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







## AGGREGATE PROCESSING PLANTS



### In this issue

IN THIS ISSUE:	3
COVER STORY:	4
NEWS:	7
RECYCLING:	14
NEW EQUIPMENT:	33
QUARRYING:	39
BULK HANDLING:	50



### **Hub Digital Media Limited**

27 OLD GLOUCESTER STREET, LONDON WC1N 3AX

### Issue 62 -**May/June 2020**

### **Advertising Enquiries:** +44 (0) 20 3637 0385

Publisher John Vincent

Editorial & Marketing Director John Edwards

07525 921714 john@hub-4.com

Media Manager Sophie Morgan

07305 785712 sophie@hub-4.com

Graphic Designer Jon Toft

Director Sue Vincent

Associate Director Ash Young

## Welcome to issue 62

Welcome to issue 62 - this edition is packed with all the latest news from our three industries -Recycling/Quarrying/Bulk Handling plus a special feature on New Equipment.

Now halfway through the year with this, the May/June edition we can announce a new management structure for HUB Digital Media Ltd which is listed below with all relevant contact details.

As always, our aim is to continue to bring you the latest industry news through our market leading magazine, the HUB4 website and our weekly e-newsletter. Its business as usual with the door wide open for you to send all your news to me for inclusion in our daily news updates.

Note our next edition – July/August will contain our usual three industry sections plus a special feature on WASHING & SCREENING.

Please send all your materials to me at john@hub-4.com

Keep safe...

### **John Edwards**

Editor



Magazine Subscriptions - the HUB magazine is available free of charge within the UK, please send an email to subscriptions@hub-4.com stating your name, title, company, full postal address and email

We will then review your application. The Hub magazine is available for overseas clients on a paid subscription at £115, for six issues, please email subscriptions@hub-4.com.



### **Cover Story**

Whatever the business, and whatever the application, Sandvik Mobile Crushers and Screens has focused on delivering a superior customer experience and aftermarket care from the first enquiry, to spare parts delivery, to regular servicing and repairs. Sandvik recognises the residual value not only in the equipment supplied, but vitally, in how the customer investment is maintained. This has seen Sandvik concentrate efforts in the UK & Ireland to create maximum efficiency and productivity, ensuring that its customers are at the forefront of its business. Through skilled teams and pioneering digital solutions, Sandvik is available to provide its customers with the necessary support, information, training, service and part requirements in order that customers get the very best from their investments.

#### World class facilities and people

Over the past 18 months Sandvik has invested in not only facilities, but also its people, focusing on recruiting the very best specialists to provide unparalleled levels of sales and aftermarket support, with the dedicated team being located throughout both islands. Andrew Haldane, Territory Sales Manager UK/Ireland says of these developments: "Our products are supported by a local sales and service team, who are experts in their professional field. From evaluating our customers initial requirements to providing dedicated aftermarket support, our customers have access to a wealth of information and assistance 24/7. Recent appointments to the team have strengthened our service across both islands and we have never been better positioned to offer our customers a new approach to their fleet."



#### **Customer focus**

Sandvik Mobiles is proud of its work in tandem with its customers and considers them to be its partners, helping to ensure that the product lifecycle is at its optimum. Exeter based, BT Jenkins Ltd, recently acquired a new QE342 scalper to add to its extensive fleet of Sandvik mobile crushers and screeners. Commenting on the addition, Russell Lowton, operations manager, explains benefits gained for BT Jenkins in choosing a Sandvik machine. "We chose Sandvik due to the excellent back up they provide and we have experienced with our existing Sandvik crushers and screens." Commonality of parts and services were also a major factor when choosing the Sandvik machine as Russell continues; "All our crushing and screening plant is now Sandvik. This means our operators are familiar with the kit and this cuts downtime which costs money." To keep Sandvik equipment operating efficiently and at an optimum level, Sandvik has its Security+ packages to offer customers full peace of mind and confidence in their operation. Through these extended warranty agreements,

customers can plan and manage their maintenance budget, with the reassurance that their machine is receiving the best support available with the added value of a full-service history. With two levels available, Silver and Gold, customers are able to select the package which best suits their needs.

Digitalisation has also proved to be increasingly important to customers. Over the past couple of years, Sandvik has invested heavily into My Fleet, its telematics system which is now fitted to every unit leaving the factory in Northern Ireland. My Fleet has been purpose developed to help customers know exactly how their equipment is being utilized. Through the accurate monitoring of a wide array of parameters, this facilitates accurate production forecasting, ensuring that the most efficient use is obtained from equipment, thereby maximizing return on investment.

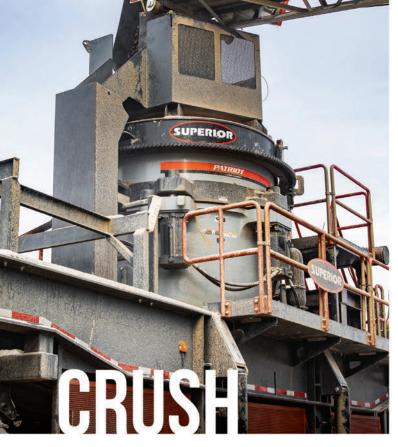


Digitalisation is also positively changing the way of working for many people within Sandvik Mobiles' own sales network. More important than it has ever been before, Sandvik are well positioned to support customers remotely. The company can offer advice to resolve any faults or issues with their equipment without having the need for an engineer present on the facility. Using telematics from My Fleet, Sandvik can ensure

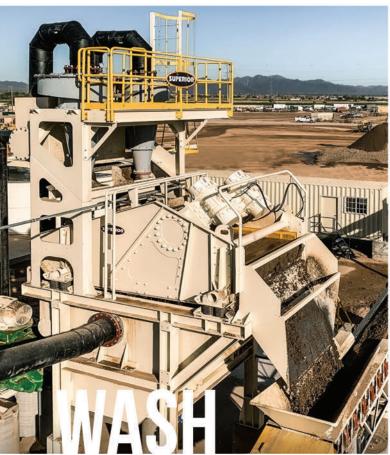
that operations both remotely and on-site results in a safer operation. Alongside additional safety measures that come as standard on all Sandvik products, data is available without anyone being at a physical machine. The actions of any Sandvik equipment can be monitored, with customers being notified of its status with any problems and/or alerts, being provided with advice to how to possibly resolve any fault. The viewing of operational data and the ability to use 'geofence' (a rental fleet and ordering of spares and service platform) digitally further enhances operational efficiency meaning that as well as ordering any parts, warranty registration is handled directly with your local service team, making for a seamless user experience. Commenting on Sandvik's approach, Russell says, "We have excellent lines of communication and back up from Sandvik. We use them for all our servicing and repairs; it is this service in the field that made the decision to buy the scalper screen from Sandvik an easy one. Reliability has been excellent."

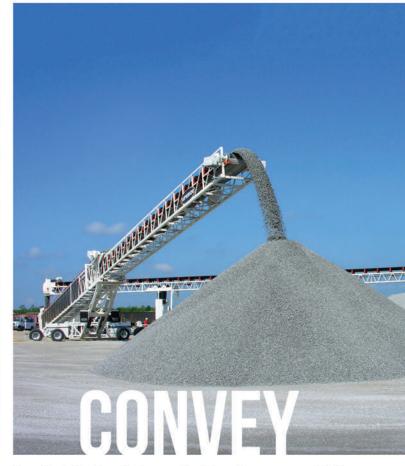
### **Continuing development**

Sandvik Mobiles takes continuing pride in its digital innovation and optimising solutions for customers through investing heavily in R&D and continuously developing the digital experience. Sandvik is committed to using engineering and innovation to make the shift that will drive more sustainable business, for example, less travel involved as remote data can be used effectively. Furthermore, new improvements and innovations are also being seen across the company's sales and aftermarket service offering, ensuring that customer requirements can be dealt with more rapidly and efficiently than ever. This aim to lead the digital race within mobile crushing and screening through focusing on customer requirements is matched by the continuing development of Sandvik Mobile crushing and screening solutions to a rapidly growing industry. Sandvik Mobile Crushers and Screens has never been better positioned to support its customers' growth.





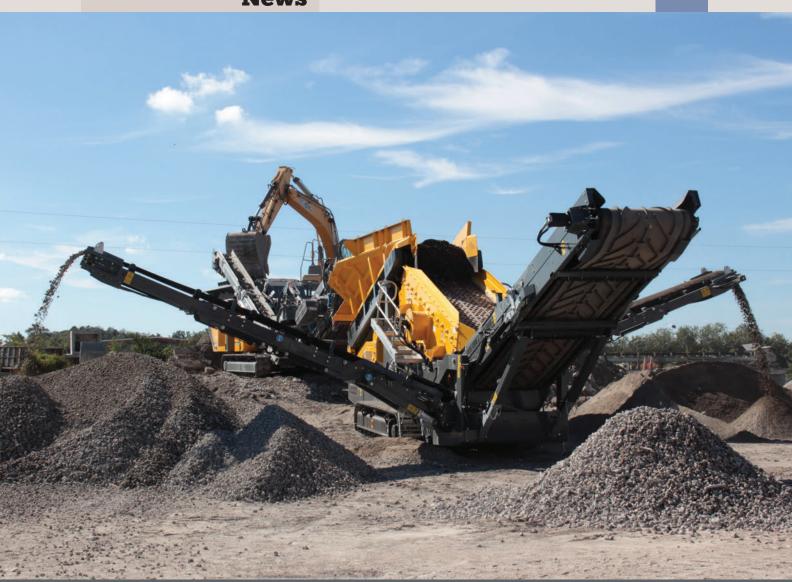






Superior Industries designs and builds a diverse group of bulk processing and handling solutions from Rock Face to Load Out®. Crushing, screening, washing and conveying equipment, plus all wears and spares, industry-leading warranty protection and world-class customer service. We're ready to help lower your cost per tonne!





## Red Knight 6 Ltd secures RM Dungannon Dealership

Red Knight 6 Ltd (RK6), the construction and waste machinery distributor based in Surrey, have been appointed dealers for RM Dungannon, the screening manufacturing division of the Rubble Master HMH GmbH business.

Under the agreement RK6 will be responsible for all the sales and service of the RM Dungannon screening range for London, the South, South-West, Wales, Midlands and East Anglia. The deal further strengthens the 4-year relationship between the two businesses during which time RK6 has grown the impact crusher market significantly in the UK.

RK6 has a wealth of experience in the screening business having previously enjoyed a very successful partnership with Anaconda in the same region as well as working with current partners Komplet, Metberg Enviro and Chieftain Trailers.

"The quality of the Rubble Master products is key to the success we've enjoyed together in the UK, along with the approach we take to working alongside our customers, ensuring they get the right product for their needs," said Paul Donnelly, MD for RK6.

"We saw that Rubble Master had brought their high demands of quality and expertise from their crushing range into their screening range. The Rubble Master team have some very exciting plans for screening market, they don't build machines to be mediocre, they want to be the best. The opportunity to bring that range to our customers is very exciting," added Paul.

The extensive range of RM Dungannon screeners contains tracked scalping screens HS3500M, HS5000M, HS7500M and HS11000M; tracked sizing screeners MSC5700M2D, MSC85002D and 3D and MSC105002D and 3D models. RK6 has recently taken delivery of a HS5000M with more of the range to follow soon. Anyone interested in a demo should contact the team. Full details on all products can be found on the RK6 website www.redknight6.co.uk



The Genuine Alternative







www.cmscepcor.com

## Renting equipment enables food company to earn money from their waste

Setting out a fixed monthly budget for waste processing has enable N. Ireland based, Avondale Foods to reduce transport costs, recycle on-site and earn more money from their waste...

Food manufacturer, Avondale Foods, have recently embarked on an exciting new waste processing project. By renting equipment such as balers and compactors, they have completely changed the way they handle their waste and recyclables on-site. This is not just food production waste, along with baling cardboard, they are now separating their plastics by colour to add value.

### **Renting Equipment Helps Stick to the Budget**

Waste equipment specialist, CK International, sat down with Avondale Foods at the start of the project to look at their current costs, where they could generate a revenue stream and the ROI. Avondale Foods knew exactly what they wanted to spend on this project and had set out a fixed monthly budget. As with all new projects there is apprehension around purchasing new equipment but CK International were able to offer a rental option which was ideal. It included all breakdowns, warranty and planned and preventative maintenance over a 5 year period. It also meant that, without any unexpected costs regarding the machines, the company could stick to their monthly budget.

#### **Reduction in Costs**

With multi-nationals such as M&S, Waitrose, ASDA, Dunnes Stores and Morrisons among their many customers, waste from packaging and food had become very costly for Avondale Foods. With their new portable compactor, the company are achieving better weights on their general/non-recyclable process waste. They can now get 11-12 tonnes loaded onto the lorry which is a 20-25% increase on before, thus saving on transport costs.

#### **New Revenue Stream**

Previously Avondale Foods paid for skips to dispose of nonsegregated or baled cardboard. Now it is baled using the CK450HFE horizontal baler and turned into a commodity, therefore adding a new revenue stream.

The company also took a new approach to baling their plastics. In the past, they baled the plastic material in one machine. They are now using three CK250 balers to bale the plastics by colours: clear, blue and black. This has certainly added a lot of value to the plastic waste.

James McBennett, Senior Purchasing Manager at Avondale Foods, adds, "Over the past 5 years Avondale foods, in line with legislation and our customer aspirations, have really changed the way we think about waste and how we process it.

Waste is a cost to a business, whatever way you look at it, and it comes in many forms for us, from unpackaged food waste/trimmings, packaged food waste, general waste and of course recyclable material.

Our latest project is to take complete ownership of our recyclables from start to finish. We have had to retrain front line staff to do initial segregations on the shop floor so we can maximise the rebates per material. This also makes it more efficient in the baling process. We now separate cardboard, aluminium cans and 3 different variants of plastic at source which capture different values during rebate calculations.



The equipment provided by CK international is perfect for our requirements as regards processing the waste, keeping costs to a minimum and generating income from companies who use it."

Garrett Loughran, CK International's Regional Sales Manager for Ireland explains, "Our equipment rental option is ideal for customers like Avondale Foods who are just starting to recycle in-house. It gives them peace of mind and is a risk-free option for them as they know we cover all of the preventative and reactive maintenance, including warranty. We also will be supplying the company with their consumables, such as wire and tape, on an on-going basis. CK International have many years' experience in this industry, so can offer the best advice as to which solutions will give companies like Avondale Foods the best return on investment. I'm delighted to see how well the project is working for the guys."



### FLEXIBLE STORAGE SYSTEMS



CALL FOR A QUOTE TODAY OR VISIT OUR WEBSITE
TO REQUEST A BROCHURE
sales@npstructures.co.uk | www.npstructures.co.uk
| +44(0)1282 873148



Are you using an excavator or loading shovel to handle your waste?

Are you aware of the benefits a Fuchs Material Handler can bring to your operations?

### Efficiency

Machine movements kept to a minimum

### **Reduction of risk**

Less vehicle movement

Cost

Fuel efficiency

### Safety

Visible line of site ensures safe movements

### Ease of use

Simply and easy to operate

### **Speed**

Handles waste quicker

### Blue's 2020 offer

- years at
- deposit & 0% interest
- **years**
- service & warranty costs



### Models available:

MHL320F

MHL310F



For more information:

### Call 0345 217 8755

or email: sales@bluegroup.co.uk

Terms, conditions and exclusions apply. E and OE. Full Details are available upon request. Limited time stock availability. Blue Group Limited is not a lender.

www.blue-group.com



@blue\_machinery



BlueMachinery







# Steel packaging hits a new recycling milestone of 82.5%

Recycling of steel packaging in Europe has hit a new all-time high of 82.5%, according to figures issued by APEAL, the Association of European Producers of Steel for Packaging.

This new record rate, which represents data from 2018, confirms steel as Europe's most recycled primary packaging material and means that more than 8 out of 10 steel items put on the EU market this year have been recycled into new steel products.

Alexis Van Maercke, secretary general of APEAL, said: "A recycling increase of two percentage points sends a clear message to all stakeholders in the value chain that steel for packaging is a tried, tested and sustainable packaging solution, fit for a 21st century circular economy."

"Steel is circular by design. Magnetic properties make steel easy to collect and steel can be recycled over and over again without any loss of material quality. Today's rise in recycling rates is largely the result of increased separate collection in countries such as Italy and Poland. As 100% of separately collected steel packaging is used to make new products, steel is clearly the best placed of all packaging materials to achieve the aims of the new Circular Economy Action Plan (CEAP 2 0)"

APEAL believes that there is no room for complacency, however. The industry has achieved a great deal already, but we must continue to strive towards the improvement of collection and recycling of steel packaging throughout the EU. Mr. Van Maercke added: "Indeed, we welcomed the European Commission's ambition to harmonise separate collection of packaging waste streams in the EU, demonstrated in the CEAP 2.0. Separate collection is the best way of guaranteeing high-quality input into recycling operations."

In the case of steel packaging, an input of steel scrap is a

necessary component for making new steel at any one of more than 500 steel plants in Europe. Indeed, the more quality scrap that can be used in new steel production, the less raw materials and energy are needed and in turn, this reduces emissions.

In 2018 over 4 million tonnes of CO2 were saved through recycling, the equivalent of taking 870,000 cars off the road for one year2.

The methodology and data sources used by APEAL to calculate the recycling rate have been independently reviewed, audited and certified by energy and waste specialist consultancy, Eunomia.

For more information, please visit www.steelforpackaging.org



### The Liebherr of telescopic handlers.



## Outstanding lifting power and excellent manoeuvrability.

- Market-leading Comfort cab with 360-degree vision for optimal safety and productivity
- Available with 'auto power' for enhanced loading cycles and excellent efficiency
- Continuously variable hydrostatic drive system provides maximum tractive force
- Quick couplers available for compatibility with other manufacturers' systems
- Models available: T 35-6, T 32-7, T 36-7, T 41-7, T 46-7, T 55-7, T 60-9, T 33-10
- An excellent all-rounder machine tailored to you specific application requirements

Liebherr-Great Britain Ltd.
Normandy Lane, Stratton Business Park
Biggleswade, SG18 8QB
Phone: +44 1767 60 21 00
E-mail: info.lgb@liebherr.com
www.facebook.com/LiebherrConstruction
www.liebherr.co.uk



## **CEMEX announces proposed mothballing of South Ferriby Cement Plant**

Building materials supplier CEMEX has today announced a proposed mothballing of the South Ferriby plant during the third quarter of 2020.

It is anticipated that the proposal may result in redundancies of all the employees currently based at the South Ferriby Cement Plant. The current cement drivers based at South Ferriby are not immediately impacted but the intention is to review the optimal haulage provision.

CEMEX will shortly commence a process of collective consultation with affected employees. A final decision will be announced when complete.

The proposal to mothball the South Ferriby Cement Plant comes after an analysis of the company's European cement supply chain. CEMEX remains committed to the UK and its European business, which is one of the company's largest regions, and will continue to have a strong national presence. This proposal will allow CEMEX to optimise the network it has available across the region. This is part of the ongoing strategy to strengthen the CEMEX portfolio and secure its place as a global leader in the industry.

The Coronavirus pandemic has not influenced the decision to consider mothballing the South Ferriby Plant.

CEMEX customers will be supplied from the company's existing cement network. CEMEX's supply chain plan and



commercial management will ensure that customer service will be maintained at all times. CEMEX will continue to supply high quality products in line with customer expectations.

Strategic growth in the UK will be focused in the future on those markets most attractive to CEMEX, such as the larger metropolitan markets where demand and profitability will be strongest. CEMEX invested more than £52m in new capital projects during 2019, alongside significant ongoing investment into the UK cement business, demonstrating the continued importance of this area to the company.

### **DEUTZ REPLACEMENT ENGINES**

In stock & immediately available

BF4M 2012 (Powerscreen / Finlay tromel) £7,000.00

BF4M 1012C (Powerscreen / Finlay tromel) £8,000.00

TCD 3.6 L04 (Doppstadt tromel) £8,453.00

TCD 2013 L06 2V (Atlas / Finlay / Fuchs) £14,386.00

Also available: built to order

Built to the same specification as your original engine Comes with the same warranty as your original engine Quick turnaround - five days build, five days delivery Built using latest technology DEUTZ genuine parts

**Excellent support for superb engines.** 

### **DEUTZ UK**

08700 10 24 10 exchange.uk@deutz.com www.deutzuk.co.uk



# Blue Group come up with the ideal solution for Fortis

Fortis IBA Ltd (Fortis) are a leading UK Incinerator Bottom Ash (IBA) Processor with over 12 years IBA processing experience. The business invests in the latest technology to ensure quality secondary aggregates are produced and distributed into the construction industry to reduce reliance on primary aggregates.

As a country, we are facing a limited availability of primary aggregates and IBA Aggregate plays a key part in highways and construction projects as well as being a part of the solution for our country's waste. For every one tonne of IBA Aggregate used in construction, approximately 400 black bin bags are successfully diverted from landfill. IBA Aggregate been approved as a sustainable alternative to Type1/6F4/6F5 by the Environment Agency, Highways England and local authorities such as Hampshire County Council and has been widely used within the construction industry for over 20 years.

Fortis were looking to set up a new semi-mobile operation at their site in Buckinghamshire, to help process and extract ferrous and nonferrous metals and produce a saleable recycled aggregate out of their IBA. Their plant was to consist of two Mobile Screeners and several Eddy Current Separators. After contacting a number of suppliers, they decided to work with Blue and purchase two Powerscreen Warrior 1400x Screeners.

Terry Moore, General Operations Manager at Fortis explains: "We decided to go with the two Powerscreen Warrior 1400x Screeners because of their aggressive screening action, build quality and reliability and their unique patented screen media. Powerscreen are a good value product and along with Blue's excellent support and backup it seemed the obvious choice. We also have a longstanding relationship with Brian McNabb and the Blue Group."

### The processing aspect of the plant is as follows:

The IBA material is transported from the Greatmoor Energy from Waste Facility which is located close to the Fortis site. This material is then stockpiled for several weeks, until it matures, and the moisture content has decreased sufficiently to allow processing. The feed material which is Approximately minus 150mm is fed into the first Warrior 1400x which is fitted with patented self-cleaning fingers separating the material into three different sizes. The oversize material, in this case +55mm, is sent to a mobile picking station where pickers retrieve Non-Ferrous items then an overband magnet removes any large Ferrous items. The mid-size product of +20-55mm material comes off one of the side conveyors, fitted with an overband magnet and further separated with an Eddy Current Separator to remove any remaining Non-Ferrous and Ferrous materials. The <20mm material will then move up through a specially covered conveyor and into the second Warrior 1400x screen fitted with 28mm breaker deck and 6mm self-cleaning bottom deck. the material into a further two sizes. The <6mm material will flow into an All Metal Separator and anything >6mm will go right through to the front end and into a final All Metal Separator- with any metals left removed for resale.

Alan Rudd, Unit Manager, at Fortis offers his thoughts on the two Warrior Screeners: "I like how mobile the two machines are and they are very easy to use, our operators have had no problems in getting to grips with operation and giving us very



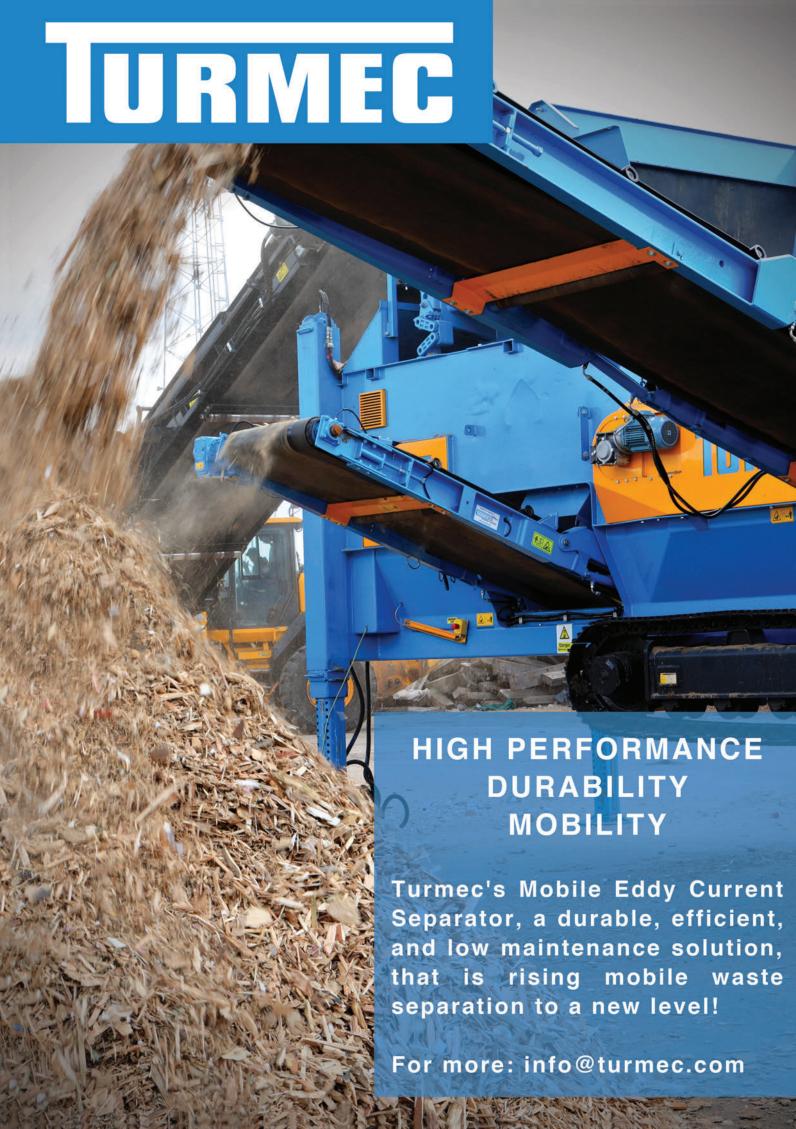
good access for any routine maintenance and cleaning. The machines are perfect for the application we are using them for and have been very reliable to date."

The application that Fortis are using the Warrior 1400x Screeners for is quite unique in the UK and is very specialised. Blue Sothern's Regional Sales Manager that sold the two machines, Brain McNabb, adds his thoughts on the deal:

"I have a very good relationship with Fortis. When Terry Moore and Steve Clasby approached us about this project, we had to put our heads together to come up with a solution. With some

help from the Powerscreen dealers in the Netherlands, Van der Spek, and their representative Peter Volstra we managed to get some guidance in what they do over in Holland.

"We managed to get a proposal drawn up and Terry and Steve knew what they wanted in the metal recovery end of the business. We got the right media in place and we eventually came up with final concept. I would like to thank Terry and Steve for trusting us with the designs and equipment and hopefully we can continue with our particularly good relationship in the future."



### Bunting has added two new models to their popular and highly successful range of Permanent Overband **Magnets**

**Bunting has added** two new models to their popular and highly successful range of Permanent Overband Magnets. The two new designs - the PMax and Easibelt - meet specific

requirements of reduced maintenance time and lighter weights. These models expand the Overband range, which also includes the classic PCB model.

Bunting is one of the world's leading designers and manufacturers of magnetic separators for the recycling and waste industries. The Bunting European manufacturing facilities are in Redditch, just outside Birmingham, and Berkhamsted, both in the United Kingdom.

The design of the Overband Magnet is simple with two pulleys mounted on a frame either side of a permanent magnetic block. As the name suggests, the Overband Magnet is positioned above a conveyor, either over the head pulley, or more commonly across the belt. In operation, conveyed material passes under the Overband where the strong magnetic field attracts, lifts and then automatically discards tramp ferrous metal such as rebar. Hundreds of Overband Magnets are built at the Bunting-Redditch plant every year.

The development of the PMax Overband Magnet meets the mobile plant industry's move towards lighter and smaller designs (e.g. crushers and screens). The PMax is 15% lighter than standard the PCB model across the range and 12% shorter in length. These reductions result in a 14% higher magnetic force to weight ratio. The PMax operates at a maximum working height of 300mm (above the conveyor) on belts with widths between 600 and 1500mm. The reduction in weight and size is achieved through adopting new manufacturing processes, including investing in new production plant. The new design is released in response to customer requests across Europe.

at least 50% compared to the changing of a belt on a standard Permanent Overband Magnet. The Easibelt is operates at a maximum suspension height of 300mm on belts between 600 and 1500mm. This new design of Overband is specifically designed for 24-hour 7-day operations where any production downtime can result in significant challenges. This new model is also ideal when an Overband Magnet is in a

**PMax Overband Magnet** 

"The development of two new designs of Overband Magnet meet the changing needs of our customers," explained Adrian Coleman, the General Manager of Bunting-Redditch. "Our PCB model has been an industry-standard for several decades and remains the optimum design for many applications. However, the PMax is specifically designed as a lower weight option for mobile plant, whilst the Easibelt offers significantly reduced maintenance time."

The expanded range of Permanent Overband Magnets extends the range of Magnetic Separators and Eddy Current Separators Bunting manufacturers for the recycling and quarrying sectors.

For further information, please contact us on press@buntingeurope.com or visit our website www.mastermagnets.com

location with limited or difficult accessibility.



## Modular Recycling Solutions are a valuable tool in tackling increased waste

With increasing amounts of various wastestreams increasing during lockdown, operators and local authorities may need to turn their sights to modular solutions to handle new volumes.

The Association of Directors of Environment, Economy, Planning and Transport (ADEPT) launched an online survey for local authorities across England to establish the impact of the Covid-19 outbreak on waste and recycling services at the end of March and has since issued weekly reports.

In partnership with key local authority network groups, ADEPT, has published the findings from its fourth waste impacts survey representing the week starting April 27.

According to this latest report, greater than usual waste arisings are being experienced across many waste streams.

For example, almost all (90%) respondents have reported higher than usual residual waste arisings - a similar picture to previous weeks.

Almost half (46%) reported increases to be in the region of '0-20% greater than normal', 39% reported increases to be in the region of '20-50% greater than usual', and 5% reported waste arising levels to be '50-100%' greater than usual.

It was a similar picture for recycling where 90% of respondents reported recycling waste arisings to be greater than usual, compared to a similar level of 88% the previous week

In addition, Higher than usual arisings of collected food and garden waste have been reported by 80% and 84% of respondents, respectively. The statistics show more than a quarter (26%) experienced increases of between 20-50% in food waste with some 40% experiencing those levels of growth in garden waste.

### Modular Solutions Ideal for Tackling Today's Increased Waste

Kiverco modular solutions are suitable for a wide range of waste streams including municipal solid waste and dry mixed recyclables which are currently experiencing some of the largest increase of volumes.

What makes them ideal to meet today's challenge is the fact that they are easy to set up — many within hours - and easy to operate.

Equipment is shipped in large pre-built modules which go together easily. All modules are pre-wired at the factory with a 'plug and play' electrical installation. A simple plug connection to link all the modules back to a central control panel is integral requiring just a normal connection to a mains power supply.

Also, depending on the volumes being processed, the Kiverco Modular Range can be used individually or linked together in order to further improve quality of materials and throughout for the operator.

All Kiverco's modules are interchangeable and can be reconfigured to facilitate change in process in line with market trends.



### Recyclina



Additionally, modular plants can be easily relocated as business needs change. This ease in movement can make it an attractive option for operators seeking approval from finance companies.

Amidst all the uncertainly of the past few months, recent events have shown that operators need increased flexibility to adapt to changing circumstances and be safe in the knowledge that they have robust, flexible recycling plants that can grow and change with their business needs – whatever lies ahead.

Kiverco Modular Recycling Solutions are a proven valuable tool in tackling increased waste and are an obvious solution to increased demands of the industry.



#### **About Kiverco**

Combining more than a quarter of a century of engineering know-how with the world's 'best in class' technology brands, Kiverco designs, manufactures and delivers dynamic and enduring recycling solutions for any waste stream anywhere.

Kiverco has designed, manufactured and installed recycling solutions for diverse sectors and waste streams including construction & demolition; commercial and industrial; municipal solid waste; energy from waste; incinerator bottom ash; dry mixed recyclables; RDF/SRF fuel preparation; glass; compost; plastics and fines treatment.

Kiverco solutions are utilised across the world from the Middle East to North America and across Europe to Australasia - with more than 300 installations in the UK alone



METAL SEPARATION EQUIPMENT FOR THE RECYCLING & QUARRYING **INDUSTRIES** 

Overband Magnets Now in Stock



01527 65858 / SALES.REDDITCH@BUNTINGMAGNETICS.COM MASTERMAGNETS.COM

GLOBAL. MAGNETIC. FORCE."



## The Complete Shredding Solution



CRJ Services Ltd, Brook House Farm, London Road, Allostock, Cheshire, WA16 9LU

CRJ Services Ltd, Brook Floose Farm,
 www.crjservices.co.uk
 enquiries@crjservices.co.uk
 01565 723 886











## Turmec's compact Eddy Current takes movable processing to a new level

After over a decade of successful contracts in the UK, Brian Thornton, Turmec CEO, says the company thought the time was right to invest in developing a mobile approach to eddy current separation.

With over 45 years' experience planning, designing, building and installing engineering and recycling solutions, Turmec's mission statement, a world without landfill, defines Turmec's current operations, with the company estimating it has diverted over 43 million tonnes of waste from landfill to date.

This spring, the company is consolidating its position as world leaders in recycling solutions with its latest innovation, the Mobile Eddy Current Separator, an efficient, durable and low maintenance solution, that is rising mobile waste separation to a new level.

Turmec's state of the art Mobile Eddy Current Separator with the world's largest machine of its type, able to achieve high capacities within a compact design, measuring just 3m wide and 3m high, yet capable of processing 300m3 per hour of material.

Developed with Turmec's long-standing partner IFE, the new machine has already had 4,000 hours of reliable operation in the field, processing both C&D and C&I waste.

The design is focused on providing operators with an unmatched combination of flexibility and robust performance from a mobile plant. Operators have the option of jacking legs to give an extra 2m stockpiling height, and still maintain the machine's compact footprint.

Built to bolt onto the back of mobile shredders for the wood industry, or for post-processing — for example, glass, incinerator bottom ash (IBA) or solid recovered fuel (SRF) — Turmec's Mobile Eddy Current separates ferrous and non-ferrous materials.

The mobile package comprises a vibrating feeder with unbalanced motor drive, magnetic rotor, and conveyors for collection of ferrous and non-ferrous materials, with another for discharging residual waste.

Built to ensure the highest standards of durability, the mobile separator plant is ideally suited to waste processors serving multiple sites, and operators of any scale in need of additional capacity from a standalone, robust and reliable plant.

"At Turmec, we design customised recycling plants with a 98 per cent recovery rate, which means minimised landfill costs and maximised commodity revenue," says Brian Thornton, Turmec's CEO.

"Turmec's Mobile Eddy Current Separator is the product of many years' experience of designing, manufacturing and installing waste processing plants," he continues. "This machine combines high



performance with durability, while separating ferrous and non-ferrous particles. Our innovative design ensures the plant delivers both high-quality output and a trouble-free, low maintenance service life, while being easy to be transported between plants."

In addition to the Mobile Eddy Current Separator, Brian says Turmec offers plants upgrades of any size and full-service turnkey facility solutions.

"Every Turmec plant is custom designed to specific needs, and is planned with future growth in mind," he says. "We can adapt to any budget, floor plan or stage of the project, whether that means a completely new plant design or an insert into an existing plant."

Brian adds that Turmec make sure to account for available labour and manpower, working around any existing operation to minimise disruption and offers a 24/7 emergency breakdown service to any brand of plant in the UK and Ireland.





## MOBILE BLENDING PLANT



Operating Position

12m Bin

10m Bin

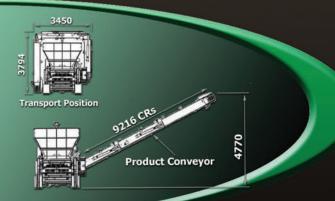
Blending Unit

Powerpack

BP1200-9TB Mobile Blender has been developed by IMS to meet the many applications where blending of material is essential.

It can be used in applications where high volumes are required and is capable of producing up to 1000tph of blended material.

Where more refined mixing is required, the unit is equipped with a mixing chamber with rotating mixer shaft to thoroughly blend mulch, topsoil, sand, etc. for use in lawn development, golf courses, and similar applications.



### **NATIONWIDE SALES & SERVICE**



Dyke Nook, Sandford, Appleby, Cumbria, CA16 6NS Web: www.t-and-b.co.uk

Contact:
Jaime McGlinn
Tel: 07976 560 099
Email: jaime@t-and-b.co.uk



# Taylor & Braithwaite partner with IMS

Construction equipment sales and service specialists, Taylor & Braithwaite, operate a national franchise for Irish Manufacturing Services Limited (IMS) for the whole of the UK.

Specialising in designing and manufacturing equipment for the mining, quarrying, recycling and materials handling industries, IMS are based in Northern Ireland, a region renowned worldwide for its expertise in producing high quality, cost effective equipment for the world market.

IMS product portfolio includes mobile blending plants, developed to meet the many applications where blending of material is essential. It can be used in applications where high volumes are required and is capable of producing up to 1000tph of blended material. Where more refined mixing is required, the unit is equipped with a mixing chamber with rotating mixer shaft to thoroughly blend materials such as mulch, topsoil, sand, etc.

IMS also offer a high capacity Track Pugmill, specifically developed to produce high quality material blending for stabilising road based materials with the addition of water and cement or lime. The Track Pugmill can also be used for blending at asphalt plants, for cold emulsified asphalt mixing (cold mix), for roller compacted concrete (RCC) and for flowable backfill material.

By offering IMS's product range, in conjunction with existing brands in their portfolio, (including Hyundai, Yanmar and Rubble Master), Taylor and Braithwaite are able to offer its customers a one stop shop for construction, quarrying, recycling, waste handling equipment with the same trusted high levels of after sales service from their depot in Cumbria.

Other products available from IMS include wheel mobile screen units, the ideal screening solution for small recycling yards, and both wheeled and tracked stacking conveyors for high production stockpiling or material transfer.

Ian Burton, Taylor and Braithwaite Sales Director said "IMS have a great approach to business, and are working with us to deliver the best possible solution. Their approach, along with their excellent product design and build quality, will give us a unique offer to both existing and new customers."

Paddy McMeel, IMS Managing Director said "Taylor and Braithwaite have an excellent reputation within the markets they serve with a reliable and trusted after sales service. This puts them in an excellent position, not only to promote and sell our product range, but offer the after sales service that has become essential to all customers working in our industry."

### Parkway Recycling Ltd purchase Mobile Blender

Parkway Recycling Ltd, located just off the M6 in Birmingham, had a specific requirement for blending and mixing sand and compost in order to produce a tailor made top soil mix in large volumes for a customer.

Following a successful on-site demonstration, where the capability of the BP1200-9TB mobile blending plant was fully demonstrated, these specific requirements were achieved, leading to Parkway Recycling purchasing the mobile blender.

Paul McGowan, Managing Director, explained: "We were very impressed with the blending plant; it has proved to be very reliable and is producing a top quality product at high volumes.

He continued: "Taylor & Braithwaite have been excellent in demonstrating the machines capabilities and providing ongoing support."

Jaime McGlinn, T&B area sales manager said: "Working together with Paul and his team, we successfully proved that



the blending plant could meet a tough set of criteria, and were delighted with their decision to purchase the BP1200-9TB.

## A Pair of Aces

Ace Plant manufacture and supply the 'Quickspray' - a Telehandler & Loading Shovel attachment specifically designed for dust control. The Quickspray utilises a carbon-fibre spinning disc on which flow controlled water is gravity fed. The spinning action of the disc then disperses the water into droplets over a wide area, capturing dust effectively and efficiently. To further assist with the efficiency of water usage, the flow of the gravity fed water can be controlled using an adjustable 2-inch gate valve.

Ace Plant provided Ace Liftaway with a 1800L Quickspray unit for their 15-acre waste recycling centre in Romsey, Hampshire.

Founded by Philip and Melanie Liddell in 1988, Ace Liftaway is a privately owned waste management and recycling company who cover multiple operations within the industry such as C&D, Commercial and Industrial. The company also provide skip bags, wheelie bins, recycled aggregate and portable toilet hire (under 'Ace Loos') throughout Hampshire, Wiltshire and Dorset.

Philip Liddell first found out about the Ace Plant Quickspray in a trade magazine. He liked the design and principle of the operation of the unit and soon realised how effectively the Quickspray would fulfil his needs in terms of dust suppression.

Ace Liftaway already utilised JCB Teletrucks and Loadalls so having an attachment which could be utilised with existing fleet machinery was certainly a bonus. Philip stated "The Quickspray gave us the instant ability to go through the yard from one end to the other. It is the most proficient, minimal time and effort machine we have for dust suppression".

The Quickspray unit has also been utilised as a water storage bowser to feed Ace Liftaway's crusher's internal dust



suppression system. Philip said that he was very pleased with the operation, versatility and simplicity with which the attachment operates.

Philip further added that "weather conditions change by the hour; the unit can dust suppress with controllable water extremely quickly".

Ace Liftaway opted for the 1800L unit, the benefit of this is the flexibility of being able to supply large quantities of water quickly for any unforeseen event.

The Quickspray was supplied in a specified coastal paint (RAL 1007) and the fork pockets were adjusted so that all of Ace Liftaway's fleet of Teletrucks and Loadalls were easily compatible with the unit.

To discover more about Ace Plant and their innovative range of products visit www.aceplant.co.uk or call 01908 562191.

To discover more about Ace Liftaway and their products and services visit www.aceliftaway.co.uk or call 01794 367939



## Doocey Group invests in Elite's Precast Legato Blocks and three

In January 2020 the recycling division of a leading multi-disciplined civil engineering and utility contractor, the Doocey Group, contacted Elite Precast Concrete Ltd about their Legato interlocking blocks. Doocey were planning to contract three new covered storage areas for their recycled construction and demolition waste and utility excavation arisings and the Legato blocks manufactured by Elite provided the ideal way of both segregating the recycled materials and of supporting Zappshelter's tension membrane roof system.



Shortly thereafter Doocey Recycling took delivery of Elite's Legato blocks and within a three-day period they built the walls themselves. Zappshelter were then on site to erect three new 14m x 12m roof structures with the result that Doocey are now able to carry out the recycling operations whilst keeping the finished products at a consistent moisture content and correctly segregated. The shelters have also enabled the recycling operation to introduce SMR a soil stabilising process, increasing the percentage recycled which further helps to reduce the Doocey Group carbon footprint.



Roger Summers, Business Development Manager for the Doocey Group commented – "Elite's help early on, delivery, products and price were first class, which helped the whole project run very smoothly and on budget. I would highly recommend Elite to anyone who needs their products"

Doocey Group is a multi-disciplined civil engineering and utility contractor for Water, Gas & Electric. Based in the West Midlands and Cambridgeshire the Doocey Group of companies operate nationally with a circa of 400 direct employees. The group comprises of — Utilities, Multi Utilities, Traffic Management, Recycling, Pipeline Resilience, Directional Drilling, Testing & Commissioning, Plant and transport.

Elite Precast Concrete Ltd have been manufacturing high strength precast concrete products for over 12 years. With two factories in Telford, Elite pride themselves on providing good "old fashioned customer service" to clients throughout the UK supplying a wide range of interlocking concrete blocks, security and traffic barriers and drainage products.

For further information, please contact – sales@eliteprecast.co.uk or call 01952 588885 www.dooceygroup.co.uk or call 0121 5209873 sales@zappshelter.com or call 0208 0505 121



# The winning solutions that make a profit recycling demolition waste material and earth from excavation work

## With the Call4Solutions Service, MB Crusher helps companies develop new business opportunities

Hungary - recycling demolition waste

After listening to companies all over the world, MB Crusher developed a range of innovative machinery capable of simplifying the complex process of recycling aggregates and demolition materials.

Thanks to the patented MB Crusher units, each job becomes more competitive and profitable, but there's more. The company grows independently and reduces costs and has the opportunity to expand its services. MB's Call4Solutions was created specifically for this: to help companies solve any operational problem by identifying a range of services that can become a new source of income.

Companies that rely on MB Crusher develop new business opportunities; here are some questions they sent to Call4Solutions, which we found answers to:

The hardest and most expensive part of an average job for my demolition company is transporting waste material to a recycling plant or landfill: what can I do to reduce costs?

With MB Crusher, costs can not only be reduced, but even eliminated. By eliminating the need to move waste material to a landfill, recycling is done on site.

**Solution:** After careful consideration, the customer purchased a BF70.2 crusher bucket and now processes all the material from his demolition sites, allowing him to eliminate the step of hauling debris to landfills, saving time and money. Now, the company expanded their business: the material they crush on site is sold and used as road base or fill. The new production process was quick to implement and easy to manage.



little room to maneuver or are steep and difficult to access, the crusher bucket's abilities remain unaffected.

**The solution they chose:** after considering their options, our client purchased the BF70.2 crusher bucket for their dolomite quarry. Since 2005, the unit has been crushing aggregates without fail and the results are easy to see: all the material is crushed on site without major maintenance, external intervention, or the machine stalling. Granular material is easily obtained and used in the construction process: as fill or in bituminous conglomerates; aggregates are applied in the production of concrete, as base for railroad ballasts, and as waterproof material for foundations.

### We extract material from riverbeds: can we profit from it?

Yes, MB Crusher's attachments adapt to any construction site, by easily processing tough and resistant materials, making this service more profitable and competitive.

**Solution:** Customers in India chose to install the

BF70.2 to crush the materials extracted from a riverbed. They sold it as an aggregate for road work, expanding their market and profiting from it.

I own a demolition company

own a demolition company and work in city centers: how can I reduce disposal costs and operational constraints?

The best solution for those who perform demolitions on urban job sites is MB's crusher bucket.



We operate at an inaccessible

### Recycling





For example, the BF70.2 model is agile, compact, easy to handle, and is transported to the construction site with the operating machine, all without increasing costs.

**The solution:** For his job site in a city center, the customer chose to use the BF70.2 crusher bucket. He entered and exited the center without a problem, processed material on site, decreased dust emissions, and used the waste as fill for the excavation. A great tool that helps carry out the job and save time and money.

### I am self-employed and deal with recycling: are there solutions for professionals like me?

MB Crusher's units are suitable for any type of company, even the smallest one. MB Crusher's goal is to help companies and professionals reach their potential.

**Solution:** Thanks to the Call4Solutions service, our customer in Hungary decided to purchase a BF70.2 crusher bucket to offer a new service: he collects demolition material from his customers, crushes it in his yard, and sells it.

I offer environmental remediation services and I have to deal with inert material such as reinforced concrete: how does it become income?

MB Crusher's patented crushers are easily and quickly mounted on any excavator: any type of inert material can be crushed and can be sold or reused

**The solution:** The customer installed the BF70.2 jaw crusher on a Caterpillar 317FL excavator to crush reinforced concrete and recycle it. Once everything is crushed, including reinforced concrete poles and railway sleepers, the material is sold as base for the construction of a new railroad.



### WHY REPLACE WHEN YOU CAN REBUILD?



Using new or refurbished genuine Volvo CE parts, we can breathe new life into your older Volvo fleet, with the reassurance that work has been completed by a Volvo Certified rebuild company. A Volvo Certified rebuild maximises the productivity and uptime of existing equipment, rebuilt to perform almost as if it had just left the production line.





## Safely Using Mobile Plant for Waste Operations



No waste and recycling site can run safely and effectively without a robust management system which includes the correct use of equipment. Considering the recent HSE statistics that highlight the rise in major injuries and illness in the waste sector, Mentor provide an insight into simple steps that onsite management can enforce to promote safe operation of equipment onsite.

The primary focus of most waste sites is to store, treat/recycle and transfer waste from one process to another. In order to carry out these tasks, equipment with diverse operational capabilities such as wheeled loaders, material re-handlers and forklift trucks may be used, but how can we ensure that we use these types of equipment to their maximum capabilities but in the safest way possible?

### Why not start with the basics...

### **Pre-Operational Checks**

The pre-operational checks of any equipment may well be the most important element to an operator's daily routine. The operator should be competent to carry out a detailed inspection of the equipment, beginning with isolating the equipment before conducting checks such as damages, fluid levels, under carriage of the machine, wheels/tyres/tracks, attachments etc. before moving inside the cab and checking the seat, levers, switches. Final operational checks consist of the hydraulics, steering and brakes. Any defects must be reported, and a schedule of maintenance must be followed before any work with the equipment can commence.

### **Attachments**

A key piece of mobile plant equipment used across all waste sites are material re -handlers. This machine can work with a number of different attachments such as a grapple, compactor, bucket or a magnet and can become complex in their use.

Attachments are either fixed to the equipment and removed by maintenance personnel or by the use a quick hitch system which is a latching device that enables attachments to be connected to the dipper arm of the equipment and interchanged quickly. A material re-handler operator may change the bucket on his excavator up to 30 times a day in order to maximise the machine productivity.

A significant number of all accidents investigated on excavators are attributed to the attachment detaching from a quick hitch and injuring a ground worker, most of which are fatal/ major injuries. All operators must be trained on the use of attachments including using the quick hitch system. There are 3 types of quick hitches:

- A manual system requiring the operator to change the bucket manually by removing the safety bar.
- Semi-automatic systems requiring the operator to manually remove the safety pin before hydraulically removing the attachment.
- Automatic systems that are operated entirely from the cab.



#### Safe Operation on Site

Whether you are stockpiling, compacting or transferring material from one place to another, you must always consider the following questions before you allow work to commence -

- Is the environment safe? Are there any hazards?
- Are the ground conditions suitable for the type of equipment?
- Will the equipment need to go indoors? If so, are there any overhead obstructions?
- Is there other equipment working within close proximity?

If you are operating the equipment, you must always have a clear line of vision with adequate room for the equipment to work, however sometimes the equipment will have to work in an area with limited operational room whilst still being used to its full potential; visual aids e.g. camera and mirrors can aid all round vision if the view is obscured. Site risk assessments and Safe Systems of Work will determine what aids are sufficient and possibly employing the services of a trained banksman.

Understand the limitations of your equipment; you must never exceed the lifting capacities of the equipment, especially when using any attachments. We see far too often in a busy operational environment that operators are keen to get the job done as quickly as possible collecting more materials than the machine can cater for, resulting in equipment failure, tipping over of the machine or even worse.

### **Machine Shutdown**

The importance of safely shutting down your machine is just as crucial as the set up. Any defects must be reported to management following the operator's final walk round checks. When parking, ensure the equipment is parked so that the first movement can be forwards; do not park where it creates a hazard such as doorways, access point or in front of safety equipment. When exiting your cab, ensure access steps are undamaged and accessible allowing 3-points of contact for a safe exit to be maintained at all times.

For more information on safely using mobile plant for waste operations or to book your mobile plant training today, contact our expert training team today. Call us on 01246 386900.



The term 3D is currently on everyone's lips in recycling. It involves the extremely precise screening and processing of recyclable materials. In concrete terms, the 3D COMBI type screening machine from the screening machine manufacturer SPALECK is shaping a new class of separation cut quality. For the classification of materials that are difficult to separate, sticky and moist, it offers recyclers new recycling products with separation cuts from 0.2 to 120 mm. The latest development is the 3D COMBI Compost Screen especially for biomass. SPALECK customer Olde Bolhaar, one of the largest biomass processors in Germany, can for the first time offer its industrial compost customers a quality guarantee, even with different feed materials, thanks to the exact separation cuts and constant screening qualities of its new 3D COMBI Compost Screen. In addition, the screening machine increases its utilisation rate of the valuable compost content by more than 20 percent, with significantly less machine maintenance.

### The moisture and long grain problems finally solved

Christiaan Olde Bolhaar, managing partner of the compost specialist: "We have gained very extensive experience using mobile and stationary screening plants. We always had to struggle with two major problems: The strongly fluctuating moisture content of our raw material over the year and the associated long grain problems in the screened end product." Thus, the biomass specialist had to increase its separation cuts considerably in the wet season, which in turn led to harmful long grain parts. In the dry season, on the other hand, increasingly finer sieving was carried out to prevent long grain parts as far as possible. However, this inevitably led to the costly incorrect screening of the valuable organic material. Nevertheless, the passage of faulty long grain particels through the screening surface was not reliably prevented and continued throughout the year. A constant screening quality was therefore impossible.





Good for the recycler - overflow free of valuable compost

### Recycling

#### Flip-Flow cassettes and 3D screening panels decisive

This changed completely with the SPALECK 3D COMBI screening machine. "Even the first test in the SPALECK TestCenter was very promising. Subsequently we specified our exact requirements and tasks for SPALECK. We wanted to increase the screening quality to a maximum and make the best possible use of the valuable components of our raw material. After the second test we were absolutely convinced that we had found the right partner for our complex screening

Frederik Stening, head of the SPALECK TestCenter: "The breakthrough in the joint development with Olde Bolhaar was our modular 3D COMBI screening technology which can be adapted to the screening material. This enables recyclers with difficult to screen materials, such as biomass processors, to produce a year-round constant screening quality that is optimised for the end customer."

The 3D COMBI screening machine consists of an upper and a lower deck. For very moist material, Olde Bolhaar uses SPALECK Flip-Flow cassettes in the upper deck. These have an integrated Flip-Flow screening surface and can be easily installed by the user in the upper deck. Their purpose is the upstream screening of the fine fraction, so that in the further screening process moist, sticky and sometimes contaminating screening material is already screened on the upper deck. The downstream 3D screening panels of the upper deck then prevent faulty long grain particles from being shot into the lower deck. This means that long pieces such as horse mackerel, shrubbery, etc. are safely and completely removed via the upper deck. In summer, when the materials are

sometimes very dry, the Flip-Flow cassettes can then be replaced by 3D screening panels from SPALECK. The lower deck is then used to screen the middle grain and the composter's valuable organic fines. Christiaan Olde Bolhaar: "The configuration of the lower deck is the same all year round. It enables us to screen the organic fines very reliably and consistently throughout the year, even with the most varied initial conditions of the material. For us, this is a significant simplification and increase in efficiency compared to our conventional screening machines.

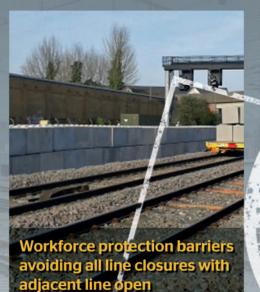
#### Win-win-win situation for the complete recycling process

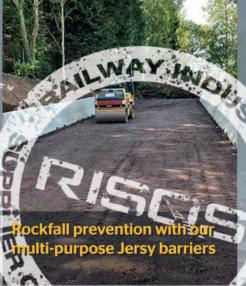
In particular the recycler's end customers, i.e. the substrate manufacturers and their private end customers, benefit from the screening performance of the SPALECK vibratory screening machine. Christiaan Olde Bolhaar: "With the new 3D COMBI Compost Screen we are able to guarantee our customer an excellent soil with high organic content all year round. This benefits the hobby soil users, but especially the professional buyers, the greenhouses and soil producers. Compared to that time, all our products are now almost completely free of long grain impurities. This enables us to significantly increase our quality level compared to our competitors in the market." As a result, the company was able to significantly upgrade its compost products and develop new sales opportunities. Frederik Stening, contact person at SPALECK: "For us it is important that our customers can flexibly adapt their SPALECK screening machine to changing feed materials. This is the only way to guarantee that they can reliably deliver the separation cut qualities required by the end customer."

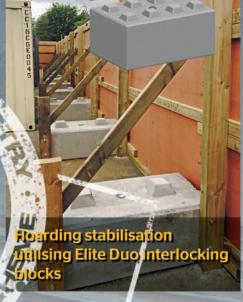


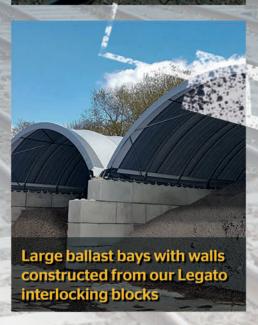
## Get on track with Elite interlocking blocks and barriers

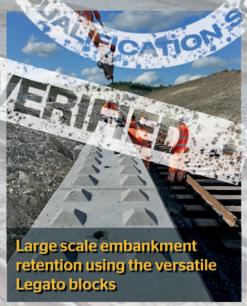


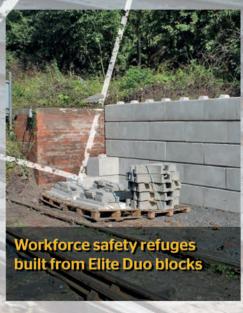












# PRECAST CONCRETE

### Everywhere on rail networks Elite products are seen in use

For more information phone 01952 588 885 or browse www.eliteprecast.co.uk or email sales@eliteprecast.co.uk























## Liebherr's new mid-range wheel loaders ready for orders

Liebherr has announced the world debut of its latest mid-range wheel loaders featuring more power, redesigned cabs and, for the first time on mid-range models, the options of joystick steering and assistance systems from the larger XPower® machines.

The three loaders – L 526, L 538 and L 546 – were due to be unveiled at next month's IFAT trade fair in Munich but with the postponement of that event the company has elected to accept orders immediately.



Complying with stage V/tier 4f emissions guidelines, the new generation arrives with a package of innovations that underscores their reputation as high-performance efficient, and reliable all-rounders.

Hydrostatic travel drive on all three models has been optimised, giving the L 538 and L 546 significantly more power while the L 546 gets a new six-cylinder engine. The hydrostatic travel drive means lower fuel costs and CO2 emissions



Two lift arm variants are available: one is the Z-bar kinematics with high forces in the lower positions, the other parallel kinematics with enormous holding forces in the upper areas as well as parallel guidance. This latter configuration is particularly useful in tough industrial applications where the machine is handling materials such as scrap metal or glass. Both variants were redesigned for the new series. The L 538 and L 546 are manufactured with larger lift cylinders that have increased lifting force by 20 per cent over the previous generation.



The electro-hydraulic pilot control in combination with the standard bucket programming function means that bucket and forklift positions can be set on the nine-inch display that is installed in all models. The powerful hydraulics ensure that the machine operator can also carry out overlapping movements of lifting and lowering as well as tilting in and out at full power.



In redesigning the cab, Liebherr engineers were influenced by the success of the larger XPower® wheel loaders. That means a roomier working environment for the operator, further enhanced by the pedals being positioned 40mm further forward.

The joystick steering installed on XPower® models is available on request for the new midrange machines. Where an application calls for numerous steering

manoeuvres, this makes the work more comfortable for the operator because the position of the joystick always corresponds to the articulation angle of the loader. The cab can be ordered without a steering wheel and steering column if road approval is not required. An added benefit for the operator is that it makes the cab even more spacious.

All assistance systems from the XPower® models are available in the new mid-range series. These include active personnel detection at the rear, weighing device with Truck Payload Assist, integrated tyre pressure monitoring system and adaptive working lights. Front space monitoring and the Skyview 360° camera system are also available.

### AT A GLANCE

- More power
- Roomier cab
- XPower® joystick steering available
- Greater lifting force
- Optional assistance systems

## Volvo 90-Tonne Excavator Now Available Worldwide

Volvo Construction Equipment (Volvo CE) is launching a new 90-tonne excavator fitted with a Stage V engine to meet requests from markets with such engine regulations.

The 90-tonne EC950F crawler excavator from Volvo Construction Equipment (Volvo CE) offers the perfect combination of power and stability to handle a high capacity in the toughest applications. Equipped with a 450kW Volvo D16 engine that delivers high torque at low rpm and complies with the newest international emissions standards, this machine is designed for fast and efficient on-site production.





#### **Peak Performance**

Even in the harshest applications, the EC950F is up to the challenge. Experience the superior digging force particularly when working with hard and heavy materials, thanks to constant high hydraulic pressure. The optimized hydraulics system increases pump power for fast and smooth operation, while the electro-hydraulic system controls on-demand flow and reduces internal losses in the hydraulic circuit. What's more, the EC950F comes with a boom-swing priority valve.



### **New Equipment**

The 90-tonne excavator delivers a high bucket capacity for more tons per hour and can be fitted with a range of Volvo attachments, including General Purpose, Heavy-Duty, and Extreme-Duty buckets. When an application requires something more unique,

Volvo can offer Custom-Built Attachments to develop the right solution and achieve ultimate digging results. And to boost machine versatility, the attachment management system can store settings for up to 20 different attachments, enabling the operator to pre-set hydraulic flow and pressure through the in-cab monitor.



with rearview and side cameras, or Volvo Smart View, which provides 360° vision.

### **Maximum Uptime**

Volvo's commitment to rigorous testing in its development process ensures the production of wellengineered components, proven to be reliable in the toughest applications.

Achieve non-stop production with the EC950F, built to deliver maximum longevity. Machine protection is provided by features that include a heavy-duty boom and arm, strong frame structure,

heavy-duty underside plate and floating pins on the bucket connection, as well as optional full-length track guard.

For a prolonged bucket lifespan, Volvo offers a range of wear parts including segments, side cutters, shrouds, and teeth. When working with heavily compacted material the Pick Point tooth provides maximum penetration. To cut downtime to a minimum, the new Volvo Tooth System enables teeth changes in minutes: simply place, push and click - it's that easy to install. Essential maintenance points are also easily accessed via the wide-opening and conveniently located compartment doors using central and surrounding walkways.

While the EC950F is the biggest excavator in the Volvo CE range it's not just the size that's impressive. With unrivaled performance, productivity and uptime, the EC950F is the perfect match to load the A60H hauler.

SMT GB markets Volvo Construction Equipment products, together with K-Tec articulated hauler scraper boxes, in Great Britain. There are eight strategically placed Customer Support Centres, a dedicated National Used Equipment Centre and a network of utility equipment dealers, to ensure high quality

### **Operator's Choice**

The outstanding stability of the EC950F means operators can work with confidence in the most challenging environments. The sure-footed and solid machine features a wide track gauge, long track length, retractable undercarriage, and an optimized counterweight.

For optimum control, all machine interfaces - including joysticks, keypad, and LCD monitor - are ergonomically positioned. Smart features such as the optional Dig Assist powered by Volvo Co-Pilot – assist the operator in digging more efficiently. The low-noise and spacious cab further boost comfort.

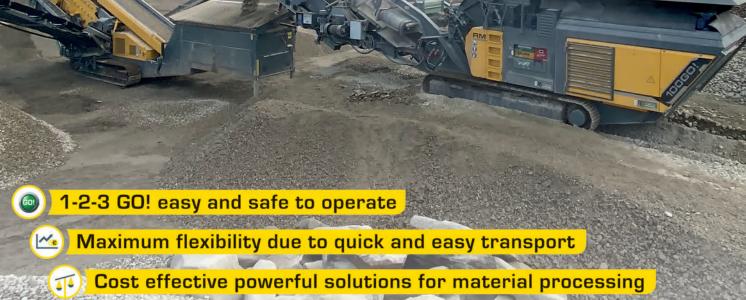
Convenience and safety are enhanced thanks to a large entrance, including high visibility handrails and conveniently positioned steps, as well as anti-slip plates. The optional FOG (Falling Object Guard) and FOPS (Falling Object Protective Structure) provide further peace-of-mind when working in





# RM CRUSHERS & SCREENS

UNBEATABLE SOLUTIONS WITHOUT COMPROMISE.













## **RM Tracked Scalper and** Sizing Screen Range unveiled

Cumbrian construction equipment sales and service specialists, Taylor & Braithwaite, unveil RM Group single solution approach for Compact Crushing, Tracked Scalpers and Sizing Screeners from its depot at Appleby in Cumbria.



This unveiling follows the news that back in January 2020. that Irish screen manufacturer Maximus became part of the RM Group in name, which in turn, followed the acquisition of Maximus by RUBBLE MASTER, the Austrian world market leader in Compact Crushing, in 2018.

Having successfully sold and supported both Rubble Master (3 years) and Maximus machinery (four years), Taylor & Braithwaite are delighted with the newly branded RM machines, which continue to be manufactured in Northern Ireland, one of two centres of excellence to emerge from the acquisition; Northern Ireland for Scalpers and Sizing Screens and Upper Austria for Compact Crushers.

Ian Burton, Taylor & Braithwaite Sales Director, said: "Our customers have come to expect the very highest quality of build and reliability from machines manufactured by the former Maximus factory in Dungannon, and we are delighted this will continue with the added benefit of the expertise, knowledge and support from the rest of the RM Group."

Gerald Hanisch, founder and owner of RUBBLE MASTER added: "RUBBLE MASTER has always promoted a company culture that brings people together - customers, suppliers and network partners. In recent years, this culture has enabled us to exchange knowledge with our location in Northern Ireland, develop and launch new products and expands our expertise in all areas.

"We see the rebranding as the next logical step so that together with our full range of tracked compact crushers, we appear on the market as a strong, full solution provider with one brand name - the RM Group", explained Hanisch.

Ian Burton, from Taylor and Braithwaite, added: "This full solution approach will bring added benefits to the customer, with two centres of excellence behind us, we are confident of



lifetime support for all RM products - 24 hours a day, for the lifetime of the machine."

Included in the new RM range, are two HS scalpers (HS3500M and HS5000M) pictured alongside Ian Burton at Taylor & Braithwaite's depot in Cumbria.

lan concluded: "The screens in the Scalper series are durable and robust, these high-performance machines are designed to handle the heaviest applications in the harshest conditions. Whether it's heavy rock or bulky construction and demolition material, thanks to their versatility and high throughput the Scalper series screens minimise material handling and deliver high quality end products."

For the complete range of RM products, including Compact Crushing machines, visit Taylor & Braithwaite at www.t-and-b.co.uk or contact product manager Jaime McGlinn on 07976 560 099.

Email: Jaime@t-and-b.co.uk















# Do you need screen mesh?

Are you tired of being asked for mesh measurement details?

Do you want it tomorrow?

All we need is:

The brand of your machine

The deck (top, middle or bottom)

The aperture of the screen

With 30 years of manufacturing experience, we know what we are doing!







**Harpscreen** is the UK's **LARGEST** manufacturer of screening media.

Call us on 0845 2020 300 or email sales@harpscreen.com

harpscreen.com

**QK** provide Tracked **Conveyor Solutions** 

Quarry King based in Co. Tyrone, N. Ireland have been offering the QK **Conveyors TRACKPILER® range of** self-powered medium-duty track mounted conveyors since 2018. Along with their already extremely popular range of wheeled conveyors the company have supplied tracked conveyors to customers worldwide. These can be found working seamlessly alongside many different makes of tracked mobile crushing and screening plants reducing the need for wheels loaders in many cases, as well as increasing stockpile capacity.

The TRACKPILER® range is available as 15m or 18m long and either 750mm or 900mm wide. They come with a range of options and now feature the latest Tier IV Final and Tier V power solutions.

The track conveyors can be easily manoeuvred into position using the dog-lead remote controlling the heavy-duty Strickland crawler tracks. Radio remote is available as an option, if required. Variable feed in and discharge heights provides flexibility when using as part of a tracked crushing and screening system.

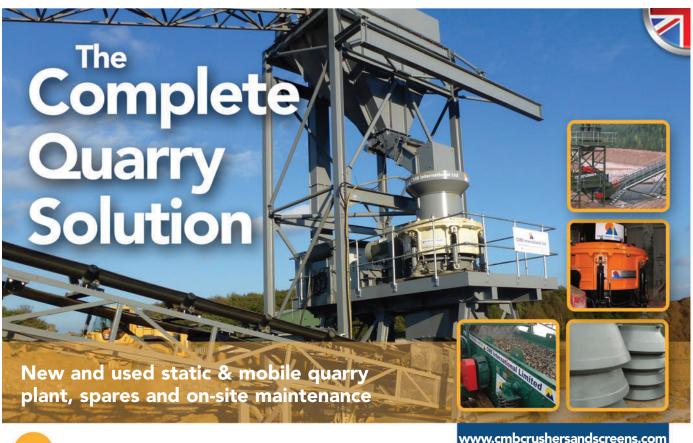
The use of a TRACKPILER® tracked conveyor significantly reduces operating cost as well as increasing stockpile capacity and reducing on-site material handling. Due to the need for



fewer loading shovels operating site safety is also improved.

The simple yet robust design provides a value for money solution to fit many producers need for an intermediate capacity tracked stockpiling or link conveyor. They are easily transported on a low loader and can be containerised for cost effective shipping worldwide.

For more information on QK Conveyors email info@quarryking.com or call +44 (0)28 9557 5911.



CMB International Limited

LITTLE ALTON FARM, THE ALTONS, RAVENSTONE, LEICESTERSHIRE LE67 2AA UK T: +44 (0) 1530 563600

# Zip It

A quick-to-install, modular overland conveying system makes material handling reconfiguration easy.



In its second season and operating a brand-new processing plant, Dakota Aggregates mines on seven million square meters within the **University of Minnesota Outreach, Research and Education Park. Located in Minnesota, USA, the** mine serves the Minneapolis metro area with a wide variety of construction aggregate products. The operation was designed with innovation in mind, particularly where material handling is concerned. The site spans five kilometers from north to south, and a two and a half from east to west. Consequently, overland conveyor systems were chosen to efficiently transfer material from the face to the processing facility, while eliminating the costly use and resulting emission streams of loaders and haul trucks; and providing quiet operation while minimizing energy use and lowering operating costs per

Initially, the challenge for Dakota Aggregates was finding a lower cost overland alternative versus that of customengineered, conventional overland systems - and most importantly, one that would allow them to easily and quickly reconfigure their overland systems to accommodate changing mining requirements each season.

Dakota Aggregates has a substantial 40-year lease on the university-owned land where melting glaciers had left behind a thick blanket of high-quality sand and gravel thousands of years ago. Mining this deposit is part of an overall sustainability focus. A few of the big benefits of this initiative is that the local region taps into the cost-efficiencies of a valuable and nearby source of aggregate products, while the university realizes an additional long-term revenue source. And, for every ton of gravel mined, a portion of the profit goes into a scholarship fund for geology and civil engineering

students at the university. It's a win-win deal for all and an example of innovation at its best.

With the latter spirit in mind, Dakota Aggregates approached its material handling challenges by consulting with Superior Industries, a global manufacturer of crushing, screening, washing and conveying systems. Superior had recently launched its Zipline® Conveyor, a preengineered, modular overland conveying system designed for quick, and almost tool-free installation.

"It was refreshing to share our input on the system with the engineers at Superior and to work with them on various



enhancements to this new product," says Stacey Hannover, operations manager for the **Dakota Aggregates** plant, which processes more than 1.4 million tonnes of aggregate products annually.

The site mines from its furthest boundary and back toward the processing plant. "While we are generally pulling conveyors out and shortening the distance of conveying, we can easily add on sections in other areas of the operation. We needed flexibility at the right price point. With the Zipline Conveyor, we have ease of assembly and ease of onsite portability," says Hannover.

The operation utilizes a total of 1,500-meters of modular conveyor sections (at lengths of 10-feet each and belt widths of 762 to 914mm) which is currently divided into six different overland systems of 150- to up to 300-meters. "It's easy to reconfigure any one of our modular overland systems to costeffectively meet our changing requirements each year. As an example, during last season, we easily pulled 75-meters out of one system. Also, while we generally operate on level ground, next season we will be moving a section to accommodate material transfer on an area with a 15-percent incline," says Hannover. He adds that installation is "pretty much a breeze. Once we got the pattern down, three crew members marched right down the conveyor corridor and were able to assemble 300-meters of overland conveyor sections in a ten-hour day." The crew used a forklift and a skid steer loader with no need for cranes or other heavy equipment.

#### **Engineering perspective**

"We began with the mission of being tool-free in installation requirements regarding the entire intermediate area between the head and tail sections," says Travis Thooft, a member of the Superior Industries engineering team. He explains that this required creating a new type of "fastening system" that is structurally sound and reliable yet is quick and easy to use in the field.

"When you consider the typical way to put things together, the industry standard is basically weld or bolt. We took it a step further by eliminating bolts and replacing them where possible with a 'fixed-pin' connection. We wanted to eliminate the need to bring out a set of wrenches for most installations," says Thooft. He estimates that the new design can cut installation time by up to 75 percent. "Basically, you hook in one end and then the other, with the whole setup for a 3-meter section taking just about five minutes," he says.

Thooft goes on to explain that the specification process starts by defining the overall length of the overland system, and the required horsepower. The system includes a pre-engineered head assembly and tail section and is designed with off-the-shelf components for easy sourcing of replacement idlers and pulleys. "Producers can customize with options such as self-aligning troughing idlers or special return trainers, idler guards, and belt cleaners; or a longer or different type of gravity take-up for example," he adds.

When compared to the spec-by-spec, highly engineered system, Thooft says that the Zipline Conveyor system is a lower cost overland alternative. "While it's lighter in weight, it offers the structural strength of the conventional overland system. Its big advantage is its 'modularity factor and unique

fastening system," which allows easy structural additions in the future; and easy site reconfigurations as needed. It also allows operations to choose (depending upon the project) between renting modular sections from their local equipment dealer or purchasing a package of sections that they can customize within a given set of parameters," he says.







## Driving overland solutions

What are the key drivers behind more and more operations turning to overland conveyor solutions? Certainly overland conveyors offer cost-effective material transport within a wide spectrum of capacities — and when used in place of loaders and haul trucks, operations are significantly reducing fuel costs and expenses due to labor, training, emissions, maintenance and engine depreciation.

Another key driver is ever-tightening environmental regulations. While individual mobile haulage units emit and stir noise and air pollution along the entire transfer path, overland conveyor systems offer quiet and environmentally-sound material transport.

With the advent of the pre-engineered and quick-to-install, modular overland system, producers such as Dakota Aggregates can acquire a system with a lesser initial capital investment than that of conventional systems, and can operate with greater efficiency, flexibility and sustainability into the future.

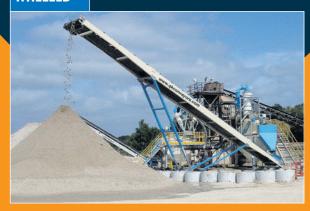


#### TRACKED



TC5030/1575	from <b>£30,500</b>
TC6030/1875	from <b>£37,480</b>
TC6036/1890	from <b>£39</b> . <b>450</b>

#### WHEELED



WC5030/1575	FROM <b>£8,150</b>
WC6036/1890	FROM <b>£9,330</b>
	FROM <b>£15.420</b>

Quarry King Ltd. 12 Melmount Gardens, Strabane, Co. Tyrone, N. Ireland BT82 9EB
T: +44 (0)28 9557 5911 M: +44 (0)78 098 64869 E: info@qkconveyors.com W: www.qkconveyors.com



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

114 Gortlenaghan Road, Dungannon, Co. Tyrone, N.Ireland BT70 3BW T: +44 (0) 28 8776 7646 M: 078 098 64869 E: sales@dernaseer.com www.dernaseer.com



## **Vincent Dempsey Plant Hire** Installs Dernaseer Washing Plant

One of Ireland's leading plant hire companies Vincent **Dempsey Plant Hire, based in Redcross, County Wicklow** has recently installed a new Dernaseer sand and gravel washing system at their new sand pit.



The late Vincent Dempsey set the plant hire business up in 1986 to

provide machinery to the expanding number of contractors in the local construction industry and the business is now run by his son Kevin who continues to provide plant for muck shifting, quarrying, rock breaking, demolition, wind farms and coastal erosion throughout Ireland. Kevin has now expanded into providing quality washed sand and gravel to ready mix and concrete manufacturers in the Wicklow/Kildare region.

The Dernaseer washing plant features a 30-tonne variable speed belt feed hopper which feeds the two-deck heavy duty scalping screen which rejects the oversize material that is stockpiled for crushing later. The 0-28mm material is conveyed to the 20' x 6' (6m x 1.8m) inclined washing screen. The sand is separated to produce two sands which are fed to two DSP Compact Sand Plants which produce a concrete and a building sand. The DSP utilises Linatex slurry pumps as well as Linatex rubber-lined hydroclones and Linatex rubber-lined

underflow box and modular polyurethane screen media. The sand products are stockpiled with 18m long powered radial conveyors to maximise stockpiling capacity and reduce material handling. The washed gravels are stockpiled with 15m long conveyors.

Also, with an eye on environmental sustainability and water conservation Dempsey's have installed a Dernaseer water recycling system as part of their plant. The water treatment plant separates the suspended solids from the hydrocyclone overflow. The settled sludge is pumped to a storage lagoon while the clean overflow water is pumped back to the washing plant. This system recovers up to 90% of water used in the washing process.

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



## **Managing Maintenance**

### Tips for Effective Screen Media Maintenance By Lars Bräunling, MAJOR director of product technology

It doesn't matter how much aggregate is produced in a day if it is contaminated or not sized correctly. Though screen media is a minor cost when compared to larger equipment in a quarry or mine, it is a crucial part of any operation's profit machine. One unexpected break and thousands of dollars can be lost in terms of downtime and repairs.

For that reason, producers need to put a large focus on proper screen media maintenance, including selection, installation, preventative maintenance and storage. Best practices result in fewer changeouts, less unplanned downtime, higher quality product and a more efficient operation.

#### **How to Choose?**

Where it used to be as simple as choosing the right size of woven wire for their material, producers now face a choice of dozens of different styles and brands of screen media. And while it may be tempting to think a cheap, off-the-shelf option will get the job done, plant managers should take a moment to think about what the wrong choice could mean. Not choosing a screen media suitable for an individual application could mean unexpected breaks, ruined piles from contamination, and overall expensive downtime.

Work with a screen media manufacturer to figure out what media is the best fit for each area of the screen deck. In some cases, a heavy-duty option may be necessary to take the punch at the feed end, followed by something durable but with more open area.

However, in many applications, high-vibration wire screens are suitable for the entire deck. A producer could choose higher gauge or double wire screens for high tonnages at the feed end and increase open area for the rest of the deck to boost stratification. Sometimes referred to as self-cleaning screen

media, this media can be especially beneficial in an application with a lot of fines and clay deposits or where an operation has had difficulty with contaminated piles caused by too much organic material. The high-vibration qualities also tend to go far in solving issues with blinding and pegging.

#### **Don't Slack on Installation**

It's not uncommon for an operation to send the newest crewmember to complete the undesirable job of screen media change-outs, but the task benefits from someone with a bit more experience. The best screen media in the world won't do any good if it's installed incorrectly. This could mean improper tensioning or even installing it the wrong way around, something that happens more often than it should. The resulting issues can include accelerated wear, panels broken too soon and just overall inefficient screening.

While specifics vary depending on the type of media, there are a few overall best practices for screen media installation. To start, clean and check the condition of components that touch the screen, make sure that the screen panel matches what was ordered, and install the screen based on instructions from the manufacturer for that particular type. During installation. make sure each support bar touches the screen and that the tension matches manufacturer recommendations. Some manufacturers include a "do's and don'ts" sheet with screen media to make the process easier. Also, crews should make sure they are following safety procedures, including having more than one person working on the installation and using the lock out procedure to prevent the equipment from being turned on while personnel are working on it. Certain types of screen media are safer to install than others, including shrouds of metal to cover the sharp hooks, no sharp edges and a lighter weight than standard woven wire.

Consider looking into screen media installation and maintenance training seminars to prolong screen life.

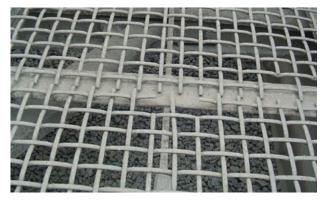
Manufacturers often offer the service either through site visits or via a nearby dealer. The benefit will be a crew with shared knowledge of proper installation that could be worth thousands in unexpected downtime prevention.

#### **Keep Your Eye on the Screen**

Once installed correctly, it's still best to check screen media at least weekly to make sure tensioning is proper and the panels aren't showing unusual signs of wear. A little bit of extra time during routine preventative maintenance can have a noticeably positive effect on profits.

While checking tension, also look at the clamp bars themselves. Check for wear, corrosion or cracks and examine the rail for straightness, which is necessary for even tension. Examine all nuts and bolts and replace any that are worn, stripped or corroded. Shaker bolt threads with excess build-up can be cleaned by running them across a wire wheel. Also, replace clamp bars that are thin or caving in to greatly improve screen media wear life and be sure to choose OEM versions





Neglecting maintenance often causes screen media wear and breakage as well as poor efficiency.

for proper operation.

Screen box diagnostics systems can help prolong media life and improve screening by checking and monitoring a machine's health. Use a vibration analysis system to inspect the machine for balance and excessive vibration, which can lead to screen media failure or unintended machine wear. Vibration analysis systems are becoming easier to use. Some of the newest include only a single sensor, no wires and work quickly with a smartphone.

When it's time to remove and replace the screen media, pull off the bar rail or crown liners and inspect the steel bar rails for wear or warping. Best practice is to replace the bar rail liners during each change-out for longer screen media life.

#### **Storage Matters**

Just like it's best to keep the expensive new car out of the harsh elements to lengthen its lifespan, so too should screen media be kept out of harm's way to maximize its effectiveness. Leaving the media in a pile near the screen box



Use a vibration sensor to optimize settings and identify equipment issues early.

structure is convenient, but can lead to wires rusting, something that can reduce durability. Another common issue is screen media on the ground simply being run over by heavy equipment. Wire screens also get damaged when stored standing upright. The best solution to prevent damage during storage is a simple rack that allows crews to hang the screens from the hooks. This prevents damage and improves accessibility by allowing personnel to find the right screen without sifting through a pile of panels. Also, keep extra panels covered and in a well-marked area out of the path of heavy equipment.

#### Screen On

Though minor compared to the rest of an aggregate or mining operation, producers benefit from staying proactive with screen media maintenance. From choosing the right media for the job and installing it correctly, to proper storage and preventative maintenance, treating screen panels right can mean less downtime, fewer headaches and more profits.





# LOCAL SUPPORT ON YOUR DOORSTEP

**DURING THESE UNPRECEDENTED TIMES** 



Contact us today: tws.sales@terex.com www.terex.com/washing

## **McGuires Excavating & Trucking Inc. Upgrade Wash Plant for Increased Capacity**

#### **Family Business**

McGuires Excavating & Trucking Inc. is a family run business located in Terre Haute, Indiana, that has been operating for over 33 years. Established in 1986, the company first started washing aggregates in 2007, producing sand and gravel for the expanding local construction and concrete industry. Earlier this year they made the decision to upgrade their washing plant to allow them to offer a higher volume, and a wider range of high quality materials to their loyal customer base. Through the investment in new Terex Washing Systems (TWS) equipment and technology they have been able to maximise profits and eliminate inefficiencies in their production process. Commenting on the project, Ryan McGuire, Vice President, McGuire's Excavating & Trucking Inc. commented 'Increasing our production and our salable

material was our reason for looking at a new solution. We initially considered a few at different options, however the reason we opted for this TWS washing solution was due to the capability to make multiple sands and aggregates at any one time and in addition the local dealer support on the ground, which was crucial not only for the build, but for the lifecycle of the plant thereafter.



Ryan added 'meeting with both the manufacturer and our local dealer several times reassured us in terms of our final decision. We instantly knew this would be the best relationship for us moving forward."

#### **World Class Support**

Terex Washing Systems (TWS) and their local territory dealer, Powerscreen Crushing and Screening, worked very closely with McGuire's Excavating & Trucking Inc. to provide a solution suited to their needs and desired end products. The solution was specified following several site visits, plant proposals and customer specific design modifications, as well as samples of the feed material being sent for further testing at TWS Headquarters in Dungannon, Northern Ireland.
Commenting on the support, Ryan McGuire commented, 'The support we got directly from TWS and from our dealer has been absolutely amazing."

have a full facility and team based in Louisville, Kentucky, so to easily serve the USA customers alongside their dealer network. The service and support from TWS, along with their distributor, is typical of what customers can expect when purchasing a TWS product. TWS offer their expertise and highly skilled team of engineers to assist and guide the customer from the initial conception to final installation.

Whilst TWS is headquartered in Northern Ireland, they also

#### **Seamlessly Combined**

Designed for the processing of dredged sand and gravel with organics, the TWS washing solution at McGuire's Excavating & Trucking Inc. consists of an AggreSand™ 206 and the AggreScrub™ 150, Industry leading products first launched in 2014. Both products seamlessly combine to form a washing and scrubbing plant to produce 3 clean sized aggregates and 1 or 2 sands. Ryan McGuire commented 'With this new washing solution we have so much flexibility, we can produce 2 sands or 1 sand, and we can adjust spec by blending more fines into the sand, or less fines, based on what specification of sand our customer needs. We also have the capability to make 3 washed aggregates at once, which just makes it a really great plant and meets all of our expectations and more'.

Barry McMenamin, Global Sales Director, TWS commented: "The McGuire's Excavating & Trucking Inc. installation represents our end to end solution offering and demonstrates how our equipment can be seamlessly combined to provide a solution tailored to the customers' needs, so to consistently deliver premium grade sand and aggregates.





#### **Improved Product Quality**

Ryan McGuire went on to explain that the increased demand for high-spec clean aggregates was the major driver in selection of the TWS equipment. Through pre-sale customer visits, understanding the sand production levels that were required, the AggreSand™ 206 was the obvious choice of sand washing equipment. With it's large 20x6 bottom deck, sand production could be maximized while offering flexibility to meet spec across all products.

Through further feed material sampling it became apparent that, to guarantee the aggregate cleanliness, the material would need scrubbed. The AggreScrub™ 150, with its high performance twin shaft logwasher and integrated post rinsing and sizing screen met all the needs in one compact chassis.

The AggreSand™ concept pre-wired & pre-plumbed with quick installation was particularly intriguing to McGuires

Excavating & Trucking Inc. far removed from their previous wash plant. The material to be processed required extra scrubbing, to ensure the desired product was in spec, therefore the AggreScrub<sup>TM</sup> 150 was added as part of this overall solution. It offers increased production capacity and increased levels of access. The seamless combination of the AggreSand<sup>TM</sup> 206 and AggreScrub<sup>TM</sup> provided the extra required capacity.

#### **Reaching New Heights**

The AggreSand™ 206 plant consists of a H12 feed system which is fed by a wheel loader. The feeder is fitted with a 14′ wide hydraulic tipping grid, equipped with 4″ grid bars to scalp off any oversize material in the feed. Both the feeder and grid are powered by the on board 37kW electric hydraulic power-pack. The material transfers from the feeder to the main rinsing screen via a 23m twin-drive feed conveyor with an integrated rubber lined washbox. Here the material is presoaked using a high volume spraybar system which fluidizes material presenting it uniformly onto the 20 x 6 inclined rinsing screen.

#### 2 Decks or 3 Decks

The rinsing screen on the AggreSand™ 206 is available as a 3-deck or 2-deck variant. At McGuire's Excavating & Trucking Inc. the two deck version is fitted with polyurethane modular media on both decks. Each deck utilizes ten individually controlled isolated spray bars to efficiently rinse the aggregate and sand product. From the top deck a washed 'septic stone', + 1 ½", aggregate is sent to stockpile for future crushing and processing. The rinsed material between ¼" − 1 ½" from the mid-size deck is fed to the AggreScrub™ 150 for scrubbing and removal of clay conglomerates.

The 2-Grades of sand are produced through a split bottom deck system, where material is washed through as separate products into a split sump tank, where each sand is then pumped to a dedicated cyclone before finishing on a 14x6 high frequency dewatering screen making a high quality in spec concrete sand, with the ability to switch to make a variety of sands.

#### **Abrasive Scrubbing Action**

The AggreScrub™ 150 combines a combines a high performance twin shaft logwasher, trash screen, sump tank and integrated post rinsing & sizing on one compact chassis.

The AggreScrub™ 150 logwasher consists of a 26ft hull, housing two rotating shafts fitted with abrasion resistant blades and paddles. The blades and paddles convey the material from the feed end of the scrub to the discharge end. As the material travels through the hull the abrasive action of the aggregate colliding and passing through other aggregate (stone on stone) scrubs it clean and breaks up any clay conglomerates which become liberated and then float off through the back of the AggreScrub™. The addition of clean water encourages any organics (such as roots) to flow with the suspended fines and clays out of the hull and on for dewatering over the AggreScrub′s™ 6 x 2 trash screen.

Scrubbed aggregate exits the main discharge of the AggreScrub™ 150 onto a 12x5 2-deck part rinsing screen. This screen is fitted with polyurethane modular media to produce three aggregates standard pea gravels¬¬, specialized pea gravel and oversize (number 8).

The initial section of this screen is fitted with spray bars to rinse off any sand / grit residues produced during the scrubbing process.

A key feature of the AggreScrub™ 150 is the onboard sump tank and centrifugal pump, where

the underflow from the trash screen, and the underflow from the part rinsing screen are captured in this sump tank, then this dirty water is pumped back to the AggreSand™ 206 sand plant for maximum recovery of sand and efficient use of water.

#### **Sand Fit For A Castle**

Using the AggreSand™ 200tph 2-grade sand plant gives the customer maximum control and flexibility in managing the fine sand fraction in the final C33 product while offering the option to make a dedicated in-spec fine sand.

As standard, the AggreSand™ provides the functionality to blend the fine and coarse sand product at the cyclone discharge point, or at the end of the dewatering screen, at the final product discharge chute. In addition to this a third blending opportunity is created via a specially designed rubber-lined catchbox, under the rinsing screen which allows individually operated adjustable division plates to blend more fines into the coarse product or alternatively maximize the bottom deck area availability for the fine sand production.

#### **Cutting Edge Control System**

The on-board HMI control system for this AggreSand™ 206 & AggreScrub™ 150 wash plant is another example of the seamless integration possible with these two plants. Each plant has a dedicated control panel, which is prewired and factory tested. However, when combined the entire plant can be operated and monitored from one single HMI.

For McGuires Excavating & Trucking Inc. the additional feature of having a second HMI located in plant side operator cabin, allows the operator to monitor plant parameters such as water flow rate and pressure, cyclone pressure and motor running information from one location.

Ryan went on to say: "It has given us a great deal of flexibility in the market. We started here with a much smaller washing plant and after looking at the market and the changes, we opted for this solution which has allowed for



more flexibility to better serve the market and demands. It's modular in design, so we can change the modules and we also have the ability to add a larger sand plant if the market changes. Moreover, on the back of that we have built a strong relationship with our local dealer, Powerscreen Crushing and Screening, as well as with TWS. The fantastic thing about the AggreSand ™ is the modular design, allowing us to be flexible and fast in the market and it allows us to react quickly. From start to finish, from the product coming in, the assembly of the build, commissioning, everything has been flawless.'

To find out more or to discuss specific washing requirements, contact us at TWS.Sales@terex.com or visit our dedicated website which provides an overview of the full product offering at www.terex.com/washing



## Rapid and Thalle collaborate to produce both soil cement and high-volume structural concrete using a pugmill

Rapid International Ltd recently commissioned a new Rapidmix 400CW, fully weighed, mobile continuous mixing plant (pugmill) for Thalle Construction Company (A Tully Group Company) in Leonard, Texas. The new Rapidmix is being utilised for the production of high volume structural concrete and soil cement on the \$37 million project to construct raw water storage for the Bois D'Arc Regional Water Treatment Plant.

#### **About Thalle Construction Co**

Established in New York in 1947, Thalle Construction Co offers a wide range of construction and construction material services including dams, landfills, site work, communication technology, and roller compacted concrete. Thalle has been a member of Tully Group since 2012.

## First new major reservoir in Texas in nearly 30 years

The Bois D'Arc Regional Water Treatment Plant forms part of the larger \$1.6 billion Bois D'Arc Reservoir and Regional Water Supply Project by the North Texas Municipal Water District. The project will supply 70 million gallons daily (MGD) initially to customers in North Texas — one of the nation's fastest-growing regions.

The project consists of 1.1 million yards of mass excavation to construct a 262,000.00 SY, 7.6 million gallon raw water storage reservoir, 1. 9 miles of 96" & 90" steel raw water line and 8,000 LF of associated yard piping.

The reservoir will be lined with the latest technology geomembrane and HDP liner covered in 12" soil cement.

Rapid/ Thalle collaboration enables Rapid pugmill to produce high volume structural concrete

Thalle required a mixing solution with the flexibility to produce both high and low slump concrete at volume in one machine.

With a proportionally higher volume of soil cement required (over 100,000 CY versus 6000 CY of structural concrete), the decision was taken to adapt the Rapidmix mobile continuous mixing plant, specifically designed for semi-dry mixes, to enable production of higher slump structural concrete.

The adaptation involved running a water line with admixture ports directly into the discharge hopper and installation of a shoot port with 18" discharge pipe and trunk, allowing the plant to operate in its normal manner. Final mixing is subsequently accomplished in the truck.

Robert Farrow, Project Manager-Thalle Construction Co remarked, "The process has been very successful..." He continued, "Thalle has successfully poured in excess of 800 CY/ day of the structural concrete and looks forward to increasing our production on the soil cement. The project is currently 4 weeks ahead of schedule and below budget."

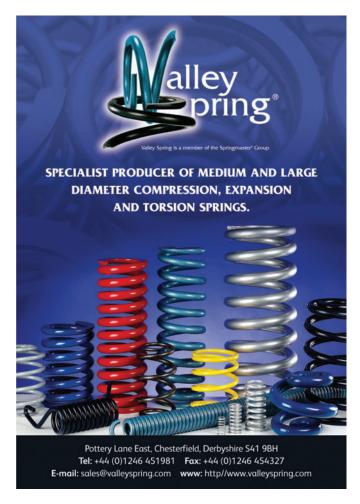
#### **About Rapidmix**

The Rapidmix 400CW plant produces high quality controlled mixtures for utilisation in a range of applications, including RCC (Roller Compacted Concrete), CTB (Cement Treated Base), soil stabilisation, soil cement, bentonite, marine dredging, mine backfill and many more. The mobile nature of the plant combined with the technically advanced design, is most advantageous in meeting the supply and demand requirements on projects. The Rapidmix provides a cost effective solution for on-site projects where high specification compliance coupled with a high volume fast throughput are essential.

Fully mobile and self-contained, the Rapidmix 400CW is a complete plant powered by its own power source, with onboard compressor and generator. Fitted with a self-erecting system, using hydraulics, the plant can change from travel mode to fully operational within a few hours. Available with outputs of up to 600 tonnes per hour, the Rapidmix provides feed rates that are fully adjustable for the aggregate, cement and water systems.

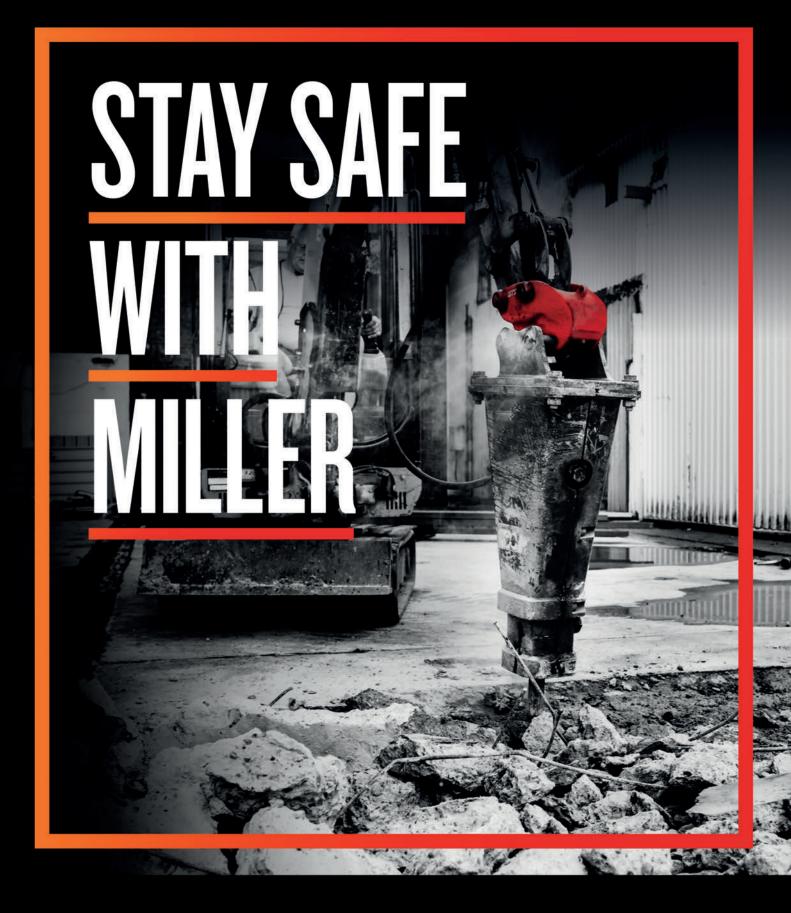
## **HUB Classified Advertising**





#### **Advertisers Index**

ACE	11	MILLER	BACK COVER
BLUE	10	NP STRUCTURES	9
BUNTING	19	QM&S	INSIDE FRONT COVER
CMB	39	QUARRY KING	42
CMS CEPCOR	8	RAPID	27
CRJ	20	SAWARD	51
DERNASEER	42	SANDVIK	FRONT COVER
DEUTZ	13	SMT	28
ELITE	32	SUPERIOR	6
HARPSCREEN	38	TAYLOR & BRAITHWAITE	22 & 36
HAVER & BOECKER	45	TEREX WASHING	47
KIVERCO	31	TURMEC	16
LIEBHERR	12	VALLEY SPRING	51
MB	43		



## COMPACT HYDRAULIC QUICK COUPLER TRANSFORMING ON SITE SAFETY

Make an operator's job site safer with the all new compact GTS hydraulic coupler – a versatile product that removes the need for an operator to leave cab to manually change attachments. Speed up work on site and enjoy more productivity on your project with this innovative hydraulic coupler. Ideal for maintaining social distance and ensuring site safety.

