classed as "inert" and reduce landfill gate fee's or used in waste derived fuel resources such as; RDF and SRF.

The EH-1500 Windshifters offer waste processors the maximum quality split of Light and Heavy materials. This plays a key role in C&D/Skip Waste recycling to separate light trash materials such as; Plastic, Paper, Foil and Fluff (which can be used in waste derived fuels) from heavy more valuable materials such as; Stone, brick, metal, glass and ceramics. It also works very well in Used Beverage Can (UBC) recycling to remove light plastic, foil and packaging contamination from the heavier valuable metal cans.

For applications that do not warrant the investment of the Windshifter unit, Ecohog offer the innovative Airhog Suction Separator range suitable the ideal compact solution for removing unwanted light trash material from various waste streams. As an example the EH-81 or HSB-81 can be used to separate pesky polystyrene balls from different waste types and also as a final clean-up stage on valuable fractions such as; scrap metal and Woodchip Biomass.



## **Ecohog Launch Quality Control Picking Cabins**

Offering the complete materials recovery range, **Ecohog have recently launched Quality Control** Picking Cabins comprising of the QCM-1200P (3 Bay up to 6 persons) and QCS-1200 (2 Bay up to 4 persons) Cabins. Complementary to the Ecohog core range, these auxiliary products enable customers to retrieve any final materials that could potentially add value or devalue the end recovered materials.

Recently unveiled by French distributor, MacMateriel at the SIM 2020 Tradeshow in October, the QCM-1200P really has turned heads. With 4 degrees of separation; Blowing, Suction, Picking and Magnetic, the Ecohog Mobile Picking Stations are ready to take on a wide variety of recycling applications for efficient processing and valuable material recovery. The quality control cabin incorporates a VSD driven 1200mm picking belt, an onboard EH-81 Dual Airhog Blower /Suction System for easy removal of the superlight and light fractions and an Eriez Magnetics CP 20-120 Overband Magnet to capture the ferrous scrap metal, discharging a cleaned heavy's material.

The QCM and QCS picking stations are designed for ease of transport with hydraulic legs for quick set up and have the option of either plug and play or generator operated. The double skin insulated picking cabin ensures the units are suitable for various climates throughout the year. Undeniably a cost effective all in one machine providing excellent waste sorting with a small site footprint, convenient for onsite use with downstream mobile plant.

### The Mobile Picking Stations are suitable for a wide range of applications including;

- C&D Waste clean up
- Skip Waste processing
- Scrap Metal quality control
- RDF quality checking
- Beverage can recycling
- Aggregate recycling

Tristam Hubbard Miles, Global Sales Director for Ecohog commented, "Ecohog Picking Stations meet the highest standards of health and safety to ensure staff can be

> The 4 way separation reduces the need for additional manual sorting. Sorting valuable commodities from waste has never been so easy."

> > To find out more about the Ecohog equipment and for the solution to your waste separation problems contact

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## **QK Provide Conveyor Solutions**

Quarry King based in Co.Tyrone, N. Ireland offer an extremely popular range of wheeled radial, tracked conveyors and belt feed hoppers which are sold throughout the world.



Standard wheeled conveyors range from 12m to 24m long with belt widths ranging from 600mm to 1200mm. These wheeled conveyors are available in hydraulic, electric or diesel powered and have proved popular due to their versatility and great value for money. They also offer a 32m long powered radial wheeled conveyor for high capacity stockpiling.

A range of self-powered tracked conveyors is available in 15m, 18m, 20m and 24m lengths. The simple yet robust conveyor design provides and effective solution to fit the need for a cost effective medium-duty tracked conveyor. These conveyors are easily transported on a low loader or can be containerised for worldwide shipping.

The recently launched TR6536 radial tracked conveyor has been generating a lot of interest from many customers in





Europe and the USA. The TR6536 offers fully tracked on-site movement while producing huge stockpiling capacity.

Quarry King has also developed a range of hoppers, surge bins and feeders to complement their conveyor range. Whether handling crushed rock, sand and gravel or recycled material the hoppers and bins are designed to provide material handling solutions to meet process requirements.

All QK equipment is available in standard pre-engineered models or custom designed to meet specific requirements.

For more information on the QK range go to www.qkconveyors.com email: info@quarryking.com or call: +44 (0)28 9557 5911.

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## **Rapid International Continue Two New Divisions - Rapid Tum**

Rapid International, global manufacturers of mixing technology, recently announced the launch of two new divisions, Rapid Tumbler and Rapid **Power Generation. Rapid Tumbler supplies** premium, lightweight concrete truck mixers to the **UK & Ireland. Rapid Power Generation** manufactures custom generating sets from 10kVA-2500kVA and offers a range of service and maintenance options.

#### Rapid Tumbler, Suppliers of Premium, Lightweight Truck Mixers.

Rapid Tumbler offers new affordable, premium, lightweight truck mixers to the concrete industry in the UK & Ireland. Benefitting from Rapid International's half century of mixing technology expertise, Rapid Tumbler offers the assurance of both quality and

No stranger to the truck mixer, Rapid International originally produced truck mixers in its early days before market demands and trends channelled the focus on concrete batching plants. concrete batch mixers and high volume mobile plants.

Rapid Tumbler's range includes 4m3 to 12m3 mixers plus a 14m3 trailer unit. Engineered and manufactured using long life, high strength, Arcelor Mittal steel, the truck mixers feature premium components such as, Bosch Rexroth drives and ZF Germany gearboxes.



Mark Lappin, Managing Director - Rapid International Ltd, commented, "We're delighted with the launch of our new division, Rapid Tumbler. This further expansion compliments our current product range and allows us to offer even more to our customers across the whole concrete industry. Having celebrated our 50th anniversary recently, it seems timely to re-introduce one of Rapid's original product areas."

### **Rapid Power Generation, Custom Power Control** Experts.

Rapid Power Generation, formerly A1 Power Systems Ltd, manufactures standard and bespoke generating sets from 10kVA 2500kVA. Manufactured using only premium Volvo, Scania and Perkins engines, Mecc Alte alternators and Deep Sea controls,



# s Expansion with Launch of bler & Rapid Power Generation

Rapid Power Generation's range includes open set, soundproof canopied and containerised generator options.

With over 30 years knowledge and experience in the world of diesel power generation, Rapid Power Generation covers all aspects of the generator industry. All generators are complete with 1 years manufacturing warranty and all components are CE accredited. Rapid Power Generation's in-house team of experienced, qualified electrical and mechanical engineers have the capabilities and expertise to create a custom fit solution for every requirement.

Rapid Power Generation offers a comprehensive range of



technical and after sales support, including 24/7 call out, maintenance contracts, load bank and overhaul testing.

With the increasing requirement for sustainable energy, Rapid Power Generation recently announced a new distribution partnership with Pramac - Generac, acting as sole natural gas fuelled generator distributors for

both Northern Ireland and the Republic of Ireland.

Established in 1966 and headquartered in Siena, Italy, Pramac manufactures and sells power generation systems and material handling equipment primarily under the Pramac and Lifter by Pramac brands. The company seeks constant improvement in design, manufacturing and installation of its complete range of portable, mobile and stationary generators products. Pramac offers tailored power solutions that can be adapted to every specific requirement.

Pramac manufactures portable, mobile and stationary generators up to 4MVA, and exceeds the needs of many industries, including but not limited to, commerce, power plants, transportation, telecommunications, events, automotive, mining industry, tower lights and rental.

With the aim of pursuing further growth opportunities in the global power generation market, in 2016, Pramac signed an agreement with Generac – a North American power generation market leader. Together, the two companies have a combined total of 4,000 employees and are the world's third largest power generation group.

Rapid Power Generation's new range of natural gas fuelled generating sets offer a range of benefits including low NOx, CO2 and virtually no particle matter emissions, low noise output and reduced installation costs.



# Roberts Waste choose Kiverco to help with future growth

Northern-Ireland company Kiverco recently installed a new C&D waste recovery plant at Roberts Waste in Bridgewater, Somerset. The plant was purchased to replace an older waste with the objective of processing current volumes more efficiently and increasing capacity, thus allowing the company to grow their waste business over the next 3 years.

Roberts Waste are a well-known family business who have been operating for over 80 years in the Somerset area. Sammy Roberts started the business back in the 1930's selling coal in the local area, his son Terry then took over the business and diversified into demolition and tipper lorries throughout Somerset and the South West. Following Terry's retirement in 2004, his daughters Vicky and Beccy became the third generation to take over at the helm growing and developing the business which now offers skip hire, licenced asbestos removal, bulk earth moving and demolition services.



This latest investment from Roberts Waste will enable the company to handle more waste each day from the Somerset area. The Kiverco plant consists of a hopper/feeder, Combi waste screen, five-bay picking station for manual sorting, two overband magnets to remove ferrous metals, an Air Density Separator (ADS) to remove lights material from the mid-size fraction and a powerful fan blower to remove any lights found in the oversize hardcore material at the end of the recovery process.

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## Commenting on this latest investment from Roberts, Beccy Roberts stated:

"This is a really exciting and important investment for us to continue our growth plans by handling and processing more waste. As a company, we are committed to diverting as much waste as possible from landfill in the Somerset area, and the Kiverco plant will certainly help us to achieve our goal. Vicky and I are the third generation and committed to being progressive and innovative in developing the business like our father and grandfather."

#### **Maximising Recovery**

Kiverco has been designing, manufacturing, and installing waste recovery plants for more than a quarter of a century. They are renowned for the quality, robustness, reliability, and overall performance of their waste plants and are a highly respected waste plant provider in the UK.

Known for also integrating world-class partner technologies such as waste screens, optical sorters and large drum separators, the plant at Roberts Waste was 95% manufactured at Kiverco's headquarters near Dungannon in Northern Ireland.

## Con Gallagher, Global Sales Manager at Kiverco, was delighted with this latest project in the UK:

"The UK has been and continues to be Kiverco's most important market and we are delighted to once again secure this order from the region. Roberts Waste are a well-known business in the South West and we were very pleased when Beccy, Richard and Vicky chose Kiverco to design and install this waste plant. They are committed to recovering as much clean waste product as possible from their incoming waste stream and help contribute to a more sustainable future for everyone."

The Kiverco plant is designed to process more than 60,000 tonnes per annum of construction and demolition waste. The system will recover fines, hardcore (brick/concrete), ferrous metals, non-ferrous, hard plastics, plastic bottles (HDPE & PET), wood, cardboard, and an RDF/SRF product.

## Roberts' decision on choosing Kiverco for this plant was summed up by Beccy who said:

"Kiverco listened intently to what we needed now and for the future to guarantee our business and environmental objectives were met. We felt they understood our vision and clearly demonstrated their capabilities both in terms of knowledge and reference sites which they shared with us. We are delighted with how professionally they have worked as a team with Roberts— from meeting deadlines, to install and commissioning — they have been exceptional!"

### Michael McMenamin, Regional Sales Manager at Kiverco concluded:

"We were delighted to be selected by Beccy and her team to design, manufacture and install this recycling solution. It is another Kiverco plant for the UK to help meet the recycling targets nationally and locally. Roberts have been a real pleasure to work with and I would like to wish them every success as they strive to take their business to the next level."

Kiverco recycling solutions are utilised across the world in Europe, North America, the Middle East, and Australasia with more than 300 installations in the UK alone.



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# ENGINEERED FOR MODULARITY



## Longcliffe on track to meet zerocarbon targets with CDE support

Independent, family-owned business Longcliffe Quarries is fast approaching its milestone centenary celebrations. By 2027, it hopes to achieve zero-carbon quarrying operations - it has committed to a series of ambitious sustainability targets and has partnered with CDE to help realise its environmental objectives and strengthen its position as a champion of sustainability in the UK's quarrying sector.

Founded in 1927, Longcliffe Quarries is the largest independent supplier of calcium carbonates in the UK, producing over one million tonnes of high-quality calcium carbonate powders and granules every year.

Calcium carbonate forms the basis of many everyday products. Managing Director Viv Russell says the company produces over 100 products for a vast range of "critical industries". Calcium carbonate products are vital components in animal and pet foods. Its powders and granules are also supplied into the glass, plastics, and pharmaceutical industries and many more. Sealants — or cure activators — produced by Longcliffe Quarries are used in fluoroelastomer docking seals on the International Space Station.

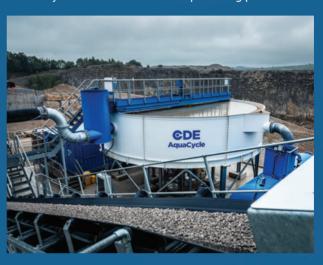
#### Stewards of the environment

In pursuit of its environmental commitments, the business sought to address the high volumes of waste generated at Brassington Moor quarry.

The business had historically discarded its quarry by-product, material described as having a higher clay content. But feasibility studies and material testing to demonstrate market demand for products recovered from this stream highlighted the potential to realise its commercial objectives without sacrificing its sustainability credentials.

David Kinloch, CDE's regional manager in the UK and Ireland, says the partnership with Longcliffe Quarries began several years and

"Following intensive testing in our lab we demonstrated through on-site plant trails how CDE could process Longcliffe's by-product into a very clean and high-value revenue stream. After a procurement process CDE proved its technical capability and workshops were launched in partnership with Longcliffe to co-design what would eventually becomes its first-ever wet processing plant."



CDE operates a unique co-design approach which involves working closely with its customers to design customised wet processing solutions tailored to meet their specified commercial and environmental objectives.

He added this design process included integrating the plant into the existing set-up at Brassington Moor quarry.

"One of the more unique aspects of this particular plant was how it integrated with Longcliffe's existing primary crushing set-up. We introduced overland belt conveyors to charter product to the CDE wet processing plant."









#### **CDE** solution

The resulting 220 tonnes per hour state-of-the-art wet processing plant represents the single largest investment Longcliffe Quarries has ever made.

Engineered to maximise product yield from heavy clay-bound feedstock, the plant features CDE's signature AggMaxTM modular logwasher setup for scrubbing and sizing, incorporating CDE's patented EvoWashTM classification and dewatering system which offers greater efficiency compared to more traditional washing methods.

Central to the system and to addressing the availability of clean water on site is CDE's AquaCycleTM thickener which allows for up to 90% of the process water to be recycled and recirculated back into the system, offering near-total independence from fresh water supplies.

#### High value

Previously discarded clay-bound material is now producing high-quality single-sized aggregates and sand grades - providing high value revenue streams for the company. 'It's a win-win scenario', as Russell explains. "We're now supplying into both the ready-mix and decorative markets as a direct result of the quality of material output from the plant. We're processing high volumes of low-grade feed and turning that into saleable products."

"We're recovering up to six different products from heavily contaminated material. The CDE plant is producing an exceptionally clean product and one that we're now able to turn into a higher value industrial material." This has led to a significant 12% reduction in the quarry's load and haul fuel usage and follows an almost 70% reduction in net emissions recorded at the quarry since 2014/15.

"As we move towards a more circular driven economy, it's vital that the industry continues to adapt. Our investments in renewable energy and this wet processing plant demonstrate our commitment to sustainability.

### **Technology**

James Thone, chief executive officer of the Institute of Quarrying, says technology is reshaping how the industry operates.

"Projects like this are the future. It makes sense to do these kinds of things and I think the industry will view this with a real interest, particularly when you look at the big picture of the issues we're facing as a society."

The integration of technology and IT in the plant, Russell says, has impressed the team at Longcliffe Quarries.

"Due to the IT related to the plant, if we've got an unforeseen problem then CDE often knows about it before we do. That gives us the confidence and reassurance that we are working the right team."

It features CDE CORE, a suite of smart technology tools that offers plant operators greater control over their plant and access to real-time data on how their plant is operating to maximise plant uptime and throughput.

"We want the plant to be running and producing products and so too does CDE. This exemplifies the partnership and shared ethos of both companies."



# New mobile baling solution reduces the risk of fires at waste sites

Each year, the UK fire and rescue services attend around 300 significant fires at waste sites'. Recently, several European manufacturers along with earthmoving company, Oosterveld, based in the Netherlands, collaborated to develop a unique waste compaction solution to help prevent these fires igniting.

Oosterveld approached the Avermann Group (Netherlands) to find a solution that would improve fire safety and space at their customer's landfill site in Hengelo, Netherlands. They joined forces with waste compaction experts, CK International and Finnish-based, Cross Wrap to develop a unique mobile baling system and conveyor - offering the customer greater flexibility. CK International used their automatic twin ram as the base for this new product and in order to have an integrated plastic wrapping system, Cross Wrap customised their unit, also making it mobile.

With such a highly experienced team of manufacturers collaborating together, the end result was a mobile turnkey solution for on-site baling and wrapping which can be dismantled and set up on-site within a day.

#### **Improving Fire Safety**

Frank Oosterveld, Owner of Oosterveld explains, "One of our clients requested a baling solution that would improve fire safety and save space at their landfill site. Along with Avermann and CK International, we developed a mobile solution which would not only solve these problems but would also give them the flexibility to move the machine around the landfill site. Having the ability to bale on-site helps them reduce environmental and odour nuisance and gives them a neater environment."





The most common cause of waste fires is an increase in the oxygen content of the waste. This oxygen increases bacterial activity and in turn raises the temperatures. Waste compaction and wrapping significantly reduces the oxygen in the waste as the bales are fully enclosed and tight. When investing in equipment such as this mobile baler, the financial benefits soon outweigh the potential costs of trying to control a fire and the extortionate insurance costs which ultimately follow should a fire occur.







#### **A Turnkey Solution**

Wouter van der Pool, Sales & Application Engineer at Avermann Netherlands explains, "In the last few years we have become an expert in baling and wrapping RDF type materials. During our discussions with many interested customers we became aware of the issues of waste fires and have found a unique way to combat these problems. We have a direct wrapping system, twin ram balers and big conveyors which we have integrated into one turnkey, off the shelf solution. With the help of our partners at CK International and Crosswrap we adapted this into a mobile unit for Oosterfeld who currently bale 200-300 tonnes of landfilled RDF waste per day. They are very happy with the final outcome."

Gareth McCullagh, Engineering Manager at, Northern Irishbased, CK International says, "This mobile version certainly

has the end-user in mind. Automation and simplicity were key factors when developing the machine. It is fully integrated with a mobile conveyor and Cross Wrap direct wrapper and also has options for wire tying or plastic strapping systems. It is fully kitted out with access ladders, walkways and handrails. Essentially, it's a full turnkey solution for any customer. Transport is made much easier with the mounted ejector ram on the rear of the main body."

Ville-Pekka Parkkinen, Sales Manager of Cross Wrap says, "We are happy to be part of this project with our CW Direct Wrapper, as it is a great example of a fine and helpful business idea that helps to create difficult waste material handling more simple, effective and safe. Especially as it is a mobile unit that broadens the usage and possibilities even more."

<sup>1</sup> www.ukfrs.com/quidance/fires-waste-sites



#### **Accurate and efficient** separation with Terex Ecotec's new TMS 320 Metal Separator

Leading environmental equipment specialist, Terex Ecotec, is delighted to introduce the TMS 320 Metal Separator. This latest addition to the Ecotec product range is the ultimate in mobile separation, offering operators unrivalled application flexibility, production rates and serviceability. A highly efficient drum magnet and eddy current rotor combined with superior material flow, ensure accurate material separation. The TMS 320 is ideally suited for metal recovery from compost, biomass, IBA (Incinerated Bottom Ash) and waste.

Tony Devlin, Business Line Director commented "The TMS 320 Metal Separator is a new and unique offering from Terex Ecotec and demonstrates our continued investment in new product development. It will further enhance our product range meeting both market and customers' needs. Manufacturing will take place at our Terex Campsie facility which has benefitted from further investment with the completion of a large capacity shed offering an additional 30,000 square foot which will support the ongoing growth and development of Terex Ecotec's expanding product portfolio,

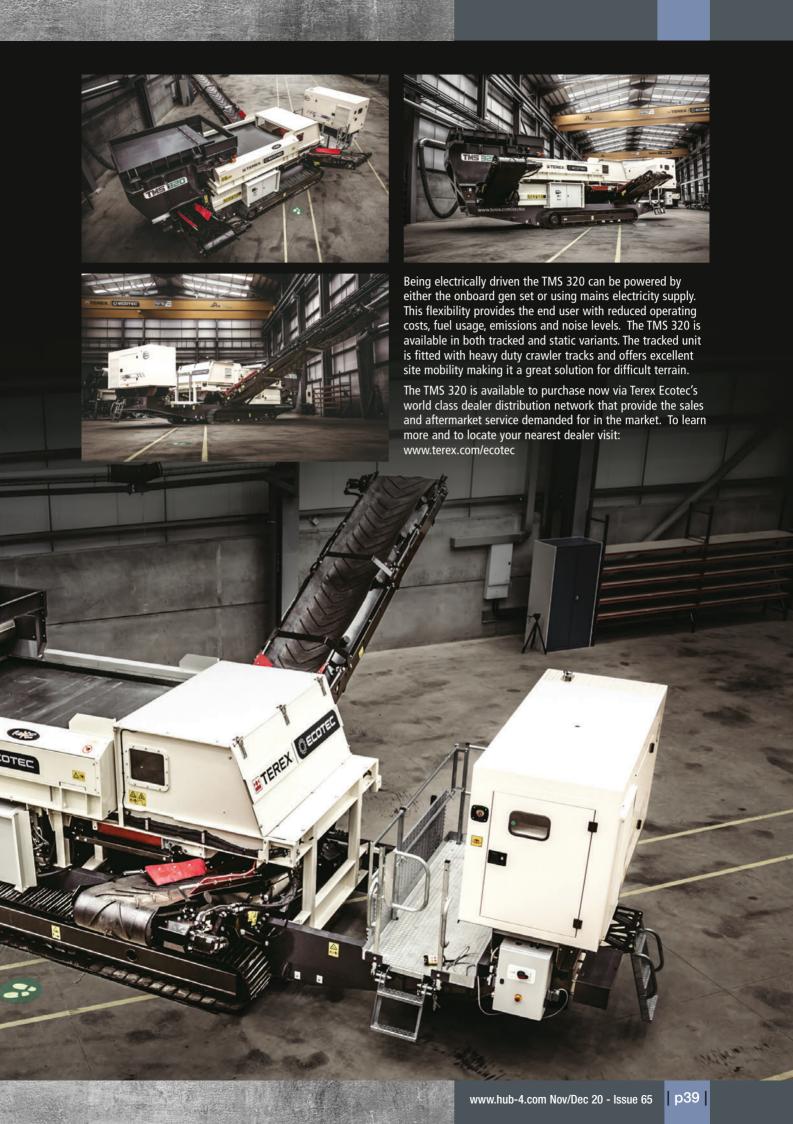
In partnering with Eriez, a world authority in magnetic separation technologies, the TMS 320 incorporates the renowned RevX ST22 eddy current separator and rare earth drum magnet. The RevX ST22 eddy current separator has a premium 22-pole neodymium rotor which spins at just 3000RPM. This rotor is encased in an ultra-thin carbon fibre shell, and a thin but durable PVC belt, ensuring that the intense field produced by the ST22 is fully employed to provide the most effective separation results. The 2m wide high-strength neodymium radial pole magnet is utilised for optimum iron recovery.

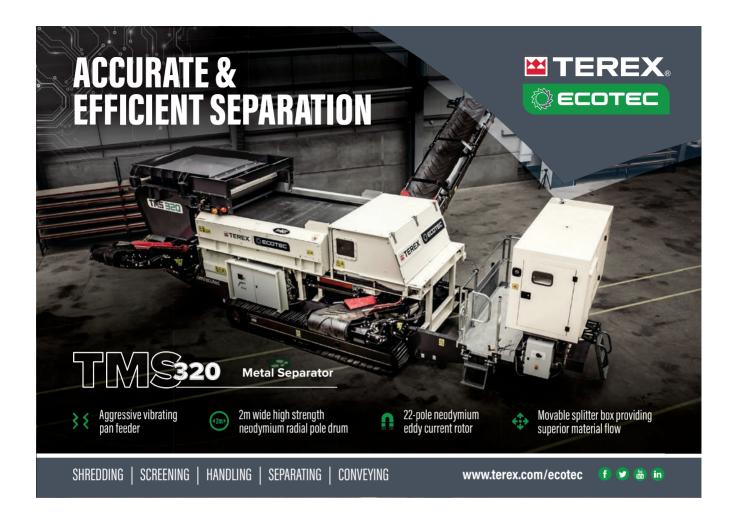
Designed to provide operators with unrivalled levels of service access, all conveyors are built to a modular design allowing each one to be removed independently for ease of maintenance. The splitter system can be moved away from the eddy current unit to provide unobstructed access to both the splitter system and eddy current rotor. This innovative feature also enables the TMS 320 to fold within a 3m wide transport width and places it as a market leader.

ETEREX OEC



The TMS 320 metal separator offers quick and easy set-up and will be ready to process in minutes with no tools required. An intuitive push button control panel, variable speed drum magnet and eddy current belt, combined with a splitter system that offers accurate real time adjustment, enables the operator to easily configure the machine to suit a wide range of applications.







## RM Group launches new product philosophy in series production

Following the presentation of the prototype at bauma in Munich in 2019, RM Group is now launching series production of the new product philosophy in October. The RM 120X is the first crusher to be implemented in this series. An RM screen which will be produced at the centre of excellence for screening in Dungannon will follow next year. This will be the ideal addition to the RM 120X or an efficient standalone machine...

"With this philosophy we are once again setting standards in user-friendliness," says Gerald Hanisch, founder, and owner of RUBBLE MASTER, enthusiastically. As the first NEXT philosophy crusher, the RM 120X combines enhanced safety with maximum performance and flexibility. However, the company remains true its proven service and intuitive GO! operation concept, which it continues to expand. These concepts will be implemented in all future RM products no matter if they are produced at the RM Headquarters in Austria or at the centre of excellence for screens in RM Dungannon.



An additional focus was on the optimisation of material throughput. Here, the world market leader implements job-specific crushing equipment for the respective material and real-time analysis. This reduces running costs and increases turnover. Optimisation starts with the machine configuration, which is why 5 main application cases have been developed with the necessary equipment options. In addition, the



#### Four-point product philosophy

In a nutshell, RM NEXT focusses on four points. Extended service is one of them, which includes both the standard five-year warranty - an industry first - and the annual service.

Simplicity is ensured despite the additional features, equipment options and configurations that have been developed based on customer requirements. "Operating an RM 120X still involves only a few buttons. The built-in screen is only used to display information and has no sub-menus. We have received valuable input for this operating concept from our customers around the world, and the controls and display meet the specifications on job sites 100%," says Hanisch.

The RM Group has always been one of the pioneers in terms of safety in the past. Gerald Hanisch's vision has now become reality. With RM NEXT and the comprehensive operator-machine interface, the operator no longer has to enter the danger zone while operating the machine and can see light signals indicating both the status and current workload of the crusher from the excavator cab.

performance indicator on the machine and the RM GO! SMART can be used to immediately detect and implement any potential improvement.

#### **Future developments**

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







### **Edge Innovate boost production capacity with on-site investment**

Since Hub-4's last visit to EDGE Innovate's manufacturing facility in Dungannon, Co. Tyrone, in 2018; customer demand for EDGE's products has continue to grow. So too, has their product offering. With the company's aggressive product development programme, EDGE Innovate has continued to bring new products to the marketplace on a regular basis. In fact, since that visit in 2018; EDGE Innovate have unveiled two new, high capacity waste shredders, a 140' telescopic radial conveyor and a newly designed track radial conveyor.

#### **DEVELOPMENT STRATEGY**

Expanding the product line has not been EDGE's only focus; in January 2019, EDGE Innovate announced a four-year expansion programme. The programme centres on innovation, employment, skills development, and export growth. Over the four-year period covered by the programme; EDGE Innovate will invest nearly £8 million in the business. Plans include the upgrading and expansion of their existing assembly production facilities, a new Customer Welcome Centre to house their ever expanding sales, marketing and aftersales departments, new staff welfare facilities, a Research and Development unit along with a new Quality Control Centre at their Dungannon headquarters. The investment will result in the creation of 80 new roles and a leadership and skills development programme.

#### **IMPROVED CAPACITY & QULAITY**

In a matter of weeks EDGE Innovate will see the completion of one of the programmes main goals, with the opening of a new 37,500 ft<sup>2</sup> factory at their Dungannon facility. The new facility will see their production capacity increase by up to 30%

The facility will house a new stores area, a state-of-the-art paint shop and blasting facility complete with an automated blasting line. Through a close working relationship with their current paint supplier, the new paint shop facility will enable EDGE to achieve a much superior paint finish, leading to a more durable product for their customers. Additional training coincided with a strengthened internal Quality Control system will guarantee an already high standard paint finish, first time, every time.

The new paint facility is controlled via an advanced PLC control system that will capture live data on production cycles. This process enables painters and fitters to get the correct colours and parts in place allowing for builds to move through the factory much more efficiently and increases productivity.

EDGE state that "every aspect of the coating process is regularly audited by our internal team and paint supplier to ensure compliance to our now increased internal and customer requirements. With the imminent transfer to our state-of-the-art painting facility we are confident that our investment will ensure EDGE remain market leaders and innovators".

#### **ENVIRONMENTAL BENEFITS**

EDGE Innovate has committed to improving the environmental impact of its business operations. They aim to design and manufacture their machinery range at the highest levels of safety as well as minimising the environmental impact through the lowest possible levels of emissions. This has been evident through the installation a rooftop Solar PV





system in 2016. The system generates 180kWp and covers an area of 1152m<sup>2</sup>. The solar PV system generates over 140,751kWhrs/annum of electricity, offsetting over 72.8 tonnes of CO2 each year.

The new paint facility will see several environmental benefits. With shorter drying cycles and superior heat retention properties of the new paint booths installed; EDGE Innovate's onsite energy consumption will be improved. Wastage generated via the painting process will also be greatly reduced, as too will the level of organic substance emissions.

Darragh Cullen, EDGE Innovate Managing Director commenting at the completion of the new factory, "With an ever-increasing customer demand for our products, it became abundantly clear that we needed to expand our manufacturing capacity. Having the ability to satisfy that demand was important, but so to, was the process of improving the quality of our products. This investment will allow EDGE to create a best in industry paint finish, allowing our customers to enjoy a much more durable product in the field".

EDGE Innovate will now turn its attention to the expansion of their final assembly production facilities along with a new Customer Welcome Centre to house their ever-expanding sales, marketing, and aftersales departments.

#### **ABOUT EDGE INNOVATE**

EDGE Innovate develops, manufacturers and markets sophisticated technologies for shredding, stacking, screening, and sorting of primary and secondary raw materials in production processes and recycling. Our Material handling and recycling range is made up of reliable, durable and cost saving products with a wide range of mobile stockpilers, portable telescopic conveyors, tracked stackers, tracked and mobile feeders, trommels, slow-speed waste shredders, picking stations, material classifiers, roll-sizers and truck offloaders. Our product range allows our customers, to shred, screen, separate, stockpile and size a vast array of materials.



#### **Ulster Shredder's celebrating** 50 years in business

2020 has been a prominent year for Ulster Shredders as they celebrate 50 years within the engineering industry. Located in Castledawson Magherafelt, their 43,000 square feet facility provides manufacturing and office space: benefitting the company as they can design and manufacture equipment all under the one roof. It was in the last 30 years; Ulster Shredders focused all their energy into designing and manufacturing shredders. Their product range include shredders that focus on confidential destruction, volume reduction, production processing and mobile shredding.

Managing Director Elliott Martin, looks back and discusses the years in business. "I am thrilled to see the development of Ulster Shredders; we have grown and became one of the leading manufactures within the UK for Shredding equipment. Constantly evolving and introducing new machinery, we continue to learn as we grow. We have many projects planned for the future, which I am excited to see come to fruition.

Not only do Ulster Shredders provide shredders for SME and nationwide recycling organisations, but their engineering team also design and manufacture bespoke shredders for individual customer applications. Ulster Shredders value their customers businesses and provide cost effective solutions to

their customer needs.

Producing a variety of shredders from their U-5 to U-200, Ulster Shredders also manufacture and supply spare parts, which are competitively priced, of the highest quality and designed specifically for use in Ulster Shredders equipment. In their warehouse, they hold a large stock of parts which can be shipped to customers globally within 24 hours.

Sales Director Paul Atkinson adds "It is important that we are able to support our customer when they need us, our relationship with our customers is something we hold dearly. I am proud of how we support our customers from the beginning of design right until dispatch of equipment. Also, with having five services vans located across Britain and Ireland, it leaves customers having a reduced waiting time for a trained engineer to reach them.

Ulster Shredders skilled engineers are involved from commissioning equipment, inspections, through to regular maintenance helping to support their customers evolving needs.

Paul Atkinson also highlights, the plan to grow customers in Europe; "Our main customer base is in the UK and Republic of Ireland, although we do hope to grow our business within other European countries. With dealers in Finland, Spain, France, and Portugal, already having been appointed."



It is an exciting time for Ulster Shredders as they continually grow and develop within the shredding industry. For more information on Ulster Shredders and their shredder range email info@ulstershredders.com or visit www.ulstershredders.com.

You can also contact Sales Director Paul Atkinson on 028 79639244.



## Terex Finlay launch new hybrid jaw crusher: J-1280

The new Terex Finlay J-1280
Mobile Hybrid Jaw Crusher
offers operators the flexibility
to power the plant either by an
onboard genset powerpack
configuration or connected to
an external power source. Both
power options provide
operators with significant
power, servicing and
maintenance cost savings in
direct comparison to a
diesel/hydraulic powered
plant.

The machine is fitted with a high powered alternator that generates sufficient energy that can be used to power downstream screening plants or stockpile conveyors further improving overall fuel consumption and efficiencies of production trains.

The machine incorporates a Terex® 1200 x 820mm (47" x 32") high performance electrically driven single toggle jaw chamber. The integrated pan and heavy duty VGF feeder features automatic power monitoring to regulate and control material flow to the jaw chamber to prevent overflow and give optimum production in quarrying, mining, demolition and recycling applications.











#### **Key features:**

- The plant's electrically driven power systems provide significant cost advantages and environmental efficiencies.
- Superior performance in dusty applications and in high altitude environments.
- Automatic variable speed VGF ensures continuous choke feeding of the crushing chamber for optimal productivity.
- High powered electric drive ensures precise chamber controls and reverse functionality for clearing blockages and assisting in construction demolition, asphalt and recycling applications.
- T-Link telematics hardware and software along with free seven-year data subscription are fitted and installed as standard.





Anaconda is an international equipment company that designs, manufactures, and supplies a diverse range of equipment that can be adapted to numerous applications and industries ranging from C&D to organics and recycling. Anaconda machines are built with the end-user in mind, designed at every turn to work harder and smarter than the competition, translating into time and money-savings for you.

Anaconda boasts a worldwide following, and with almost 2,000 machines working hard for their owners, it is no wonder we have seen #AnacondaStrong continue to grow at unprecedented speed in recent years. Our customers come to us for our quality machines and diverse product offerings and stay for the exceptional product support. From selecting the best machine amongst our existing product line to designing bespoke customizations aimed to optimize their function for your specific application, we pride ourselves on getting the right machine for you from the start.

As most of our customers know, one of the best aspects of being a part of #AnacondaNation comes after the sale; Anaconda is there with you every step of the way, offering unparalleled customer support to ensure your Anaconda machine keeps working hard for you without interruption. By handpicking only reliable, quality partners and cultivating these relationships over the past two decades, Anaconda has developed a strong and customer-dedicated worldwide dealer network, all ready and waiting to serve and support you and your new machines.

All equipment is manufactured and distributed from our high– specification, full-service manufacturing and parts facility in Co Tyrone, Northern Ireland. We also have our North American facility, Anaconda USA Inc., based in Bellingham, Massachussetts, to expand the product and brand into North America. Anaconda USA houses machinery, spare parts, and looks after all sales and technical support for the USA, Canada, and South American markets.

This year, Anaconda stepped firmly into the tracked crushing equipment arena with the launch of the J12 Jaw Crusher and the I12 Impact Crusher. The generic tracked chassis is Cummins engine powered and comes as standard with a 14ft (4.3mtr) variable speed vibrating grizzly feeder, hydraulic hopper wing extensions, an overband magnet, and side-discharge dirt belt. This generic chassis allows for the placement of either crushing chamber, giving the dealer immense flexibility in their rental fleet and the ability to reduce their inventory cost. It also allows them to increase their fleet utilization by giving them the versatility of converting the machine from a Jaw to an Impactor and vice versus in minimal time.

The benefit of Anaconda joining the McLanahan family of companies earlier last year means that both units come with Universal Crusher chambers as standard. With over 7,000 Jaw chambers, and 1,500 Impact chambers placed worldwide over the last 130 years, these chambers are household names in the crushing industry and help give further credibility to the dealer when introducing these new products to their customers.



## 20 reasons to select a WG20 geared motor

#### WEG releases technical features of WG20 gearbox range

Selecting a geared motor requires countless technical considerations. To simplify purchasing efforts for buyers, global manufacturer of motor and drive technology, WEG has released 20 Reasons for Choosing WG20 Geared Motors. The guide explores the essential considerations for selecting a geared motor and why, in today's manufacturing landscape, choosing a future-proof gearbox is essential. The guide can be downloaded at www.weg-WG20.com.

Geared motors are arguably the most important type of drive in the processing and manufacturing industry and WEG's latest guide has been released to assist technical buyers when purchasing this equipment. The guide explores the key aspects of previous WEG geared motor manuals, while focusing on the newly launched WG20 range and its new technical features.

WG20 is the first geared motor range to be completely developed in-house by WEG. The guide explores the specific technical advantages of the WG20 range, including the gearboxes energy efficiency ratings, power ratings and predictive maintenance options. The guide also covers

20 Reasons for Choosing WG20 Geared Motors is one guide in a series of four whitepapers to accompany the launch of WEG's WG20 range. In addition to the technical features of the WG20 range, the guides cover everything you need to know about gearbox units — whether you are a mechanical engineer, plant operator, maintenance specialist or technical buyer.

"Geared motors are used in a wide variety of applications, machines and systems," Marek Lukaszczyk, marketing manager for Europe and the Middle East at WEG. "Yet, the more varied the applications, the more varied the demands are on the drive. The WG20 geared motor range from WEG has been developed to meet all the complex requirements found in industry."

"The guide is free to download and provides a high-level review of WG20 motors and has been released to help buyers make purchasing decisions. The guide includes important information about operational costs, predictive maintenance and how WG20 can be switched to different voltages around the world meeting many requirements for international markets."





Built on the success of the EW240E MH comes its smaller counterpart, the **EW200E Material Handler**. The material handlers are specifically engineered to deliver outstanding results in waste and recycling applications. Built by Volvo, supported by SMT GB. Trust in the full support and back-up from SMT GB, for the lifetime of your machine.





### **Albion Stone PLC adds a third** Volvo L150H loading shovel for its mining operations on Portland

A third Volvo L150H loading shovel has been supplied to Albion Stone for its mining operations at the Jordans and Bowers mines on the Isle of Portland.

Joining the two existing L150s that were supplied in 2014 and 2016, the new arrival will take over the primary duties of extracting and rehandling blocks of Portland stone from the mine face, as well as conveying them to the stock yards and designated block cutting areas of the works.

"Our original machine has clocked up over 10,000 hours, so we considered it was time to replace this with a fresh machine and put the older unit onto secondary duties," says Operations Manager Dan White.

Unlike the two older units that had to be supplied with reduced height operators' compartments, the new L150H has been supplied with a conventional cab. "Since those machines were delivered, we have made a significant investment in our drilling operations inside the mines to increase the roof horizon and maximise our production capability. This means we can now utilise a conventional loading shovel without a significant amount of modification," continues Dan.
"Furthermore, having such a reduced cab height meant our operators had a restricted field of view, so using a standard

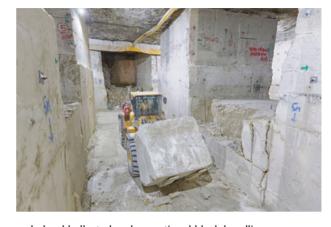
cab means better visibility and, ultimately, a more conventional

machine to sell on if we so wish in the future.

The new L150H features a hydraulic quick hitch, to facilitate the easy change-over of the existing attachments from the previous machines. These include a 3.8m<sup>3</sup> spade nose rock bucket for cleaning up, as well as heavy duty 1500mm block handling forks that are capable of handling blocks weighing anything from 7 to 12 tonnes. Whilst the L150H has plenty of breakout torque to prise the majority of part-sawn blocks from the mine face, there is the occasional need to encourage some more awkward blocks away from the face; particularly from the mine roof.

and glycol ballasted and an optional block handling counterweight. Other safety features for working underground include an Ardent twin agent fire suppression system, fire resistant hydraulic oil, pyro jacket sleeved fuel lines, a double pole battery isolator and a Chelwyn valve to meet mine regulations, while also reducing the risk of fire. The operator's compartment benefits from a heavy-duty bar type screen guard and additional LED work lights.

Powered by a 13 litre Stage V engine developing 304 hp, the 26 tonne L150H benefits from powertrain components designed by Volvo. This combination coupled to other fuel saving devices, such as the Volvo 'Eco pedal', encourages the operator to run the machine at its optimum rpm in the engine's torque curve. 'Optishift' with torque converter lock up also makes the L150H a highly efficient and productive loading shovel for its size class.





## Mastering Peak Efficiency It is all in the material handling details.

Achieving peak efficiency levels is an everyday feat of engineering and teamwork at the Geneva Rock Products Point-of-the-Mountain site in Utah, USA. The facility has long been lauded for its commitment to sustainability, energy savings, and safety - which is well illustrated by a unique energy-generating downhill overland conveyor system that was commissioned more than five years ago. This much-touted material handling system (which according to the company had paid for itself in under three years) transfers up to 2,275 tonnes of material per hour from a mountain of upper-ledge rock to ground-level processing operations - while generating enough electricity to power the entire facility.

As to the latter, most folks would say that Geneva Rock has indeed reached its peak performance; however, the company continues to climb higher and higher with ongoing improvements to each circuit and system, and to every transfer point, belt, pulley, idler, and more. For Geneva Rock, truly mastering peak efficiency is all in the material handling details.

#### **Desegregated recycle stockpiling**

One of the facility's most recent upgrades was revamping material handling methods in their asphalt recycling operations. When specifications for the use of recycled asphalt became far more stringent in Utah, the operation needed to avoid segregation not only in the materials but also in the oil content of the recycled asphalt. "When the rules of the game change, we need to change with them," says Geneva Rock Aggregates Production Manager Ed Clayson, an industry veteran with more than 45 years of service.

Once again, Clayson says that his company consulted with Superior Industries, a single-source provider of aggregate processing equipment and material handling systems and components. "Superior Industries had designed and manufactured our downhill overland conveyor, which has performed flawlessly since we put it into operation," he says.

Superior recommended the use of a 914mm x 48m TeleStacker® Conveyor, a telescoping radial stacking conveyor which eliminates material segregation by stockpiling materials in windrows to ensure that the stockpiled material meets specifications.

"There is quite a variance in the oil content between the chunk asphalt and the milled asphalt that's hauled into our facility for recycling," says Clayson. He explains that previous to the use of the new TeleStacker Conveyor, they had used a standard radial stacker to stockpile the recycled asphalt, and then they would try to blend the material with the use of a dozer — and even with additional material handling, there was too much discrepancy in the specs.

"The TeleStacker has eliminated these costly issues as we introduce the material back into our HMA plant," he says. "We're getting more uniform gradations in our pile and have not had any specification issues to date. Due to the way the unit is programmed, we get a much better blend of material, and the product is the same on one end of the pile as it is on the other," says Clayson.

#### Latest design advancements

Superior Industries designed and manufactured the very first telescopic radial stacker in 1997, and over the years, feedback from the field has led to numerous innovations in their design.

"The latest design advancements to the TeleStacker Conveyor make it the best value for the money," says Clayson. He adds that his team particularly likes the new FD Auto Level technology, which automatically maintains a level head pulley while in radial travel mode — an important factor since an uneven conveyor structure is one of the leading causes of belt mistracking on radial telescopic conveyors. "In the location where we're stockpiling, it's not like we can build a concrete pad or runway to keep it perfectly level, so the auto-leveling feature is a really big deal that ensures the integrity of the belt and structure," he says.



#### Quarrying

Equally important, says Clayson, is the addition of a material flow sensor (the SonicScout Material Sensor) which causes the telescopic conveyor to stop radial travel should there be a stoppage in feed material. "With recycle, there is often some contamination in the material that may stop material flow. If there is no feed material hitting the conveyor, the sensor causes the conveyor to stop its travel, preventing the potential of gaps in the stockpile," he explains.

Lastly, Clayson says that the unit's PilePro™ Automation program is user-friendly, easy to operate, and easy to troubleshoot via one call to Superior's in-house automation team. The zoning technique of the program allows Geneva Rock to build a higher volume stockpile on a limited footprint. "We need to stockpile as much as we can in our designated area. During the winter, we will build a 30,000-tonnes. stockpile that will feed the asphalt plant all summer long," he says.

#### **High-quality components**

A big advantage in working with Superior, says Clayson, is the fact that they are one of very few manufacturers to design and build both the conveyor systems and the components. "I have been around conveyors and components throughout my entire career and I am a firm believer that Superior offers the best components on the market. We maintain a large inventory of their pulleys and idlers, and over the years, they have delivered significant cost-per-ton savings due to increased wear life and belt protection."

One of the standouts of the component line, he stresses, is the Chevron® Pulley, a V-shaped wing pulley that extends belt and pulley life by preventing rocks and debris from becoming trapped between the pulley's wings. Versus a conventional wing pulley, the V-shaped 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.

Superior is also providing custom idlers for Geneva Rock in a few locations. "We have two existing overland conveyors built by other conveyor manufacturers, and the components on them do not offer the quality we require. To eliminate the potential of costly downtime and belt damage, we are changing out the idlers on those conveyors with the custom components provided by Superior," says Clayson.

#### **Partnering for success**

"When we need a solution, we don't just buy the equipment, but we also buy the service and support that goes with it," stresses Clayson. 'We're very lucky to have the highest calibre of support from both Superior Industries and its local dealer, Kimball Equipment Company. I have learned over time that you cannot do this by yourself. Having the











Designed with standard mounting dimensions, the geared motor is easy to install and perfect for replacing existing units.

WG20 is compact, efficient and robust.

Isn't it time you changed?



Download a series of white papers discussing a range of topics from a technical guide to purchasing and maintaining geared motors at www.weg-wg20.com



Terex MPS introduce new highcapacity wheeled crushing systems

The new Terex® high capacity, all electric wheeled crushing systems are designed to deliver and built to last. They are guick to set up and dismantle, as well as easy to operate. Their exceptional portable, productivity, efficiency and quality deliver real advantages over other systems in labour savings, power, maintenance, plant relocation costs and time.

#### WJ3042 Jaw Plant

The Terex® WJ3042 is a high-performance wheeled jaw crusher plant. Incorporating the aggressive Terex® JW42 jaw crusher and a heavy duty vibrating grizzly feeder, the Terex® WJ3042 gives optimum production in a range of applications. Plant installation is assisted with hydraulic legs. Its compact size, quick set up times, ease of transport and simple maintenance make the Terex® WJ3042 ideal for guarrying, mining, demolition, and recycling applications.

#### **WC1150S Cone / Screen Plant**

The Terex® WC1150S Cone-Screen plant is a high performance, medium sized wheeled crushing-screening system. At the heart of the plant is the 225 kW (300 HP) Terex TC1150 cone crusher with a modern automated control system. Its unique crushing action provides excellent capacity, high reduction & good product cubicity for the production of high-quality aggregate & sub-base materials. A level sensor over the cone crusher regulates the feed to ensure the cone chamber is choke fed, essential for maximum production, manganese life & optimal product shape. The large onboard 6'x20' 3 deck screen allows for sizing product from a single plant. Plants come with hydraulics for simple and easy installation of the plant.



The WJ3042 and WC1150S are available as stand-alone plants or as part of a multi plant system with product conveyors for a complete crushing and screening solution. All plants and conveyors are designed to fit in standard containers for easy transport overseas or on the road; the entire system with conveyors can be transported in 9 containers. Once on site, each assembled plant can be transported in a one-piece tow. Hydraulic screen lift and hydraulic support legs reduce cranage and tools required for plant set up and relocation.







#### **ALL PART OF THE SERVICE!**

MST Parts Group specialises in the supply of tracks, wear parts, buckets and repairs for earthmoving machinery. Established in 1971, MST has developed a strong reputation as the first call for machinery spare parts from the smallest mini excavator to the world's largest mining machines.

BUCKETS. TRACKS. WEAR PARTS.







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**URGENT ASSISTANCE?** 0845 838 0706

### Asphalt recycling with a zero-carbon footprint at Famenne Enrobés

In the beautiful territory of Marche en Famenne in Belgium, the company Famenne Enrobés produces and supplies hydrocarbon coatings for the road sector. With a staff of 15 employees they manage besides their offices, an asphalt production plant, an asphalt recycling plant & their own laboratory. All on the same location. The asphalt plant, installed in 2004, produces up to 320 t/h.

For the treatment of the recovered asphalt they use an electric driven three-deck classifier Keestrack C6e in combination with two, also movable, electric driven primary and secondary roller crushers. In 2019 the decision was taken to replace their classifier with the electric driven Keestrack C6e because they wanted an ecologic and more economical solution for their hydrocarbon coating recycling process and choose a full electric driven solution. But also, the compact, one piece, transport solution was a key factor, as the classifier sometimes is operational at other sites.

C6e and 2 static, electric driven asphalt crushers.

The primary roller crusher is fed by the wheel loader and creates a coarse fraction which enters the feeder of the C6e, the 11/40 mm fraction is transported back into the secondary roller crusher, creating a closed circuit with a very specific 0-11 mm granulate. The roller crushers ensure a perfect end granulate product as it crushes exactly at the right characteristics of the asphalt, maintaining the aggregate and separating it from the tar without excess of fine fraction. The

The asphalt recycling station is 100% electric driven

mm) in closed circuit. The process incorporates primary

connected to the mains network. Due to their specific set-up

of this application they can produce top quality asphalt (0-11

crushing - size control - recirculation to a secondary crushing

stage – final separation. This is achieved with the Keestrack

With the contribution of their own laboratory Famenne Enrobés controls their production process to the detail. Grain size and the bitumen oil content is strictly controlled in their recycling process by continuous checks. This way a homogeneous high-quality end product is guaranteed.

asphalt recycling plant produces up to 100 t/h.

"The possibility to plug-in the C6e classifier into the mains was a must for Famenne Enrobés" according to Mr. Patrick Noiset, "We want to be able to produce at zero carbon footprint".

The possibility to run the classifier also from its own diesel engine and gen-set, and to have it easily transportable in one piece, is also an added value as the equipment moves 3 to 4 times a year to other sites. Above these advantages the electric driven C6e also needs less maintenance when plugged into the electrical network as the diesel engine is not used at that point. As the electric driven parts use less hydraulic oil there is also less maintenance costs and less environmental risk due to leakage.

All the environmental criteria are positive and made Famenne Enrobés choose the Keestrack C6e classifier. François Bricheux, recently retired from Keestrack, explains the economic advantages of the electric plug-in classifier. "A modern diesel/hydraulic classifier uses on average 14 l/h. This C6e uses only 9 l/h when it runs on its own on-board diesel engine and generator (33% less). When plugged-in to the electric grid it uses 27kWh (±70% energy cost savings)."



Mr. Patrick Noiset, the director of Famenne Enrobés explains the process of their fully electric driven asphalt recycling process (recycling process for hydrocarbon coatings). Up to 50% of bottom layer asphalt can consist of the high-quality recycled asphalt which they produce in their asphalt recycling plant. The top layer in Belgium roadworks always exists of 100% new asphalt as in the Walloon Region, the Qualiroute specifications do not allow any recycled material in the wear layers currently.

Keestrack C6e classifier in closed circuit with the primary and secondary roller crusher.



With increased demand BG Europa are well positioned to offer a range of aggregate drying equipment which include the SD Series of Parallel Flow Dryer Drums. At the top of the range is the SD 1.5 which are usually mated to the SF Series of Pulse Jet Fabric Filters to provide efficient low temperature drying at just above dew point. These drums are used extensively within the slag and sand drying industries and therefore flight design and drum construction are targeted to provide long operational life given the highly abrasive nature of these materials.



BG Europa Rotary Dryer Drums benefit from many years of design and experience of a diverse range of drying applications, where each dryer unit is designed to suit individual applications and requirements. Where additional versatility is required elements can be incorporated to allow dryer inclination and drum speed to be easily adjusted to suit the differing drying characteristics of a range of materials.

The SD 1.5 drying drum ensures long life expectancy and low operational costs by offering a heavy-duty chassis in stationary or relocatable designs.

A high specification drum shell is manufactured from 12.0mm thick boiler plate which is resistant to flaking under cyclical temperature conditions.

High efficiency flight pattern including insulation flights in the combustion zone to maximize radiant heat capture incorporate adjustable drum flights to enable the material veil to be modified to suit extraction and burner characteristics.

Trunnion assembly design:

The trunnion assembly consists of two trunnion rings forged from a solid billet of EN8 steel and machined to tolerance to provide a trunnion path free from joints.

The incorporation of pivoting trunnion roller support stools enables tracking by skewing the trunnion roller tangentially to the trunnion ring. This design ensures that the trunnion rollers have full face contact with the trunnion ring at all times, thus ensuring even distribution of forces over the roller and trunnion ring for minimum wear. This design is particularly beneficial when using nylon rollers which can be damaged by point loading.

BG Europa heavy-duty trunnion roller assemblies incorporate internal taper roller bearings to lock all thrust forces into the roller assembly. This design significantly reduces forces on the trunnion shaft and negates the need for keyways which are traditionally a source of weakness.

BG Europa trunnion rollers are manufactured from EN8 steel with flame hardened wearing faces for maximum life.



Leading infrastructure services company FM Conway has been awarded the new Transport for London (TfL) Highway Maintenance and Projects Framework (HMF) for the South region.

The contract, which commences on 1st April and will run for eight years with an option to extend for a further four years to 2032, will see FM Conway act as both Principal Contractor and Principal Designer.

The new HMF contract replaces the London Highways Alliance Contract (LoHAC) and will see FM Conway deliver a complete range of highway services including safety inspections, reactive maintenance and planned works, including minor capital schemes.

FM Conway has a longstanding relationship with TfL having previously worked on LoHAC for the North-West region. Throughout the term of LoHAC FM Conway demonstrated a proven capability to support TfL in maintaining a safe and functional highway network, while importantly minimising disruption to road users and communities across the capital.

This new contract will see FM Conway support TfL in its drive for 'healthy streets', including a reduction in carbon and improved air quality. The business is already demonstrating its commitment to carbon neutrality through a range of initiatives such as 'low carbon sites', electric plant and vehicles, electric cargo bikes and low carbon asphalt solutions.

Andrew Hansen, Managing Director at FM Conway comments: "We are delighted to continue our long-term partnership with TfL. This contract win is testament to the strength of our highway maintenance offering in the capital.

"Our experience on the TfL network coupled with our strong collaborations in the South provide great foundations as we embark on this new contract with TfL and we now look forward to demonstrating our proven track record in delivering sustainable infrastructure solutions."



Glynn Barton, TfL's Director of Network Management, said: "Our network of red routes are the arteries of London's road network and play a vital role in helping people get around the capital safely, whether they are walking, cycling, getting the bus or driving. These new maintenance and small projects frameworks will help us to keep these roads safe and well maintained for years to come as we work to cut road danger and congestion and make London one of the best cities for walking and cycling."



Tarmac has called for new thinking in road construction and greater use of warm mix asphalt to reduce disruption from roadworks, as a new survey\* shows people believe traffic levels across the UK are almost back to pre-pandemic levels.

Nearly two thirds of motorists are making the same number of car journeys (or more) than prior to lockdown, and 41 per cent are now travelling far more than they did just a few months ago.

Essential roadworks play a key role in getting people moving but alongside the freedom to travel also comes the frustration of additional traffic delays, with 73 per cent of those surveyed saying that their travel had been impacted by roadworks.

Further to this, the survey also revealed that 71 per cent of drivers believe traffic levels are the same or higher than prelockdown levels, with almost a quarter having been stationary in traffic for up to 20 minutes per journey since lockdown restrictions were lifted.

To ease the problem, the UK's leading construction solutions company is encouraging local authorities across the country to embrace new thinking in road building and repair through the increased use of warm mix asphalt to help get traffic moving more quickly.

The solution involves laying asphalt at lower temperatures than traditional mixes which means it can be laid faster, it sets quicker, is much more sustainable to produce and enables roads to reopen and get traffic moving more quickly — which will become increasingly important as people start to travel again.

As the government continues to outline its plans to build back better and greener, with £100m set aside for road repairs and improvements, Tarmac is calling on local authorities across the country to take action and help both the environment and road users by adopting warm mix asphalt as the default method of paving our roads.

Warm mix asphalt is quick and easy to lay and requires less cooling time between courses, increasing the amount of material that can be laid in a standard shift – saving time and money.

It is estimated that this method of road building and repair could save 60,000 tonnes of CO2 per year nationally, the equivalent of 300 million miles of car journeys\*\*, and offers significant public health benefits in terms of clean air.

Despite these benefits, a report from the All-Party Parliamentary Group (APPG) for Highways has stated that the widespread adoption of warm mix asphalt has so far failed to take place. The report notes that adoption of warm mix asphalt in the UK currently stands at less than 4 per cent, lagging far behind the US (40 per cent) and France (15 per cent).

Brian Kent, national technical director at Tarmac, said: "As we begin our road to recovery from the COVID-19 pandemic, it has never been more important for the construction industry to work together with local authorities and councils to adopt more sustainable ways of working.

"With carbon reduction at the centre of the Government's Construction Strategy and many local authorities working to achieve net zero targets by 2030, warm mix asphalt is a proven materials technology that benefits road users, residents living around areas of roadworks, highways workforce who spend less time exposed to traffic during roadworks, and the environment."

- \* An online survey of 1,000 UK road users was commissioned by Tarmac and conducted by market research company 4media Group, in accordance with the Market Research Society's code of conduct. Data was collected between 29th Sept 2020 and 6th Oct 2020.
- \*\* 'Working for better roads Warm Mix Asphalt: reducing carbon emissions and improving efficiencies' report issued by The All-Party Parliamentary Group on Highways, September 2019. This report was researched and funded by the members of the Asphalt Industry Alliance (AIA), which jointly supports the APPG on Highways in conjunction with the Institute of Highway Engineers. The AIA is a partnership between the Mineral Products Association (MPA) and Eurobitume UK and was established in 2000 to increase awareness of the asphalt industry and its activities, and the uses and benefits of asphalt.

### **UK** concrete and cement sector sets out roadmap for beyond net zero

The UK concrete and cement industry has launched a roadmap to become net negative by 2050, removing more carbon dioxide from the atmosphere than it emits each vear.

Launching the ambitious roadmap, UK Concrete, part of the Mineral Products Association (MPA), has identified that net zero can be met through decarbonised electricity and transport networks, fuel switching, greater use of low-carbon cements and concretes as well as carbon capture, usage or storage (CCUS) technology for cement manufacture.

The 'Roadmap to Beyond Net Zero' calculates the potential of each technology and the carbon savings which can be achieved. CCUS technology is vital to delivering net zero manufacturing and according to the roadmap will deliver 61 per cent of the required carbon

A net negative industry by 2050 will be achieved by using the natural, in-use properties of concrete which include its ability to absorb carbon dioxide during use, and the benefit of using the thermal properties of concrete in buildings and structures to reduce operational emissions.

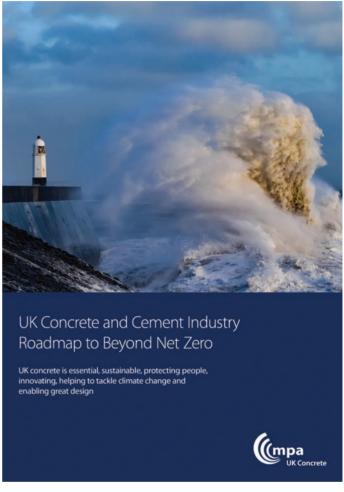
The concrete and cement industry has already taken considerable early joint action and due to investment in fuel switching, changes in product formulation, and energy efficiency including plant rationalisation, its direct and indirect emissions are 53% lower than 1990 - decarbonising faster than the UK economy as a

The MPA is currently building on this progress by undertaking ground-breaking demonstrations of hydrogen and plasma technology, which are being partly funded by the Department for Business, Energy and Industrial Strategy (BEIS) and will demonstrate the potential of these technologies to reduce carbon emissions through fuel switching from fossil fuels in cement and lime production.

The industry is now calling on Government for a robust financial support model including for the capital and operational costs of carbon capture by no later than 2021. This would ensure the technology can be developed, deployed and become an investable proposition in the 2030s.

Nigel Jackson, Chief Executive, Mineral Products Association commented: "Concrete, and the aggregates and cement used to make it, are essential materials for our economy and our way of life. New homes, schools, hospitals, workplaces, roads and railways, as well as the infrastructure that provides us with clean water, sanitation and energy all depend on these materials.

"We have already made significant progress to reduce carbon emissions but are under no illusion about the scale of the net zero challenge. Achieving this will require the wholesale decarbonisation of all aspects of concrete and cement production, supply and use. The concrete and cement industry as one sector alone cannot deliver net zero and we will only be able to go beyond net zero with concerted support from



Government, as well as with significant changes across the wider construction, energy and transportation sectors.

"Critically, our roadmap will be delivered without offsetting emissions or offshoring production facilities. We believe that net zero should be achieved by reducing emissions from the construction materials manufactured in the UK, rather than by 'carbon leakage' where UK production is replaced with imports that simply moves the emissions responsibility abroad. The aim should be to retain jobs and economic value in the UK whilst ensuring that the UK takes responsibility for the emissions it creates.

#### Chris Stark, Chief Executive of the Committee on Climate Change, said:

"Through the UK concrete and cement industry net zero roadmap, the Mineral Products Association is setting a worldleading industry ambition to reach net zero emissions. Decarbonising emissions from concrete and cement is one of the key challenges for getting to net zero with knock-on effects for helping to reduce emissions from the built environment. Net zero is a fundamental goal, requiring bold leadership from Government and from commerce – I highly commend this initiative."

To find out more, please visit: www.thisisukconcrete.co.uk

#### **Elite Precast Concrete Ltd and RSG** Structures have once again joined forces to deliver an innovative and great value solution for a client

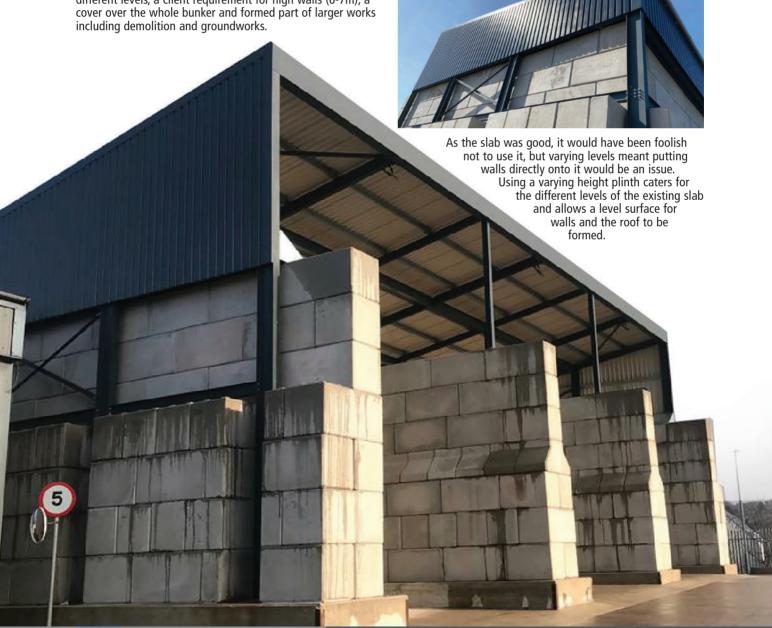
**RSG Structures operate as an independent** designer, supplier, and installer of all manner of precast, prestressed concrete as well as traditional steel frame and membrane covers/canopies.

They use a network of carefully vetted suppliers to ensure only the highest quality products are included in the portfolio and by offering a completely impartial service, there is no bias toward any one particular product, as all are considered on their individual merits and their suitability. This gives clients the confidence they are not just being sold to by a salesman but receiving sound advice from a company that have been working in this industry for a long time.

#### An innovative and great value solution:

This particular project involved an existing slab with many different levels, a client requirement for high walls (6-7m), a







This particular plinth was 0.4m at its shallowest and just over 1.2m at its highest.

There aren't too many options available at this sort of height, L walls or horizontal panels are a possibility but the foot on an L wall at this height is around 2.6m which increases the footprint dramatically and panels would require either stub stanchions, or a heavy duty steel frame with corresponding large foundations.

#### Elite Precast's high strength Legato block:

Options for the division walls are also very limited at this height and would not be operator friendly with feet or steelwork in the way.

This is where Elite Precast's high strength Legato block comes into its own. The standard blocks are cast from high quality 50N/mm2 concrete and are 1.6m x 0.8m x 0.8m, weighing 2400kgs. When designed and installed correctly they can form very large walls to take large loads, including roof canopies on top. The use of double thickness walls at the base allows the walls to take the product loading and impact loading of the operating machinery with ease. With the division walls, a "footblock" is used which creates a very neat detail and is also self-cleaning of material.

The cover for all of this is formed using a steel monopitch frame which is founded to ground externally and to the top of the walls internally and includes a spill flashing at the top of the wall.

Using this combination of products gives the client huge versatility as the concrete plinth is the only part of this bunker complex that cannot be unbolted and taken away to be reconstructed on another site.

The Legato blocks are quite simple to reconfigure into different heights and layouts which is what makes it such a versatile product. Times change very quickly and the ability to have an easily adaptable walling system is invaluable.

RSG Structures are also pleased to announce the launching of an industry first inspection service called SiteSafe.

Where clients have existing walls (constructed from interlocking blocks, timber sleepers, L shapes, panels or anything else) they can organise a SiteSafe report which includes a site survey to observe current wall layouts, systems, the types, designs and how walls are being used. The client then receives a factual report which will note where systems in place are working within design capability, highlight any areas of concern and recommend remedial actions to make the site safe, this is then signed off by an RSG Director and Structural Engineer.

For more information on any of the products offered by Elite Precast please contact sales@eliteprecast.co.uk or call 01952 588885

For more information about the wide range of services offered by RSG Structures (including the new SiteSafe service) please contact gneale@rsgstructures.co.uk or call Gareth on 08452 997597

# Investment increases capacity at Hanson's King's Cross concrete plant



Hanson's King's Cross concrete plant has undergone a £2 million upgrade, doubling capacity at the central London site.

The previous pair of two-metre Skako planetary mixers have been replaced with two four-metre models, which can produce up to 230 cubic metres of concrete an hour. The investment allows the team to supply key projects in the capital, including Thames Tideway and Google headquarters, as well as future contracts such as HS2.

As well as increasing capacity the new equipment has also improved efficiency.

"Our King's Cross plant is located on a strategically placed railhead in the centre of London with all of our aggregate and cement requirements delivered by train from source, keeping over 8,000 lorry movements a year off the roads," said Hanson Concrete managing director Brian Charleton.

"This investment allows the site to continue playing its part in helping to improve the local area by providing much-needed construction material to the capital in the most environmentally and safest manner possible."



#### Rapid International Bespoke Static Concrete Batching Plant supports Stanton Bonna's strategic growth plans, improving capacity & efficiency

Stanton Bonna is a leading UK manufacturer of precast concrete pipes, manholes and culverts for drainage, as part of a comprehensive range of precast offsite solutions for the construction industry. Recognising a need to upgrade their manufacturing methods to support strategic growth plans, the company recently selected a bespoke Rapid concrete batching plant for its Derbyshire site.

Part of CONSOLIS, Europe's largest precast concrete producer, Stanton Bonna, manufactures products for the water, highways, rail, housing, telecom, and power sectors of the construction industry. Stanton Bonna's comprehensive product offering includes: manhole systems, storm water management, flexible headwalls, flow control systems, vibration mitigation sleeper systems, power station cooling pipework and bespoke off-site solutions.

#### A new manufacturing method required for greater capacity, efficiency and reliability

Stanton Bonna's previous 'WINGET' Large Diameter (LDP) batching plant with WINGET pan mixers, was a tower-type plant erected in the 1950's. Due to its age and condition, the plant became inherently unreliable. The company faced breakdowns, high maintenance costs, difficulty sourcing spare parts, reduced mixing speeds, inconsistency and lower than desired capacities.

Stanton Bonna recognised that without major refurbishment, the previous plant would continue to deteriorate and affect production of the current product ranges it supplied. This, coupled with the company's strategic plan for growth, demanded the requirement for upgraded manufacturing methods.

With a desire to achieve improved capacities, efficiency, production levels and the introduction of new products into the market, Stanton Bonna required new production facilities for bespoke product manufacture.

This new production represented a significant increase in concrete volume demand, which could not be met by the current LDP batching plant and concrete distribution system. The company subsequently secured investment to replace the previous concrete batching plant, with a new concrete batching plant and distribution system.

#### The Rapid solution

Rapid International collaborated with Stanton Bonna to develop a totally bespoke tower batching plant system, which would meet the desired increase in efficiency and concrete volume demand. The tower configuration was essential, as





according to Rob Fifer, Major Projects Director — Stanton Bonna, "One of the key reasons for selecting the Rapid plant was its compact footprint."

The plant, which includes two Rapid planetary mixers, outputs approximately 80m3 per hour. Featuring an integral Rapid Jetwash high pressure (2000psi) mixer washout system, clean out is offered via auto-cleaning functionality.

Due to the plant's 6x 60T aggregate bins the number of ground bunkers have been restricted, as minimal product is stored at grade with more lifted to high level. This has virtually eliminated the need to use the loading shovel, increasing efficiency.

The new Rapid batching plant platforms allows for maximum

access for maintenance and cleaning, on 4 levels, maintenance; mixer; weigh hopper; and aggregate rotary conveyor; access to all levels is by stairs.

To ensure maximum output of concrete in adverse weather conditions, Stanton Bonna opted for winterisation measures, including composite cladding, lined doors and the provision to inject hot air into the bottom of the aggregate storage bins.

Commenting on the collaborative design process, Rob Fifer –

#### **Collaborative design**

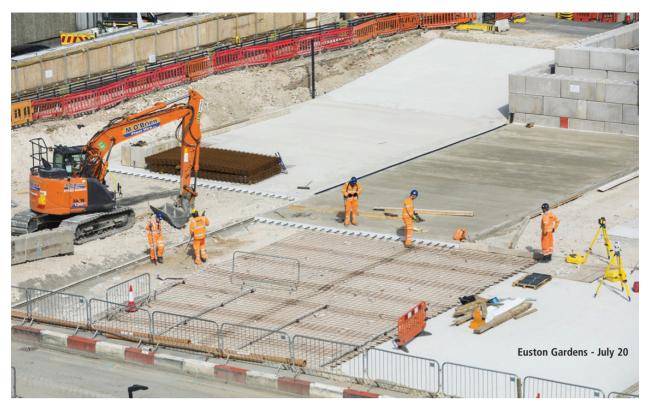
Major Projects Director, Stanton Bonna, remarked, "Rapid were certainly very responsive to any questions we had, both during the design and implementation phases of the project." Paul Gamble – Project Manager, Stanton Bonna, added, "Rapid were excellent, they were very proactive, worked very safely, were very much on the ball and completed the work in a very timely manner."



#### HS2 uses new pioneering low carbon concrete to reduce carbon emissions in construction

As part of its ambition to build the most sustainable high-speed railway in the world, HS2 contractors in London have begun using a new low carbon concrete product which provides a reduction of 42% in CO2 in comparison to a standard concrete.

In addition, the remaining carbon emissions from using the concrete are offset to provide a CarbonNeutral® product, in accordance with The CarbonNeutral Protocol. The product, used for the first time in London, has been supplied to HS2's enabling works contractor, Costain Skanska joint venture, and Lydon Contracting Ltd by global building materials manufacturer CEMEX, from their plant based in Wembley.



After engineering carbon reductions into the concrete mix design, CEMEX calculates the embodied carbon generated from extraction and processing of raw materials, product manufacturing and distribution. The residual carbon is then offset, making the concrete carbon neutral from manufacture to use.

To achieve carbon neutrality, carbon is offset by the removal or reduction of emissions of carbon dioxide or other greenhouse gases from the atmosphere in order to compensate for emissions made elsewhere. CEMEX facilitates this by investing in projects which physically remove CO2 where possible from the atmosphere, such as planting more trees or protecting against deforestation through an independently audited and verified project. This is done in accordance with international standards for carbon neutrality.

The first use of the Vertua Classic Zero concrete in the capital recently took place at a HS2 site in North West London, ready to prepare the ground for an electricity substation which will power the tunnel boring machines excavating HS2's London tunnels. A further delivery of Vertua is planned at the same site by the end of October. By using this low carbon concrete, a total of 12 tonnes of carbon should be saved once deliveries are complete, with an additional 17 tonnes of residual CO2 offset.

Discussions are continuing as to how this technology can be adopted on further sites across the HS2 route.

HS2 aims to build the most sustainable highspeed railway in the world and is driving innovation in design, construction, and operation to minimise its entire carbon footprint. In order to become the UK's most environmentally responsible infrastructure project, HS2 has set a carbon reduction target of 50% target for its contractors on construction baselines for Phase One civil assets (such as tunnels, viaducts and cuttings), stations and railway systems.

#### Peter Miller, Environment Director, HS2 Ltd said:

"We know that climate change is the greatest long-term threat to Britain's security and prosperity. The Government has set a target for net-zero emissions by 2050 and HS2 is playing its part in meeting that challenge.

"Using innovative techniques and products in the construction of the new high speed railway, we can not only build HS2 more sustainably, but we can lead by example, showing how the construction sector can help deliver Britain's cleaner greener future."

#### Dan Hunt, Programme Director at Costain Skanska joint venture said:

"Working closely with our supply chain, CSjv has identified many ways to maximise our environmental credentials, leading to more than 3,000 tonnes of carbon dioxide equivalent (CO2e) saved to date. We have focused on identifying innovations and efficiencies throughout our whole programme, from our power supplies and fuel sources through to working methodology by reducing and recycling materials.

"We have worked hard to reduce the amount of concrete needed across the programme and by working with CEMEX, we have further reduced our carbon footprint of our works."

#### Richard Kershaw, Technical Manager for Materials at CEMEX UK, said:

"We are proud to have supplied this HS2 site with our Vertua concrete, the first time this low-carbon product has been used in our country's capital. We know that minimising the carbon footprint for the HS2 project is of real importance, and our Vertua concrete offers an easy way to make a more sustainable choice for such an important product. We look forward to exploring the other opportunities for Vertua to be used as part of HS2."

When operational HS2 will offer people a cleaner, greener way to travel with lower carbon emissions per passenger kilometre, than cars and domestic air travel. HS2 trains will be highly energy efficient and powered by electricity from an increasingly decarbonised electricity grid. In the future, with electricity generation fully decarbonised, travelling on HS2 will be a zero-carbon activity. In addition, HS2 will free up extra space on the existing rail network. It will take cars and lorries off the road and reduce the need for domestic air travel. This will reduce transport carbon emissions and improve air quality.

#### Plevin invest in a Peterson 2710D Horizontal Grinder



Plevin has recently invested in a Peterson 2710D Horizontal Grinder which has been supplied by the exclusive UK & Ireland dealer for Peterson - Neutron Equipment.

Neutron Equipment who are based at Beenham, near Reading are also the dealer for Hammel Recyclingtechnik GmbH and can offer a wide portfolio of recycling equipment including - Horizontal Grinders, Drum & Disc Chippers, Hammel Primary, Secondary Shredders, Screening and Sorting technologies and Processing Plants.



Elkesley, Retford site which is a 10-acre site which was acquired by Plevin in 2002. Replacing an existing machine, the 2710D is processing up to 70tph of waste wood (dependant on wood grade and selected screen size).

Jamie Plevin - MD, takes up the story, "We had a similar machine previously, but this time we decided we needed more processing capacity, therefore we trialled a number of machines including the Peterson. We looked at the throughput, the build, and costs and other operational considerations with the Peterson machine coming out on top.

Neutron in the meantime loaned Plevin a 1710 machine until the 2710D was duly delivered to site in September.

"We always operate a primary and a back-up machine, so a continual replacement programme is in place. Normally the life of a machine in our programme is based on a 3-year cycle. However, the intention is to keep this machine longer because of its robust build quality."

Peterson machines carry quite a high residual value and surfing the web one can find used machines still commanding high prices which is a good endorsement for the brand.

## Recycling PLEVIN The Peterson 2710D Horizontal Grinder: Options include a cross belt magnet, magnetic headrum, and tracked stacking conveyor.

Peterson machines offer two rotor options and offer 4 ranges of models from 500-1125HP.

Weighing in at 31 tonnes, the tracked 2710D is powered by a Cat C18, Tier 1V, 755HP engine and is operated by a Peterson Adaptive Remote-Control System.

The feed system incorporates sloped feed walls which allow better visibility while loading, facilitating smoother feeding for increased production in a wide variety of materials.

With a robust feed chain conveyor efficiently feeding the rotor, a hydraulic drive motor synchronizes with the feed roll for near continuous feeding and massive throughput. Additionally, an adaptive feed system monitors the grinding load and varies the speed of the feed system to keep the engine working in an optimal power curve. Accelerating the feed when the engine load is light, it slows when the load is high, and reverses the feed when the load is excessive.

An impact cushion system absorbs any energy shocks and spikes which promote an extended grinding system component life, subsequently helping to prevent catastrophic damage from severe impact.

Optimum rotor placement ensures positive feeding and reduces the potential of thrown material. Pinned or drum rotors are available.

#### **Peterson's 3-Stage Grinding Process:**

This 3-stage process results in more accurate and consistent finished products. An up cutting motor draws material into the grinding chamber and minimizes bit wear - this provides the first stage in material size reduction. An anvil positioned for optimum sizing and production, provides the second stage in the sizing process. Finally, the last step in the 3-stage sizing process, the provision of a large grate area results in the highproduction of a wide variety of wood and green waste materials, and end sized products.

#### **Peterson's Patented Impact Release System:**

A patented impact release system detects any ungrindable objects within the grinding chamber by opening the anvil and first grate section to eject these minimising any damage. Having completed this process, the machine then returns to normal operation, resulting in more uptime and reducing costly damage from any heavy contamination in the feed material.

Jamie, concluded, "We are very pleased with the machine and the advice and support we have received from the team at Neutron Equipment, it has been a great experience.









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#### MANY MODELS, ENDLESS APPLICATIONS

High volume wood waste recyclers know that when it comes to creating the highest volume products at the lowest cost per tonne, Peterson horizontal grinders offer better fracturing, more accurate product sizing, more throughput and greater economy in fuel and wear parts than any horizontal grinder on the market.



Customer review:- J Mould (Reading) Ltd being one of the first to purchase a Peterson Pacific 2710D Horizontal Grinder in November 2019, seen the potential in the power and flexibility that the 2710D would allow them to have a one machine, one pass system they had been looking for. The potential to increase production tenfold and the final product is to exact specification and J Mould (Reading) Ltd now supply many WCC Biomass outlets in the UK. Less running costs, less wear and more production make it a 'no contest for the competition.' Stop Whining, Start Grinding as we say at J Mould! Brian McCrory.

Neutron Equipment are extremely proud to represent Peterson's Product range throughout the UK, Ireland and Sweden. The robust Peterson build quality, Technical and spares support, coupled with Neutron's competitive pricing and in house service teams have proven the Peterson 1710D, 2710D and 5710D models of Horizontal Grinder popular. If you would like to discuss further do not hesitate to contact us:

## Recycling - A retrospective now and then, a look back over 30 years in Recycling



TURMEC UK -A personal perspective by Trevor Smart

As we continue to move forward and improve as an industry, I thought I might share some insights into the trends and changes that have occurred in recycling.

My tenure in this industry dates back to 1991 where landfill was king and recycling was strictly limited to small local projects and run by charities, still regarded by many as something of a minority interest. Of course, the tide has now turned and fortunately individuals who do not recognise the importance of recycling are now the minority. The efforts of those early recycling pioneers helped to create our industry which has now grown into a global business, become professionalised and has been transformed by technical and industrialised processes.

As a young depot manager for Biffa operating a fleet of trucks and a transfer station when Landfill Tax was first introduced. We were faced with increasing disposal costs, so in an effort to reduce landfill costs, I hired a trommel screen, which helped to run the contents of the skips and Ro-Ro containers through it, picking off any wood and metal from the conveyor belts.

Dramatic increase in quality was noted and the results were amazing. Suddenly the skips started making money, good money. As a result, we invested in building a picking belt designed with durability that offered maximum production and the rest is history.

#### Fast forward to 2020 and the recycling plants look very different.

To compete and succeed in an increasingly recycling-friendly world, many waste providers, especially landfill-owning companies, have acquired material recycling facilities to try and keep influence over the materials that once went to their landfills Their size and complexity have increased over time to take into account the variety of material being treated, ranging from: C&D and C&I waste to MSW; producing high quality RDF and SRF; comingled and kerbside collected recyclates, plastics and paper sorting, recovering incinerator bottom ash to tyre crumb.

From these plants, the range and quality of recovered recyclates and materials has also increased.

Making a poor quality recyclate just is not good enough anymore. Our industry is now more aligned with end users such as packaging manufacturers, paper and fibre mills and energy users. Our recycling plants have to be good enough to meet these industry standards.

Thankfully, the technology we have at our disposal has moved on with the times. A pair of gloves and a sharp eye have been replaced with optical sorters, x-ray technology and eddy current separators. We have equipment specifically developed for our industry such as OCC screens, ONP screens, glass breaking screens, co-mingled screens, ballistic separators, single and double drum air density separators, zig zag separators, flip flop screens, specialised pre shredders and secondary shredders, channel and twin ram balers, bale wrappers, de-balers and now robot and AI.

## URMEC





Where once we had to use 'borrowed' technology from the mining and agriculture industries, our sector has developed its own specific technology and techniques to service its own requirements.

This development has taken place at breath-taking speed where we have seen a rapid industrialisation of recycling. Some say this development has taken place too quickly, that the focus was on producing outputs based on quantity rather than quality and resulting in recycling equipment and plant being operated far beyond its capabilities.

Recent times have seen this evolve. The situation in China and other developing countries has brought a sharp adjustment to the recyclate market and quality is king. We are seeing a new generation of professionals pop up in the industry rising up through the ranks young people not from the waste sector but from process engineering backgrounds, taking the industry in a new direction. This type of thinking this will continue to reshape the industry with new ways to solve environmental problems.

Legislation has been the key driver throughout this process: starting with Landfill Tax coming from the Landfill Directive which sought to drive waste away from landfill; developing

#### Recycling



into the Waste Framework Directive 2008 and Circular Economy Package and Environment Bill to name but a few. The recent draft Plastic Packaging Tax legislation announced by HMRC is ground-breaking and proves that the materials we recover, and process are fit to be used for its original purpose. That is real progress.

Personally, I am extremely proud to be part of this process of evolution at Turmec, which has nearly 50 years of experience in the engineering and recycling industries.

Turmec was originally a general engineering firm, a heritage from which it has evolved over time to specialise in the design and manufacture of market-leading, cost-effective, and high-quality facilities for customers in the recycling industry.

Starting in C&D sector, Turmec quickly grew to become the market leader, installing many installations around the UK, including 3 large scale systems to Powerday. Following this growth, we Turmec diversified into MSW, C&I and Trade waste, successfully installing plants for New Earth solutions, Impetus and Suez. The plants main focus was to optimise material recovery and producing high quality RDF and SRF material

Turmec plan, design, manufacture and install the very best recycling plants to process C&D materials, co-mingled recyclates, MSW, plastics, incinerator bottom ash and tyre recycling. Most recently Turmec have built a 150tph C&D plant in Australia with a specialised dry wash process to clean up fines materials, further pushing the boundaries of what is possible in our industry.

Under the new leadership of Geoff Bailey, who spans an impressive career in recycling and waste services industry will lead us through the next stages of development in a global marketplace increasing Turmec's position as a world leader in innovative recycling solutions.

It has been an interesting journey so far. We do not know what the future might bring but Turmec is excited to be part of it and adopting best practice.





#### **Welland Waste** Management Ltd is a Leicestershire based waste management company.

At their Lutterworth facility, they operate a 4MW biofuel CHP plant, fuelled by 36,000tpa of oily food waste as well as a 25,000tpa open air windrow composting operation. They also have an on-site 10MW wood waste gasifier, which is fuelled by 72,000tpa of waste wood.

The energy generated by Welland Waste is exported to the National Grid and is enough to power 17,000 UK households, per year.

A key element of their waste wood operation is their pre-shredder, which takes the waste wood and shreds it down to a consistent, sub 300mm particle size, ready for further processing through their secondary plant.

Welland Waste turned to CRJ Service, who they have dealt with for over 15 years, when it was time to upgrade their pre shredder. They wanted a machine that was more reliable and less costly to run, than their previous. CRJ Sales manager Mike Symons - met with Welland Waste to confirm their requirements, and to inspect the input material.

Welland Waste were aware that the Haas pre-shredder had impressed other wood processors within the market and were satisfied with CRJ becoming the Haas dealer, since buying their previous shredder.

When asked about their decision to choose the HAAS, Roger Clarke -Director of Welland Waste Management Ltd - stated:

"The Haas Tyron was selected as we almost bought one last time we bought a shredder; so we had done our homework on the machine then. We heard good reports about reliability and running costs from wood processors who are processing hundreds of thousands of tonnes of wood. We had also dealt with CRJ since 2005, and have always enjoyed a good working relationship with them – just simple things like



ringing back and turning up when they are supposed to – things that some other companies struggle to

Welland Waste were aware of the TYRON's capabilities, having already researched the machine for their previous shredder purchase several , years ago. It was the recently upgraded features of the HAAS TYRON 2.0 that convinced them to purchase the machine.

The TYRON 2.0 sees the introduction of foldable side panels, which allow for direct ground access to the shredding chamber. Side access mitigates the risk of someone having to enter the shredding chamber for maintenance and hard facing. HAAS has also improved access to the hydraulic and engine compartments of the machine, making it easier and safer to conduct maintenance and servicing.

Following the purchase of the HAAS TYRON 2500 2.0, we went to visit Roger Clarke to see how their new machine was performing

"The Tyron has performed to our expectations and so have CRJ. It is nice to have a machine that starts in the morning, works all day with minimum down time, day after day."

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## Red Knight 6 Ltd adds jaw crusher to its range

Surrey based reseller Red Knight 6 Ltd (RK6) has added Nordmann jaw crushers to its portfolio of partners.

The new agreement will see RK6 exclusively offer the T-750 tracked and K-750 hooklift models and extends their offering of crushing and screening equipment for the recycling, quarrying and waste recycling industries. The Nordmann 700x500 jaw crushers, capable of processing rock, concrete and brick are available in a tracked or hook lift version.

The Irish built Nordmann tracked T-750 & hooklift K-750 jaw

crushers seek to address the gap between the mini crushers and larger tracked machines. With a diesel/electric on board generator and dual power as standard, the Nordmann models drive good fuel economy and lower carbon footprint. Easy of transport, with a short setup time, the simplicity of operation positions the Nordmann models are ideal for even small crushing contracts and short-term rentals.

"We know the UK market so well and we know these machines can do really well here. It is important we give our customers the right choice and offering. We are well known for our work with impact crushers with Rubble Master, but the

Full Length Skirting

Generator

(Drops for Access)

Vibrating Feeder

Grizzly

Control Panel

Dirt Conveyor

180 deg. Swing
(optional)

Maintenance
Platform

Adjustment

T-750 and K-750 models are great machines and adding the option of a 700x500 jaw crusher to our range really allows us to make sure we are giving our customers the widest choice possible," said Paul Donnelly, Managing Director of RK6.

In addition to Nordmann, RK6 also work Rubble Master impact crushers and their screening range, Komplet screeners and crushers, CMB international on their trailer mounted jaw crusher and Metberg Enviro.

Visit: -

www.redknight6.co.uk or www.nordmannequipment.com



## Simpson Skip Hire use wash-bear® from Orba Group to ensure 100% recycling

Slough headquartered Simpson Skip Hire provides highly efficient waste management and recycling services throughout Berkshire, Buckinghamshire, and the Home Counties. The company, through its leading skip hire and container business provides a key service to local government, businesses, and domestic residents, placing an emphasis on ensuring that all waste material is recycled with what is sent to landfill drastically reduced. The recent acquisition of a wash-bear<sup>®</sup> from the Orba Group is now further aiding the company through the use of highly

businesses, and domestic residents, placing an emphasis on ensuring that all waste material is recycled with what is sent to landfill drastically reduced. The recent acquisition of a wash-bear® from the Orba Group is now further aiding the company through the use of highly efficient technology for separating lightweight materials from building rubble and waste.

A selection of aggregates for resale/reuse



Jeff Simpson, managing director, and Orba Groups Barry O'Regan alongside the wash-bear® Simpsons operates a large, covered transfer station that is fully licensed by the Environment Agency. Here the company processes and sorts all forms of domestic and commercial waste which is sorted, screened, hand-picked, and remotely segregated to ensure that the amount of material sent to landfill is minimised. At the site waste is split into different categories for recycling, comprising of metal, wood, plasterboard, inert hardcore and soil, hard and soft plastics, and cardboard. Additionally, at its waste transfer station, Simpsons can also provide containers for the direct disposal of hazardous materials such asbestos, tyres, paints, and oils. The ultra-modern facility ensures that there is a limited requirement for visits to landfill sites and the resulting damage to a company's transport fleet which can result in a loss of revenue when the vehicles are off the road. In fact, the Simpson recycling centre is recognised as a major contributor to the reduction of waste disposal, with 100% of waste being processed, with all wood and timber waste being sent to a waste-to-energy plant.

MASSEE SERVING

#### Recycling



The wash-bear® has fitted in with Simpsons'

existing crushing and screening plant



As well as dealing with domestic and commercial waste, at the very heart of its business Simpsons proudly supports the government's environmental policy of promoting recycled aggregates as a cost effective alternative to quarried aggregates (which also reduces the amount of waste going to landfill). Materials for recycling are selected at the waste transfer station, or at demolition sites and other groundwork projects. The materials are then separated, crushed, screened, and stockpiled on site for sale.

The recycled aggregates can be delivered or smaller amounts collected at site, and consist of 6F5 crushed hardcore, MOT

type 1, crushed concrete types 2 and 3, road planings, screened / unscreened top soil, recycled sand, building and rockery stone, bio-mass woodchip and wood chip as well as other recyclable materials. In addition to waste and aggregates, Simpsons has developed a specialism in the handling, processing and recycling metal, which along with its other services, is provided to customers in and around the M25 and Home Counties with full compliance with the Environmental Protection Act and hold both COTC and WAMITAB status.

#### **New solution delivers more recycling**

As part of Simpsons' drive to recycle more material, produce a cleaner recycled aggregate and ensure the very minimum of waste is sent to landfill, the company sought a new solution that would enable the more efficient breaking down of materials into separate (and re-saleable) fractions. To this end, Simpsons approached Barry O'Regan of the Orba Group Ltd. London head guartered, but covering the whole of the UK and Ireland, Orba Group Ltd specialises in the supply of machinery solutions for recycling, construction, demolition, and waste management as well as providing bespoke solutions for these industries. The company is also the official UK/Ireland dealer for wash-bear® machinery, manufactured by Moerschen GmbH, with the equipment being German designed and engineered and built to the highest quality.

The wash-bear® was seen as the ideal solution for Simpsons' requirements as it has been designed to service businesses through the use of highly efficient technology for separating lightweight materials from building rubble and other material. The wash-bear® works according to the proven floatingsinking principle, reliably and cleanly separating light materials such as wood, artificial and insulating materials from the minerals. This means that all mineral substances can be cleaned, but vitally all RCL building materials.

#### Virtually 100% material separation

In addition to its process efficiency, which ensures almost 100% separation of contaminants and mineral fractions, the wash-bear® also scores thanks to its high levels of process effectiveness. This results from the economical handling of the resources to be used through the robust, maintenance-free design of the system technology. The closed system consumes whatever water adheres to the discharged mineral meaning that in a 10-hour shift, 4-8m3 is used in practice, whereby the inlet is controlled automatically by floats. This technique

avoids the build-up of chemicals in the eluate. Any water used is absorbed into the basic moisture of the RC material with what comes out, with regard to the chemical composition, being at most, what was discarded by the rubble in the system.

Economy of the system continues with energy expenditure, which at 8-15kW/h during operation is significantly lower than an air sieve with a similar performance. Nevertheless, the drive power is enough to start the wash-bear® in full load. Thanks to its compact dimensions, the wash-bear® can be easily integrated into the overall process chain even on narrow sites. By using (the optional) 'clean extension', the wash-bear® becomes a powerful wet-processing system for the removal of fine fractions, e.g. when washing track ballast. The current generation of systems is available as wash-bear® 2.0 in three models, which are designated as 'S, L, XL' depending on size. Their hourly throughput rates range between 100 t/h and 190 t/h - depending on the input. All types are designed with a mobile lift hook for easy transport.

#### More separation means more for resale

Despite only being recently installed at Simpsons waste transfer station, the wash-bear® has already proved to be a highly efficient mobile piece of equipment for separating lightweight materials from building rubble and waste with extremely low operating and maintenance costs. This has resulted in Simpsons continuing to ensure that where possible all materials are recycled, more recycled aggregates being available for resale, and vitally, as little as possible is landfilled. "Simpsons came to us wanting to ensure that they continue recycle all the commercial and domestic waste they handle. The wash-bear® has fitted in seamlessly with Simpsons' recycling system and I am proud of the part it is playing in maintaining Simpsons' pledge to its customers that where possible, all materials' handled are recycled, with the bare minimum being sent to landfill," commented Orba Group managing director Barry O'Regan.

## What will the plastic recycling landscape look like in a post-Brexit world?



There is no doubting that 2020 has been a challenging year for the waste and recycling sector. And there is one stream which has been firmly in the spotlight over the last 12 months - plastic.

With regard to this widely used material, what challenges is the industry facing, what is the future

looking like, and what role can local plastic recyclers play in helping to implement a sustainable model that promotes commodity recyclability at source?

Steve Kinley – commercial director of plastic recycling specialist, Indigo Environmental Ltd – shares his thoughts.

#### Setting the scene during a pandemic

Plastic waste is one of the world's most widely debated and reported on topics. Over the past year, the spotlight has truly been shone upon this global material, with numerous documentaries revealing the impact plastic pollution is having on our planet. And they have arguably acted as one of the key catalysts in boosting public awareness.

While there have been numerous headlines about businesses joining plastic pacts and switching to more sustainable packaging options, the rollercoaster ride of coronavirus has thrown a proverbial spanner in the works — seeing the nation create high volumes of plastic waste.



In fact, over the course of recent months, the industry, and processes as we knew them have received an almighty shake-up.

Lockdown meant that UK plastic exporters' trading routes were interrupted – and in some instances, completely ground to a halt – causing a huge 'mirror moment' to take place. The country stared at its own reflection and realised things had to change if we were to stop being reliant on overseas reprocessing plants to take our 'wastes'.





In many ways, this was reminiscent of when China introduced its waste import ban in 2018 - but perhaps it is fair to say that we have not quite done enough to be self-sufficient since

That is because as a country, we are still shipping our waste abroad. Therefore, the saddening fact remains – we are losing two thirds of the resource opportunity we would otherwise generate here in our country of origin.

While this exportation of waste has previously been labelled as 'recycling', it is not. This method is merely moving the problem' to another destination, thus promoting a 'throwaway' culture - and, really, there is no such destination as 'away'.

This kind of approach needs to stop if a circular economy is ever going to be an attainable reality for the UK – especially as we look forward to a life outside the European Union.

#### The plastic landscape after Brexit

As the 'deal or no deal' saga continues, and World Trade Organisation fees and tariffs remain unsettled, many of the country's businesses are preparing themselves for the worst.

And while no one knows exactly what's going to happen after 31 December, there are some actions and considerations the industry can, and should, make in order to plan ahead and future-proof the sector – making it sustainable and truly embracing of a circular economy.

While domestically, our commitment to a 65% municipal recycling rate by 2035 is set to be supported by our new Circular Economy Package, post-Brexit, we'll still have lots of future planning to do to ensure UK plastic recyclers remain a competitive choice when selling their products to the EU market.

In addition to this, a nationwide change in attitude and mindset also needs to happen.

The misconception that plastic waste is 'troublesome' and should be phased out of the design process – or banned entirely – really is an incorrect and misguided approach.

Much of the problem lies in relation to human intervention. And this is where efforts need to be channelled, as a result.

From the offset, plastics will need to be designed with recyclability in mind. In addition, implementing deposit returns schemes on packaging, and ensuring businesses bear the end-to-end costs involved in recovery, are both measures which have a pivotal part to play in helping to create new habits and re-educate the population.

And post-Brexit, the role of local plastic recyclers will arguably never have been more important in helping to solve this industry challenge – acting as the 'nodes' of experience and working closely with manufacturers to phase out of nonrecoverable polymers.

Instead of exportation, we should be geared up to redistribute our plastics within the UK system.

Because without local plastic recyclers, this recirculation would not be possible. They are the ones that recycle the commodity – via both traditional mechanical methods and new innovative technologies to recover and recycle difficult polymer types back to near virgin grades - for reuse.

And by viewing plastic as an 'opportunity' as opposed to a 'nuisance', we can facilitate the movement towards a more cyclical model. Which after Brexit, will be a crucial move in helping to propel the industry forward.

#### Looking ahead to 2021 and beyond

Regarding the future of plastic, the demand for this commodity is continuing to increase – with or without a deal. In fact, experts estimate that if the current rate of consumption continues, the worldwide plastic waste volume would grow from 260 million tonnes per year in 2016, to 460 million tonnes per year by 2030.

Ultimately, this would take what is already a serious environmental problem to a completely unrecoverable position for the planet. However, with more investment, consideration given to the 'onshoring' of plastic material in the UK, and the utilisation of innovative recovery technologies for unrecyclable mixed polymer streams, we would eradicate exports, improve our carbon footprint and foster sustainable best practice and that is a world full of opportunity.

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#### Demonstrating Competence by Completing your WAMITAB Waste and Resource Management VRQ



Are you preparing for work in the waste industry? Or looking for a taught course that will provide you with the relevant knowledge, skills and understanding to work in the waste management/recycling industry and receive an industry recognised WAMITAB qualification?

Gain your Level 4 WAMITAB Waste and resource Management qualification to become a Technically Competent Manager (TCM) and demonstrate competence on-site to run your permitted waste facility effectively and efficiently.

With all waste sites operating under an Environmental Agency (EA) permit, there are many factors to consider, one which includes establishing the correct competency route for your operatives — traditional on-site assessments or our newly revised and most adaptable route - the Level 4 VRQ.



#### **On-Site Assessment**

The on-site assessment route may be more suitable for those working in a high-risk facility with experience and an underlying knowledge to working within the industry. However, in order to complete this method of learning, there needs to be access to a working site with the required resources to enable the assessment phase to be completed within the working environment. Those new to the industry would not benefit from this type of qualification - this is where our WAMITAB (Level 4 in Waste and Resource Management) VRQ comes into action!

#### **Level 4 Waste and Resource Management VRQ**

We have been working closely with our assessors and experts in the field to tailor our WAMITAB VRQ and make it as applicable and relevant as possible to those working within the waste and recycling field. This course is ideal for those seeking a route to becoming a TCM.

This qualification can be tailored to meet the requirements of specific job roles both within the sector or within the organisation and also helps to support the sector to overcome significant skills gaps that have been raised over the recent years due to the increase in the production of waste.

Operators on site must have the knowledge to accept, validate, handle and load different types of waste whilst managing the equipment correctly to ensure maximum safety and efficiency.

But what are the benefits to choosing this 'taught and tested' method of learning?

#### Why chose a VRQ?

We see many sites (particularly high risk facilities) still completing on-site assessments in order to gain the required competence needed to operate safely which works well for those with a background working in the industry but how does this work for those who are new to the industry or those looking for a more systematic or academic approach?

It doesn't! For those that are new to the industry (novices) with no prior knowledge to demonstrate competence on a waste facility, the VRQ route is ideal for you!

The VRQ is an academic approach which provides a full, in-depth overview on legislation, environmental permitting, and most treatment processes within the sector, and what's more — it can be completed from the comfort of your own home and provides operatives with an all-round approach to formalising their knowledge without having to complete an onsite observation.

#### **Maintaining a Safe Working Facility**

The correct knowledge combined with experience and effective thinking on site can promote good health and safety but there is still more to think about:

- Risk assessments
- Equipment maintenance
- · Appropriate employer training
- Risk levels on Site

#### **How do Risk Levels Work?**

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.

If you are operating a low or medium risk facility; the VRQ is the recommended route for you.

And what's more – for those moving into a high-risk facility or even looking for further progression opportunities, there is scope to continue from the VRQ – learners can advance their knowledge through several high-level qualifications such as FdSc Wastes Management and BSc Wastes Management.

Mentor provide a full remit of waste qualifications through their qualifications business, SERAC UK, including our recently refurbished Level 4 Waste and Resource Management VRQ to support and overcome the significant skills gap in the waste sector and help bring more qualified and experienced operators into the industry.

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

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