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If you would like the HUB team to visit your stand at the RWM show please drop us an email to sales@hub-4.com or call David Roberts on 020 3637 0385



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RWM Preview - 2015

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Exciting News from HUB-4.com

Due to the success of the HUB-4 magazine, from January 2016 the magazine will become a Bi-Monthly publication producing 6 issues per year across the Quarrying, Recycling and Bulk Materials Handling Industries.

The magazine has naturally grown in size with exciting editorial features and will continue to be posted out as a quality hard copy publication to 6,200 sites and end users across the UK and we will promote the on-line 'Page-Flip' version by email on each edition launch, allowing our global audience to easily access and view a copy of the magazine. We will also be adding 'Gate-Fold' covers and internal 8 page 'Gate-Fold' specials in the magazine, keep an eye out for those!

To download a full copy of the HUB-4 Media Kit please visit http://hub-4.com/download/content/2/0/





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TO FIND OUT MORE





rapid

Rapid launch its latest innovation - TRAKMIX

Rapid International Ltd. a leading UK manufacturer of concrete, construction and environmental machinery has announced the launch of its latest innovation, TRAKMIX. TRAKMIX is a track mounted, totally mobile and self-contained, fully weighed high volume mixing plant. The recent launch event, attended by many senior figures within the local civil engineering industry, took place at the company's County Armagh headquarters in Northern Ireland in July 2015.

TRAKMIX was designed in response to the growing demand for a mobile continuous mixing plant that provides easy, cost effective transportation and eliminates the need for special transportational permits. Customer demand also indicated a need for a machine providing more options on outputs on a different platform, offering flexibility for a wide range of site types

and applications.

The innovative new TRAKMIX tracked continuous mixing plant is the first of its kind to market. Patent pending features include a superior controls system that weighs all materials and double hopper cement weighing system. Other cutting-edge features include low friction surface lining on hoppers, bottom conveyor for easy cleanout and outloading conveyor for easy discharge.

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

TRAKMIX offers outputs of up to 250 tonnes per hour

via a high volume continuous Rapid twin-shaft mixer and 12.0m³ aggregate hopper, which includes a division plate for two different types of aggregates. The Rapid designed continuous twinshaft mixer (pugmill) is the largest and fastest continuous mixer on the market.







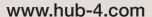
The mixer's specially phased shafts and paddles offer an outstanding homogenous mix for a variety of applications within the concrete, construction and environmental industries.

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

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

A further UK mainland TRAKMIX launch and demo is expected to take place late summer/ early autumn at a site to be confirmed in England.





Handling company at Hull docks chooses Weidemann wheeled loaders for their reliability and speed of operation



A company based at Hull Docks has replaced a pair of wheeled loaders with Weidemann 5080T telescopic boom models for their combination of speed, driver visibility and reliability.

B & A Handling was only established about a year ago but is already on schedule to handle in excess of 300,000 plastic wrapped bales of waste/annum. The loaders are used to firstly unload and stack the bales from around 20 lorries per day arriving at the company's dockside site and then re-handle them in preparation for being transferred two at a time into ship holds by a multi-docker machine.

The bales originate from waste transfer stations and are being shipped principally to Sweden and Denmark where the material is shredded prior to being used as a power station fuel.

When B & A Handling was formed, its initial pair of loaders were soon suffering major gearbox problems caused by the constant forward and reverse travel on hard surfaces. The company therefore decided to look for replacements that featured hydrostatic drive in order to eliminate the expensive problem.

According to Bob Smales, one of the company's two partners, "The articulated Weidemann machines are just the right size for handling the 1.1 tonne bales and in addition to their drive systems standing up well to the job, we have also found they are using about 10% less fuel than the previous models."

In fact, so impressed is Mr. Smales with the performance of his 5080T units that he is now considering the addition of a third machine to the fleet in order to help speed up the ship loading operation.

Supplied by the Selby depot of Russell Group, Weidemann's Yorkshire dealer, the 5080T model is powered by a Perkins 4-cylinder diesel engine developing 86 kW (117 hp) @ 2500 rpm driving and, in its standard UK specification, features a two stage 30 km/h all-wheel drive hydrostatic transmission, boom suspension and cab air-con. The 7200 kg machine has a maximum reach of 5.10 m to the bucket pivot point and features an hydraulic, multi-function joystick control with driving direction switch plus integrated buttons for differential lock and proportional teleboom function.



Striker successfully process construction and demolition (C&D) waste material for Worldwide Holdings Berhad

Striker Crushing & Screening Malaysia was invited by Worldwide Holdings Berhad to a meeting to discuss how to process construction and demolition (C&D) waste material in the state of Selangor. Over the past 5-10 years the practise of illegal dumping of construction and demolition waste had grown dramatically and the state government could see they needed to act quickly to combat the growing problem.

After many months of research and discussion between Striker and WHB it was decided that the C&D waste material could effectively be processed using a picking station with Striker Conveyor system and over belt magnet, Striker JQ1165 jaw crusher and a Striker SC252 screen. The methodology was to feed the raw material onto the conveyor where there would be 6 personnel picking off the conveyor material such as wood, plastic, paper and general waste materials with the magnet removing any steel. The remaining product would then enter the Striker JQ1165 jaw crusher and be crushed down to a -100mm material which is then sent to the Striker SC252 screen to be split into 3 sized products that can then be reused in the construction industry for various applications.

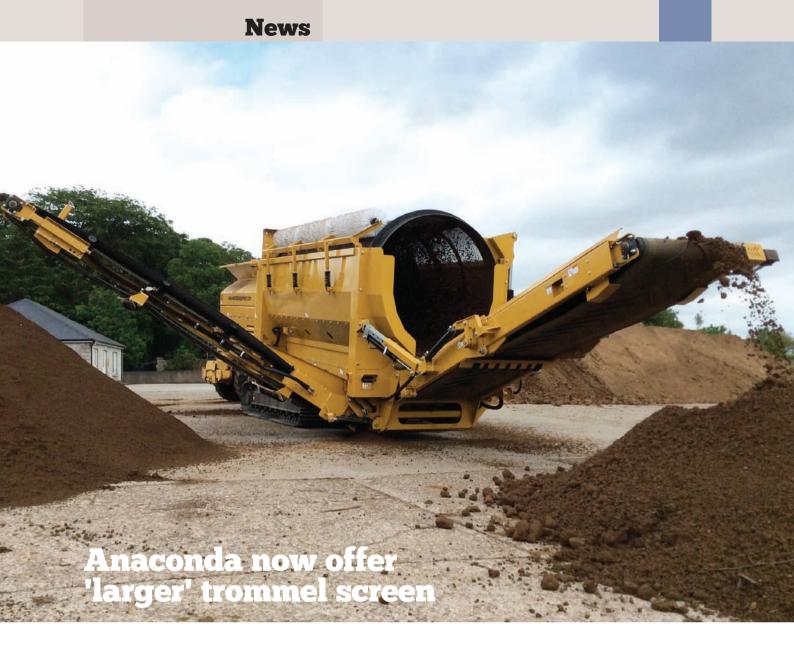


The recycling plant was officially opened earlier this year by the Selangor Government and promoted as 1st class example of recycling in Malaysia that other state governments can follow around the country.

The Striker JQ1165 is one of the most cost-effective jaw crushers on the market. This unit can be used in almost any application whether it be quarrying or recycling. Fitted with a hydrostatic drive, the JQ1165 gives flexibility for the modern contractor and with the usual Striker spec, the machine performs in the toughest of conditions with no fuss.

The Striker SQ2052 is one of the most cost-effective screens on the market today. This unit can be used in a variety of applications whether it be mining, quarrying, sand or recycling. Fitted with the longest screen deck on the market it is ideal for applications where you can never have enough screening area. The SQ2052 gives flexibility for the modern contractor or operator and with the usual high quality Striker machine specification; this machine won't let you down when the work gets difficult.





Anaconda Equipment International, the Northern Ireland based equipment manufacturer to the mining, quarry and recycling industries, are pleased to announce the launch of the TD620 Trommel Screen.

The TD620 model has been introduced following demand from customers who require a machine to handle larger volumes and feed size than those offered by the highly successful TD516. Reflecting their expertise in trommel design/manufacture, Anaconda has launched the TD620 trommel screen specifically for processing materials such as waste, compost, woodchip, soil, and related products.

Fitted as standard with a Tier 3B 124HP (93kW) JCB444 Ecomax engine, the 620 has been designed with an optional dual power system reducing fuel consumption, emissions and noise levels. Tier III and Tier IV and fixed speed genset power units are available.

A modern control panel allows operators to easily configure the machine to suit required applications. The control system features; a drum load sensing system, forward and reverse 4 wheel drum drive with variable speed control and variable speed control on all conveyors to optimize throughput requirements. The load-sensing material feed enables an optimum utilization of the large screening surface.

The TD620 trommel is extremely robust with a high capacity drum suitable for efficiently processing the most difficult

applications from construction & demolition waste to fine soil screening. With numerous screens and drum types available, the TD620 provides exceptional solutions across a range of sectors.

To aid servicing and maintenance on the unit, all conveyors use a modular design, allowing each one to be removed independently. Additionally, a hydraulic lift-out drum gives operators quick drum change thus minimises downtime if changing from one size of screened product to another. Thanks to the modular principle, the basic machine can easily be equipped with a wide choice of options to meet specific requirements.

The overall weight (20T) and dimensions of the TD620 allow for easy transport to anywhere in the world. For maximum mobility and onsite flexibility, the TD620 is available in both wheeled and tracked versions.

Commenting on the latest offering from Anaconda, Operations Director Martin Quinn: "Demand is once again driving us to design and manufacture larger mobile screening products. The TD620 is engineered to offer operators higher levels of production and the ability to feed and process large feed material. The TD620 trommel is another quality product added to the Anaconda range and will provide our dealer network with yet another option to our customers around the globe."





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in











At Sandvik we pride ourselves in the commitment and level of service we provide our customers

Sandvik is a global leader with products renowned for quality, performance and reliability. This is based on excellent products, and unparalleled customer support systems, as even the greatest machinery is only as good as the infrastructure behind it. We want to ensure that, if through natural wear or the unexpected

Effective and high-quality filters bring assurance of a reliable crusher performance. Our genuine filter kits are therefore happening, the parts manufactured to the highest and strictest technical you need are specifications. Trusting in our genuine filters will maintain the available quickly performance customers expect, and protect against and cost unscheduled maintenance, repairs and downtime. effectively. **Flexifeed** With support and export from our SANDVIK

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Customer Support

With productivity, reduction and extended

range of standard thicknesses, aperture shapes, sizes and

patterns, they can be tailored for specific applications and

screens, and optimized to balance demands for high

separation efficiency and long service life.

undeniable benefits. The lifetime of the liner is extended by 20-50% depending on the application, reduction is increased by about 5%, production levels throughout the mantle's lifetime are maintained and at the same time, the top size capability is maintained.

wear in mind, the innovative and patented Flexifeed mantle has

Manganese Wear Parts

Sandvik crushing chamber solutions are based on high-quality products with superior finish, supported by indepth knowledge of every aspect in the crushing process. Our mission is to work together with our customers to achieve the optimal crushing chamber application in terms of performance, cost-effectiveness and results. We offer quick optimization of any crushing process by having a vast selection of crushing chambers available.

Sandvik has multiple alloys to choose from, each with properties meeting your specific needs, for instance increased impact and shock resistance or high resistance to abrasive rocks.

Rubber Liner Kits for Cone Crushers

The Sandvik cone crusher rubber liners efficiently protect machines from damage, considerably reducing the noise and help dampen the vibrations of the crusher. In addition these features lead to reduced operating costs and increased total life time of the crusher and thereby improved total performance.

For further information on our Aftermarket product offerings, please contact:

For further information, please contact: Kimberley Page Senior Marketing Coordinator Office Phone: +44 (0)1283 818163 Fax: +44 (0)1283 818360

E-mail: info.smcuk@sandvik.com

Centre in Swadlincote, UK, we aim to dispatch parts with customers in mind, keeping your downtime to an absolute minimum. With thousands of parts in stock in our Aftermarket facility, you can count on

Genuine Sandvik Spare and Wear Parts to keep your equipment running at peak performance so that downtime is reduced, and this will enable you to lower your operating and running costs.

Our Service teams are here to help and guide our dealers/customers in support of their needs throughout the long, profitable lifetime of their machines. We have two experienced teams which are located within Swadlincote UK, and Ballygawley Ireland, in order to support the global market areas in addition we offer a wide range of Service and Maintenance programs for all products, to suit all customers' requirements.

Our Aftermarket offerings include:

Wear Protection

Sandvik offers a wide and versatile range of wear protection products for numerous and diversified applications. Extended equipment life, safe handling, minimized noise levels, reduced maintenance & operating costs, and easy handling are only a few of the many assets of the top-quality product offering.

Screen Media

Sandvik low-noise screening media are of reinforced, hardwearing rubber or polyurethane for mainly-dry or wet applications respectively. Available in tensioned, pretensioned, modular and self-supporting designs and a wide



Recycled UK, based in Wolverhampton in the West Midlands, is one of the UK's leading providers of total waste management solutions and their ability to recycle many different grades of plastic means that they are able to offer a plastic waste management system to clients in more than ten different industries. Bunting Magnetics Europe Ltd, with the European headquarters in Berkhamsted, Hertfordshire, designs, manufacturers and supplies a wide range of Magnetic Separation and Metal Detection solutions for metal recovery and removal.

Recycled UK was established in 2006 and relocated to their present site in 2009. The plastic received is both from primary manufacturing and secondary recycling channels across the UK. Presently, they handle and process up to 200 tonnes per month of reground plastics.

As with all plastics recycling plants, metal contamination is a serious issue and costs in terms of both production downtime and damage to equipment such as shredders and granulators. The level of metal contamination can vary enormously, but the right protection needs to be in place to prevent damage to costly granulator blades.

Paul Cotton, Production Director of Recycling UK Limited, first met Bunting on their stand at the major UK plastics exhibition, Interplas staged at the NEC in Birmingham in 2014. Paul already had an idea of how to solve the problem and after the exhibition met up with Carlton Hicks, Bunting's UK Sales Manager, on their site in Wolverhampton. The first priority was to install Magnetic Separators on new conveyors.

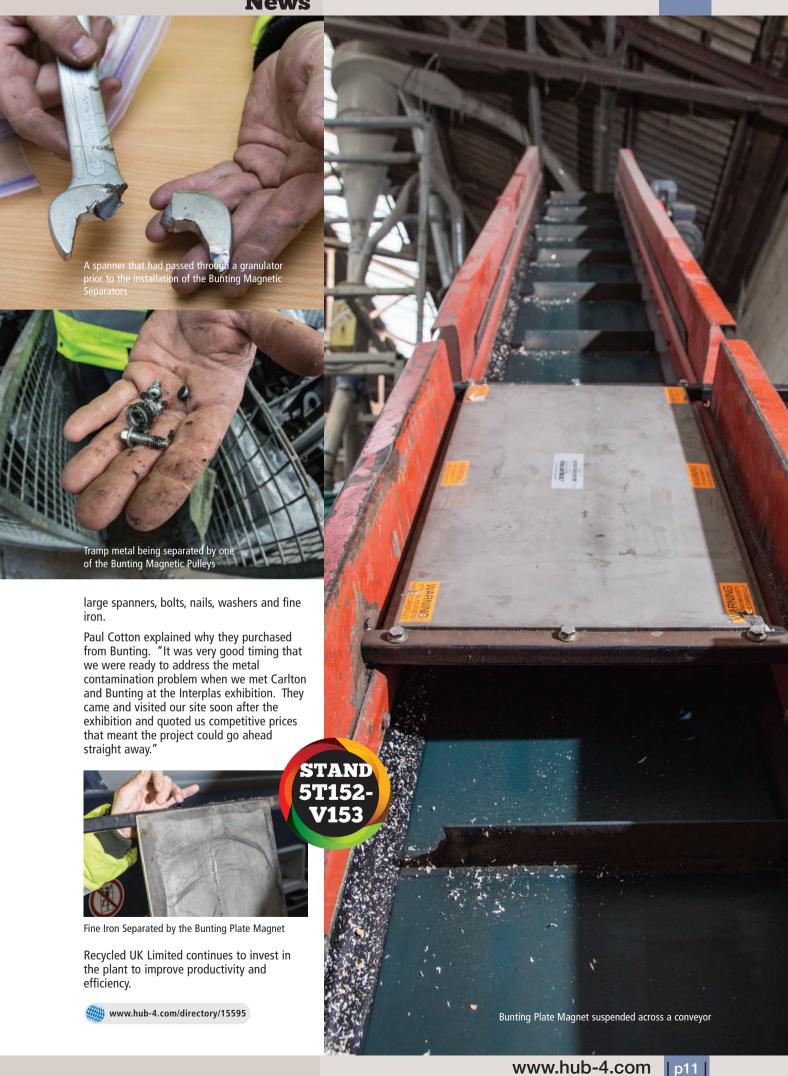
To achieve the best separation, Recycled UK has now installed

two different types of Magnetic Separator. On the end of their conveyors, they have replaced their standard head drive pulleys with Magnetic Pulleys. Material is conveyed up and into the magnetic field of the Magnetic Pulley where ferrous metal is attracted and held to the surface of the belt. Nonmagnetic material continues to fall under its normal trajectory with the captured ferrous metal being held and then discharged into a separate collection bin underneath. The Magnetic Pulley has a diameter of 150mm and is 975mm long. As the Magnetic Pulley replaced the drive pulley, the surface is lagged with 8mm of rubber to provide extra grip. To assist with belt tracking, there is a 15mm groove in the middle of the Magnetic Pulley. This existing belt tracking guide meant that Bunting had to redesign the Magnetic Pulleys to suit the location. The types of metal being removed include long blots, washers, nuts and smaller tramp iron.

Recycled UK also installed 4 Plate Magnets of 3 different sizes. All had flat faces with 2 being 1000mm wide by 300mm long and then others being 700mm by 400mm and 600mm by 300mm. All the 4 Plate Magnets were high strength Rare Earth Magnet models replacing weaker and older Ferrite Magnets. The Plate Magnets have been installed in chutes on the discharge end of conveyors and also suspended over conveyors. The installed Plate Magnets are even removing and capturing fine iron filings from the conveyed plastic.

Since the installation of the Magnetic Pulleys and Plate Magnets there have been no stoppages due to metal contamination. Prior to the installation, large and small metal contamination had been passing through the plant including

News





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Riverside Machinery continues to expand with addition of hire fleet and refurbishment centre.



Riverside Machinery Ltd are pleased to announce the addition of a hire fleet to their business. The hire fleet includes several Portafill Screeners, CityEquip Hook Lift Crusher and a Neuenhauser Star Screen.

John O'Neill comments: "the market has certainly changed for the good and we have found more and more demand for short and long term hire. Our hire fleet consists of all new equipment and full backup and service is provided from our Rotherham depot. We have several screeners available, two of which are tracked washing plants, and several crushers. Hire is available nationwide on short and long term hasis'

In addition to the hire fleet, Riverside Machinery have invested in a workshop with full refurbishment facilities.

John O'Neill comments: "Post recession we have found a number of customers are more inclined towards buying a used machine that is also in good refurbished condition and is going to last a considerable length of time. We now have the facilities in place to refurbish crushers, screeners, etc. to suit all budgets and we always have a stock of quality refurbished equipment from £15,000 and upwards"



Sandvik Construction launches crushing chamber upgrade package



Sandvik Construction has launched Optiagg - a new way to secure more profitable cone crusher output with minimal investment. The Optiagg package includes computer modeling and analysis in addition to a redesigned mantle, a concave ring and all other required spare parts.

With Optiagg, Sandvik Construction offers a new dimension in operational support for its crusher models CH430, CH440 and CH660. The mantle has been completely redesigned for higher efficiency, but the real difference is in the computer modeling and analysis. It's a scientific approach that secures more of the most valuable fractions without costly trial and error.

Tailored improvements

Optiagg takes the guesswork out of optimizing crusher performance. There's a step-by-step process that includes analysis of the current conditions, modeling to identify the optimal configuration and setup, and validation of the outcome. The chamber setup can be fine-tuned according to the desired output and the specific demands of the application. Typically, customers want to gain more of a specific fraction while either reducing the level of fines or increasing the reduction ratio. Sandvik can give a clear prediction of the gains that can be expected.

The resulting improvements are predictable and consistent, enabling an accurate economic forecast for the crusher's output. In most cases, the investment will pay for itself within a short timeframe.

Jesper Persson, VP Crusher Spare & Wear Parts, Sandvik Construction says: "Optiagg is not just a new product - it's a completely new approach that enables us to deliver what the customer wants with greater certainty. We can promise predictably more truckloads of the most valuable fractions. The customers who tested Optiagg were amazed when they calculated their potential annual gains. If you have a Sandvik crusher, it's truly a no-brainer.'

Additional savings

Optimizing output in this way can result in a number of further potential benefits, including reduced wear and tear on the mantle and concave ring, as well as possible energy savings.



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Hewitt Robins International Ltd have developed a range of products designed to maximise profits in the quarrying, mining, recycling, iron, steel and foundry industries. All of which share the build, quality and reliability for which Hewitt Robins is renowned for all over the world over.



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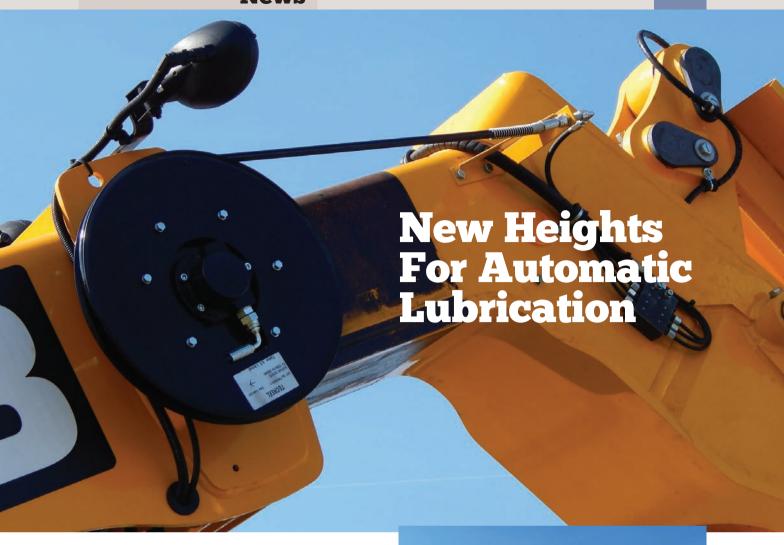
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TIMKEN ILS Limited has developed a New and Unique method of feeding grease to lubrication points at the front end of a Telehandler, known within the Industry as the "Stock Head".

The "Stock Head" is at the end of an extendable boom and all the grease points in this part of the machine have previously been manually lubricated due to the extension and retraction movement of the boom itself. Lubrication points that are to be manually lubricated at the end of a shift are often forgotten. In the case of rented machines the likelihood of these points ever being lubricated is extremely low.

As proven and reported by many leading bearing manufacturers the majority of pin/bush & bearing failures is due to lack of adequate lubrication which as a result causes machine down time, costly repairs and loss in productivity.

Now with the New Timken's (SGR) "Self retracting Grease Reel" all the lubrication points including the "Stock Head" can be automatically lubricated from one grease pump as the machine is operating. Together with the proven HDI grease pump, SPL progressive divider valves and SGR attachment all points are lubricated with precise amounts of grease at pre determined intervals.

Timken ILS has developed a truly unique combination that will as a consequence help to save money for Telehandler owners and Rental companies. The working life will be improved and brings added value to the price of machines fitted with this system.

This is a WIN - WIN situation.
For further information please send all enquiries to:
Mark Barrett E-mail: MBarrett@interlubesystems.com
Timken ILS Limited









MAXIMUS TO UNIVEIL NEW 1100 JAW & 1000 CONE



Maximus Crushing & Screening, the fastest growing Crushing & Screening company in the world, will host their customer open day event to officially launch their new 1100 Jaw and 1000 Cone Crusher. The event will be held in the JCB Quarry in Staffordshire on Wednesday 14th October and will be a "ONE DAY ONLY" opportunity for customers to come and view a range of our new and already established equipment on

established equipment on demonstration. The 518T screen and 516 scalper will also be working on site - come see how these machines conform to a wide range of applications.

Our experienced team of engineering, applications and specialist technicians will be on hand to discuss specific Crushing & Screening requirements.

ACCESS WILL BE "INVITE ONLY" SO DON'T MISS OUT ON THIS FANTASTIC OPPORTUNITY. TO GET YOURS, EMAIL LOUISE@MAXIMUSSCREENING.COM

MXJ-1100 JAW CRUSHER

The MXJ-1100 is a high performance compact jaw crusher designed to handle a wide range of applications from hard stone to landfill recycling. The MXJ-1100 crusher provides the latest technology in heavy duty crusher design that delivers high production, large feed opening, complete with hydraulic management (gap adjustment and safety release system, patented N.S.S. = Non Stop System).

MXC-1000 CONE CRUSHER

The MXC - 1000 is a modern cast steel all roller bearing cone crusher which features hydraulic adjustment. It enables the operator to rapidly change the the discharge setting, if necessary, during the crushing operation. The modern design of the MXC-1000 provides easy access for service and maintenance with ground level access to all major operational and



service features. The unique engine and transmission arrangement brings routine maintenance within easy reach without ladders and walkways. Fueling, operation and filter changes are all carried out at a low level.

The hydraulics of the MXC-1000 incorporate tramp metal release, automatic reset and an unblocking feature which will clear the crushing chamber in a matter of minutes.





516 SCALPER

The Maximus 516 is a heavy duty, high capacity scalper capable of screening a wide variety of material. It is designed to cope with the heaviest applications and can be used in construction and demolition waste, primary crusher circuits, iron ore, aggregates, coal, recycling, heavy rock and topsoil.

FOR MORE INFORMATION VISIT:

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To wash or not to wash?

That is the question. Or maybe not.

Terex Washing Systems (TWS) Mobile Rinsers let you decide that another day, or indeed to change your mind every day. The TWS M-Series range offers no-compromise mobile screening with the ability to operate either wet or dry with quick and easy change from dry to washing duty.

- Loose crusher run today and a need for maximum sub-base production? You have the right machine.
- Clay contaminated seams tomorrow and a need for high quality concrete aggregates? You have the right machine.
- Need in-spec washed sand from an all-in feed? Partner your M-Series with our FM120C cyclone-based sand washing unit or T150 bucket wheel dewaterer and you have a high performance and extremely versatile sand washing system with minimal site preparation required.





TWS M-Series mobile rinsers have repeatedly proven their merit in applications ranging from construction and demolition waste to iron ore mining, concrete and building materials production, industrial sands processing, contract crushing lines and civil engineering projects. In each case, whether working directly for a site owner-operator or as part of a rental fleet, the extreme ease of deployment, set-up, operation and maintenance has delivered sector defining return on investment and consistently high quality product on the ground.

Choose between 4 core unit sizes with screens up to 20'x5', 2 and 3 deck options and a choice of Tier 3 / Tier 4 and dual power capability. With some versions offering your choice of either wheel or track mounted configuration you can even select how to bring it to your material.

The only real question is which of the series to buy. 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





TEREX.

Raymond Brown open new recycling centre



Coinciding with the inauguration ceremony for their materials recycling facility (MRF) with the Mayor of Test Valley undertaking the ribbon cutting, the company recently held an open day event for all local residents, councillors and 100 school children. With invite in hand the HUB team went along to view their new £1.1 million recycling centre in Southampton.

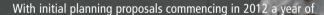
Prior to the opening the local school children from Nursling Primary and Fairisle Junior Schools, had been invited to use their imagination and come up with some poster designs for two skip trucks. The Directors announced the winners whose designs are now displayed on the truck cabs, and presented them all with a £10 book voucher each. This involvement and subsequent site tour proved to be very educational for the children who learnt the importance of recycling.

Given a tour of the new facility by Steve Cole - Environmental and Development Director of Raymond Brown Aggregates and Waste Solutions, we learnt the history of the site and its development over the previous 15 years.



Steve, commented, "The 3.5 acre site had originally been a gravel pit which had exhausted its reserves. 15 years ago we took over from Drinkwater Sabey and SITA who were involved in construction demolition and recycling waste with a number of other activities including importing aggregates so it was operating as a depot as well."

"Ten years ago we secured a temporary permission for inert recycling on the site to formalise when the new regulations on waste treatment and waste recycling came into force. We had a permit for recycling and when we applied for renewalwe were only awarded a temporary licence again. Further discussions took place with the Mineral Planning Authority over the future for the site. We went back and had discussions with the local community, advising them that we were keen to establish a permanent site and change the certificate of lawful use from temporary to permanent. We were very upfront with the local community which allowed us to acquire the permission for a permanent facility which subsequently allowed us to make the investment."





News

development and consultation with stakeholders followed with Hampshire County Council providing advice, suggestions and modifications to the application including a Raymond Brown funded wood management plan.

Working with their landlord - Broadlands Estate, the company also negotiated a long lease which allows the operating division - Raymond Brown Waste Solutions the opportunity to develop the site.

The new materials recycling centre will process up to 75,000 tonnes of non-hazardous commercial and industrial waste per annum. It is one of two satellite sites that the company operate with the second at Chilton; with the main hub operation located at the Enviropark at Barton Stacey where there is a large 24 hr/day MRF operation.

It also gives the company the opportunity to promote their skip business to a wider market delivering an efficient tip and collect service which allows customers to tip inert material whilst collecting quality recycled and primary aggregates, ready-mixed concrete and soil at the same time.

A bright future lies ahead for Raymond Brown Waste Solutions with increased recycling rates and the promotion of waste recycling in the local community and further increasing employment opportunities.

RAYMOND BROWN

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WELCOME TO TEE

INTRODUCING NEW TEE EQUIPMENT









VISIT TEE BOOTH #5Y150 NEC - BIRMINGHAM 15-17 SEPTEMBER 2015









a new swan neck conveyor solution, designed and manufactured by recycling engineering specialists Middleton Engineering.

Operating 24/7 as part of Biffa Polymers' milk bottle processing line for post-consumer plastics, the new conveyor is designed to feed material at up to 2 tonnes per hour or 50 tonnes per day, transporting it from a high-speed electronic sorting unit that removes non-compliant material, to leave a clean HDPE waste stream, then up into the granulator. Chopped HDPE is then heated, extruded and cut into pellets and sold on for blow moulding new dairy bottles and other commodities

The new conveyor was required following modifications to the granulator. It has been designed by Middletons to provide a consistent feed of material, to minimise previous spillage issues between the conveyor and the granulator and overcome overloading and jamming at the foot of the conveyor.

Middletons undertook a series of product trials at their manufacturing centre in Somerset using scrap HDPE bottles to determine the optimal design for the conveyor, including the size of vertical rubber flights to deliver material to the granulator at the right speed and volume to keep the line working at maximum efficiency. Ease of access for scheduled cleaning and maintenance were also important design considerations for Biffa to allow debris to be removed and preventative maintenance to be carried out at required weekly intervals.

Martin Brass, Engineering and Maintenance Manager at Biffa Polymers said: "We visited a number of Middleton customer sites before selecting the company to design and install the

new conveyor. It's running well and the team reacted very promptly to initial issues with the rubber belt untracking, making permanent design modifications following our input. The plant is up and running following an earlier major refit and we continue to lead the market in closing the loop on post-consumer plastics recycling.

On the back of this, Middleton Engineering has been awarded a further contract to design and supply a second conveyor to form part of a new milk bottle bale breaking system at Biffa Polymers. Bales of plastic bottles arriving at the plant will then be broken open by the machine and transported through an opening into the building on the new belt conveyor, which rises from the floor at an angle of 31 degrees to feed downstream processing. With an overall length of 10.5m the conveyor includes a fully adjustable safety rope pull system, an automatic chain lubricator, soft start to minimise wear and speed controls to optimise flow rates. The exterior section of the conveyor is covered.

Middleton Engineering specialises in bespoke engineering solutions for the recycling industry and has been supplying balers and recycling equipment to Biffa for over 15 years, including sites in Bradford, Cardiff, Grimsby, Hull, Dewsbury and the Isle of Wight.



New Cat[®] MH3037 Wheeled Material Handler Features Advanced Powertrain, Powerful and Efficient Hydraulics, and Ground-Level Entry

The new Cat® MH3037 is the first in a series of the new wheeled material handler line that Caterpillar is introducing in the greater than 25-metric ton size class. The new material handlers are purpose-built from the ground up to work productively and durably in industrial, scrap recycling, millyard and waterway applications, while affording maximum protection and convenience for the operator. The patented Cat ground-level-entry/exit design features a step-in cab that lowers to the front or the side of the machine to enhance convenience and safety for operators and service personnel.

The MH3037 has an operating weight of 39 500 kg (87,083 lb.) and is powered by a Cat C7.1 ACERT™ engine that meets US EPA Tier 4 Final/EU Stage IV emission standards. The engine features an electronically controlled, mechanically actuated, unit-injector fuel system that uses multiple-injection fuel delivery for optimum power and economy in all operating situations. The MH3037 configuration is rated at 225 horsepower (168 kW).

High-strength structural steel and advanced welding techniques ensure structural integrity. A powerful hydraulic system provides rapid response with efficiency, and new serviceability features simplify maintenance. These design elements combine to provide low-cost operation and maximum value for MH3037 owners.

plates to eliminate the need for seams and internal baffles. The upper frame is designed specifically to dissipate loads transferred through the front linkage and counterweight, and the lower frame has a unique tapered design for evenly distributing loads and reducing stress. Oversized pins and bushings strengthen pivot points. In addition, extensive finite element analysis and strain-gauge testing throughout the design process help ensure long term durability. Along with an 8.8-m (29 ft.) boom, the MH3037 can be equipped with a short 5.8 m (19 ft.) version or a longer 7.2 m (23.5 ft.) front configuration to best fit the application.

The MH3037 uses a closed-center, one-pump, load-sensing implement hydraulic system with electro-hydraulic pilot control. The hydraulic pump generates only as much oil flow and pressure as required for the application, yielding powerful, rapid response and fuel-saving efficiency. To further enhance overall hydraulic power and efficiency, the machine regenerates boom-down oil flow, reducing the volume of oil the pump must produce.

Reflecting the precise hydraulic design, the MH3037 divides hydraulic functions between the upper and lower main control valves, with the upper valve managing the boom, stick, work tools, cab riser and cooling circuits, and the lower valve controlling travel, steering and outriggers. This design provides optimal flow management that allows multiple, simultaneous machine functions without compromising performance. An independent, closed-loop, hydraulic swing system maintains swing priority at all times.



The hydraulic oil cooler, engine air-to-air aftercooler (ATAAC). and engine radiator are all mounted side-by-side to reduce clogging caused by airborne debris and to provide better access for cleaning when necessary. The auto-reversing fan used in the hydraulic cooling system ensures that optimum temperatures between 54°C and 60°C (130°F-140°F) are maintained, protecting oil quality, extending component life and promoting optimum machine performance.

The powertrain of the MH3037 incorporates limited-slip differentials on both the front and rear axles to provide true all-wheel-drive performance. A variable displacement hydraulic motor, coupled with a two-speed transmission, provides high- and low-speed travel and creeper-speed capability. An oscillating rear axle with an oscillation lock provides the capability to work on-rubber in rough, uneven terrain, maintaining stability without stabilizers deployed.

Operator safety and convenience

The hydraulic cab-riser system allows cab height to be adjusted up to an eye level of 5.5 m (18 ft.). Raise time from ground level to maximum height is approximately 8 seconds; lowering time from maximum height to ground level is 10 seconds. Adjustable sensors control the height of the cab above the ground, and manual override valves in the cab and at ground level allow the cab to be lowered in the event of engine power loss, ensuring that the operator can exit safely at ground level.

The MH3037 can be equipped with an optional impactabsorbing, falling-objects guarding system (FOGS). This includes a top guard to protect the operator from falling debris and a front guard to protect from flying debris in the work area. An adjustable, close-proximity stick limiter reduces the risk of work tool contact with the cab, and load-holding valves on hydraulic cylinders prevent sudden uncontrolled drop of the boom, stick, cab, or stabilizers in the event of a failed hydraulic hose. The cab also includes a polycarbonate skylight, removable panels, and a rear window that serves as an emergency exit.

Images from the standard rearview camera are displayed via a high-definition color monitor. A separate monitor displays operating parameters, starting fluid levels, machine warnings, and activated work functions. The system

allows operators to set functions according to preference and provides maintenance reminders, diagnostic capabilities, and out-of-specification alerts.

Work functions are conveniently controlled with joysticks, as is steering control. Using joystick controls in lieu of a steering wheel enables operators to experience smoother, faster production and creates better sight lines to the work area.

Serviceability and work tools

Durable fiberglass gull-wing panels supported by gas-filled cylinders provide ready access to routine maintenance points in spacious, lighted compartments. Service panels are located on the top, left, and right side of the machine. Handrails and anti-slip surfaces help technicians perform their work safely and efficiently.

Greaseless bearings in the cab-riser linkage reduce maintenance, and an upper auto-lube system lubricates critical areas based on runtime. The machine is set at the factory to dispense grease every 15 minutes of machine use. The lower is manually lubricated from a central grease point located behind the lower control valve on the carbody frame.

To assist customers in improving jobsite efficiency, lowering owning and operating costs and managing the MH3037 for optimum return on investment, Cat Connect offers LINK and DETECT technologies. Product Link™ allows fleet owners to wirelessly track machine location, hours, fuel consumption, idle time, events codes, and diagnostic codes via the online VisionLink® user interface. A rear vision camera greatly enhances job site visibility to help the operator work more productively.

The MH3037 can handle a variety of work tools. The machine features medium-pressure flow from a separate valve for tool rotation and a high-pressure circuit from the main pump to operate the open/close functions of typical tools, such as orange-peel grapples, clamshells, and log grapples. A separate pump is used to provide hydraulic power for operating an available scrap-magnet generator. The generator features a patented Cat solid-state magnet controller that eliminates typical maintenance issues and is supported and warranted through Cat dealers.



MH3037 Material Handler Specifications

Engine model	Cat 7.1 ACERT
Rated power (ISO 9249, net)	168 kW (225 hp)
Operating weight (without work tool)	39 500 kg (87,083 lb)
Operating weight (with 4-tine orange peel grapple GSH425)	41 059 kg (90,520 lb)
Hydraulic flow, main pump	481 L/min (127 gal./min)
Hydraulic flow, swing pump	129 L/min (34 gal./min)
System pressure	31 716 kPa (4,600 psi)
Max. reach - horizontal (long front)	15.9 m (52 ft)
Max. reach - vertical (long front)	17.7 m (58 ft)
Max. travel speed	20 km/h (12.4 mph)
Max. swing speed	7.6 rpm
Max. swing torque	84 kN m (62,000 lbf/ft)

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RWM 2015 - Europe's largest event for resource efficiency and waste management RWM

15-17 September 2015, NEC Birmingham, UK



Operators Hub

An exciting new feature of this year's exhibition will be the Operators Hub in hall 5, which will cater for MRF operators, skip hire companies, scrap metal dealers, fleet operators and those involved in the day-to-day handling of waste and materials. Sponsored by Stadler, the Hub will be the meeting place for everyone involved in the hands-on management of waste and resources, and the showcase of all the latest advancements.

Topics covered will include a bite sized review of the latest technology, working practices and regulations to help recycling businesses successfully navigate the challenges of today's market. Business leaders and decision makers will be making their way to the Operators Hub to discover the best options for the coming years, and the show is always a great place to do

As well as the large exhibition area featuring all the latest machinery, there will also be a dedicated conference theatre in the Operators Hub. Speakers will be sharing relevant and practical advice through presentations and discussion panels, and delegates will have the chance to ask burning questions of all the experts.

Key themes in the Operators Hub Theatre at **RWM 2015 include:**

Tuesday 15th September

- Fleet optimisation review: Sharing services and making savings using improved waste route performance.
- EDOC: Understanding and meeting Electronic Duty of Care requirements.
- The operation of a fully automated MSW recycling and AD biogas facility in Norway.
- The best defence is good offence: Top tips in effectively negotiating the regulatory landscape and improve safety performance.
- Health and Safety: Being compliant and inspection ready.

Wednesday 16th September

- Landfill Directive impact on skip hire and recycling companies.
- Examining success in complying with Trommell fines Loss on Ignition (LOI) testing - what has been the impact?
- Sourcing effective kit: Finding cost-effective baling, reprocessing, screening, shredding and sorting equipment for upgrades that deliver improved efficient services.
- Profitable, efficient and compliant waste management processes: What works on reduced budgets?

Thursday 17th September

- How to make money out of the materials in your plant and pay less Landfill Tax.
- Getting the best out of your fleet: Reviews on what works.
- Machinery technology review: Introducing Zen Robotics.

All the plant and equipment for the waste and recycling industry

Throughout the exhibition, machinery and equipment designed to help keep materials in the loop and retain the value in resources will be centre-stage, as well as handling and logistics solutions that minimise the environmental impact of recycling. An increasing number of companies are doing business at their RWM exhibition stand.

The Machinery and Equipment Zone will provide a platform for hundreds of suppliers with the latest products and services for construction and demolition waste, to commercial waste containers, sorting systems and heavy plant equipment, all exhibiting their latest developments. The full range of kit used by the industry will be on display, with key exhibitors including Blue Group, JCB, Hyva, Easikit Conveyors, Hammel, and Poundfield Products.

Moving through the exit at the side of hall 5 to the Outside Area, visitors will be able to see first-hand the larger plant and equipment that is changing the face of the waste management



RWM Exhibitor Preview

industry. The Outside Area is set to be bigger and better than ever before, with some of the most forward-thinking equipment manufacturers showcasing their latest advancements. Some of the companies exhibiting here include Finning UK, Liugong, McCloskey International, First Grade Recycling Systems, and Baughans Recycling Equipment.

Processing innovations

RWM has always dedicated a large part of the show to machinery, equipment, handling, logistics, recycling and reprocessing, and energy recovery.

New technologies are coming to market throughout the year, and RWM provides the platform to market them to the right audience. From commercial waste containers and sorting systems to heavy plant and machinery, hundreds of suppliers will be exhibiting their latest developments.

The Handling and Logistics Zone. adjacent to the Machinery and Equipment Zone, will have on display world-class solutions for improved operational, management and strategic supply chain

performance. Increasing efficiencies whilst preserving resources is now a proven way for businesses to flourish, and this year's show will demonstrate the smart enabling technologies on the market today.

New and improved recycling and reprocessing capabilities will also be on show, with many of the biggest players in the field alongside new and emerging businesses. The Energy from Waste Zone will also be highlighting the increased efficiencies for recovering energy from materials through anaerobic digestion, incineration, gasification and some more novel approaches.

The Energy from Waste Theatre sponsored by Mitsubishi Electric will host debates around policy, government support and investor confidence in thermal treatment technologies, with speakers including Dominic Noel-Johnson, Vice President of the UK Green Investment Bank, Birger Lauersen, Manager of International Affairs for the Danish District Heating Association; and Dick Hoogendoorn, Managing Director of the **Dutch Waste Management Association.**



International attraction

RWM attracts decision-makers, buyers and investors from across the globe, making it the ideal opportunity to meet the right partners. Last year, one in ten attendees to RWM was from outside the UK, and more exhibitors took orders on their stands than ever before. This year will see new as well as regular international exhibitors from countries including Austria, Germany, Italy, Japan, Portugal and the United States.

The UK Trade and Investment (UKTI) International Business Theatre will again bring together UKTI Commercial Officers, International Trade Advisors and UK companies to give first hand bespoke advice about doing business overseas. Information can be viewed on the RWM website and there will be plenty more in store for those business looking to go global for the first time.

RWM Exhibitor Preview



- Machinery and equipment where visitors will get an immediate sense of the sheer size and breadth of the technologies available on the market. From the latest products and services for construction and demolition waste to commercial waste containers, sorting systems and heavy plant equipment, hundreds of suppliers will be exhibiting their latest developments.
- Handling and logistics zone showcases a broad range of bespoke materials handling and logistics services and solutions to help companies build and manage world-class supply chains and improve operational, management and strategic performance.
- Recycling and reprocessing technologies zone, bringing to life the environmental and financial benefits of recycling. An immense range of products and services will be on show to help organisations achieve zero waste to landfill.
- Energy from waste zone, which highlights the increasing capabilities and efficiencies for recovering energy from materials including anaerobic digestion, incineration, and gasification.
- Professional services from consulting on resource management plans to recruiting the right people to implement it.
- Circular Economy Connect Zone and Theatre: This year's programme, chaired by environmental journalist, Maxine Perella, features companies that have already adopted circular economy principles, helping to inspire the whole supply chain.

This year's sponsors include SUEZ environnement as industry partner for the Circular Economy Connect zone; Mitsubishi Electric as lead sponsor of the Energy from Waste Theatre; Novelis; Viridor; Stobart Biomass; TOMRA Sorting and technical partner Stadler.

Leading from the front

This year RWM in partnership with the Chartered Institution of Wastes Management will be working with consultants Carbon Clear to assess the event's carbon footprint. The data will be used to offset unavoidable carbon impacts of the show.

Working closely with its suppliers, exhibitors and visitors, a number of measures have already been implemented by RWM to reduce on-site waste at the event, held annually at the National Exhibition Centre (NEC). This includes using recycled and recyclable carpets and shell schemes, re-using the electrics system, hiring furniture which is re-used at other events and

of re-board signage which is made from recycled and recyclable cardboard.

Since 2012 the event venue, the NEC has sent zero waste to landfill and last year achieved an overall recycling rate of 75.2%, with over 80% of waste from RWM being recycled. These figures show what can be achieved when the right partners work together on shared sustainability goals, and a three-year programme is helping to shape plans that will set RWM as a global exemplar in sustainable event management.

Significant strides are being made in the right direction and RWM along with CIWM invites its partners to help deliver on those ambitions. All suppliers, visitors and exhibitors are encouraged to adopt greener practices, thereby contributing to the sustainability goals for RWM.

Exhibitors therefore not only have the opportunity to showcase their technologies, processes and business capabilities, but also their understanding and commitment to a greener future.

Finally, as part of RWM's mission to support industry growth and innovation, RWM 2015 in partnership with the Chartered Institution of Wastes Management has launched a 'Rising Stars' campaign. The competition will celebrate trailblazing initiatives that challenge the way the recycling industry works, identify the top 5 newcomers and support the resource managers of the future.

Entries are welcomed from individuals who have introduced new resource management recycling practices within the last five years that are helping to transform the industry. Small changes can make a big difference, so no matter the scale of the initiative, candidates will be judged on how effective and transformative the change has been for their organisation and the industry as a whole.

Over the coming months RWM will be reviewing entries to announce the Top 5. Three finalists will be asked to present to a panel of judges at RWM2015 for the chance to win a valuable CIWM training package and funding towards their initiative worth over £2,000.

For more information about Europe's largest and bestestablished event for resource efficiency and waste management visit www.rwmexhibition.com, call +44 (0) 203 033 2049 or email info@rwmexhibition.com



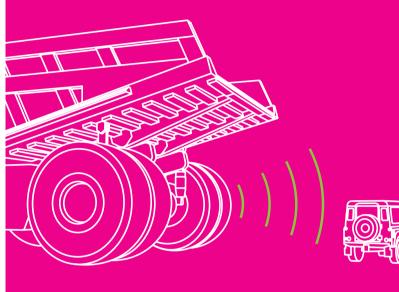
Due to the success of the HUB-4 magazine, from January 2016 the magazine will become a Bi-Monthly publication producing 6 issues per year across the Quarrying, Recycling and Bulk Materials Handling Industries.

The magazine has naturally grown in size with exciting editorial features and will continue to be posted out as a quality hard copy publication to 6,200 sites and end users across the UK and we will promote the on-line 'Page-Flip' version by email on each edition launch, allowing our global audience to easily access and view a copy of the magazine. We will also be adding 'Gate-Fold' covers and internal 8 page 'Gate-Fold' specials in the magazine, keep an eye out for those!

To download a full copy of the **HUB-4 Media Kit please visit** http://hub-4.com /download/content/2/0/

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Taking Ownership MENTOR



September is an important month for safety when it comes to the use of forklift trucks.

With all the on-going issues that face those working alongside this equipment every ingle day - the near misses, injuries, accidents and damage to stock, racking and trucks - the Fork Lift Truck Association's annual Safety Week campaign has grown into a National Safety Month with the hope that it can reach more businesses and prevent more

This year's theme is 'see danger, speak up', so - with this is mind - how can businesses go about growing their 'safety culture'?

Well, as referenced in July's article, the figures show there's certainly still much to be done to keep operators and, in particular, their colleagues on foot, safe from harm.

Regardless of their job role, people can only truly work safely when they are able to recognise the dangers associated with forklift operations, understand what they mean for them and, perhaps most importantly, know how to respond appropriately.

For non-operators, while this may be covered as part of an induction or on an ad-hoc basis, it's clear that there are many sites where they are left in the dark.

But, even when workers are informed, the nature of day to day operations means that work can be routine and repetitive, making it easy for complacency and bad habits to creep in...whether you're operating a lift truck or working alongside them. And once this happens, it can soon create a workplace where dangerous behaviour becomes the norm.

Raise awareness of the risks

Forklift safety awareness training goes a long way towards providing workers with the vital knowledge required to keep themselves and their colleagues safe, and a good course will be hard-hitting, not only highlighting bad practice but targeting the behaviour at its root.

It need not be drawn out, expensive or overly technical; after all, it's not driver training or even refresher training. It just needs to be enough to refocus everyone's attention.

Those on foot need to know enough to keep themselves and their colleagues out of danger and there seems to be a misconception that this is just common sense. But if you've never been trained to use a forklift, how would you know what is dangerous practice? You probably wouldn't.

And for operators - who have received prior training and are already well aware of the risks - an awareness course will remind them of the serious consequences of bad practice, and their legal and moral responsibilities.

Take a holistic approach

Establishing and maintaining a safe working environment needs everyone on the same page, taking ownership of FLT safety and sharing that same positive attitude towards upholding best practice.

This level of expertise, however, isn't just 'picked up' and awareness training alone is not enough. Creating real, longlasting change requires a holistic approach, from the top to the bottom of your company, where all staff are provided the skills and knowledge to be confident and committed enough to proactively encourage good practice.

It takes a real sustained commitment, but your investment will pay dividends in terms of lasting results to staff morale and safety, as well as contributing to your bottom line. After all, the safest operations are the most productive ones.

To find out how Mentor's Safely Working with Lift Trucks course can help your organisation, visit www.mentortraining.co.uk today.

In association with the FLTA, Mentor have developed an online Attitude and Behaviour Test and Manager's Checklist and Best Practice Guidance Notes - two invaluable tools of benefit to businesses in any industry whose operations involve forklift trucks.

For more information visit the FLTA (www.fork-truck.org.uk) or Mentor (www.mentortraining.co.uk) websites, but act quickly, the test is only available throughout September.







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JCB to showcase new Wastemaster machine at **RWM 2015**



JCB will be showcasing the latest in its extensive waste and recycling range - the brand new 457 Wastemaster Wheeled Loading Shovel - at this year's RWM at the NEC, Birmingham.

The 457 is packed full of new features that enhance user productivity, profitability and safety, including a Tier 4 Final emissions compliant engine, with fuel efficiency gains of up to 16%, and completely new JCB CommandPlus Cab.

The robust Wastemaster machines come with legendary JCB build quality and dependability and are tailor-made for the materials managed by the industry. Each machine is developed to perform in typical waste site conditions.

JCB has been providing machines dedicated to the needs of the waste recycling industry for more than 30 years and it offers the largest range of machines dedicated to rehandling. Come along to stand 5P20-R21, where you can also see the 560-80 Wastemaster Loadall and 35D 4x4 Wastemaster Teletruk, to see which JCB machine is for you.



Chain + Conveyor to showcase latest range of drop forged chain at **RWM 2015**



Engineered chain specialists Chain + Conveyor will be back at this years RWM showcasing a new range of drop forged chain from European manufacturer Sircatene.

Widely used in bulk material conveying such as grain, coal, timber and particularly waste management and available with a variety of special attachments & flights, this extensive range of drop forged chains have a high resistance to corrosion and excessive wear making them a particularly efficient choice.

A regular at RWM, Europe's largest event for resource efficiency and waste management, Chain + Conveyor will be back for their 9th year and with samples from a broad range of high performance conveyor and elevator chain, including that of Sircatene and Donghua, for whom Chain + Conveyor remain sole UK stockist.

Speaking about the show, Chain + Conveyor's Partner and General Manager Damian Swindells commented, 'This year we've expanded our event activity but RWM remains a key part of it and it's the perfect exhibition to be launching this new range to an audience for which it is of particular benefit.' 'As the only stockist in the UK, we're very excited that Sircatene will also be with us at the show to talk to visitors about the clear advantages associated with it.'

Also making a return to the show is their popular Sprocket of Fortune game where visitors can spin to win a number of fantastic prizes.

Specialists from Chain + Conveyor's technical sales team and representatives from Sircatene will be on hand throughout the 3 day event at stand 5T81 in Hall 5. For more information you can contact them on 01565 830747 or visit

www.chainandconveyor.com



Terex Environmental Equipment the Complete Equipment Provider

In the twelve months which have passed since the last RWM show there is no doubt that Terex Environmental Equipment (TEE) have delivered on their business strategy to be a Global Leader in the Wood Processing and Recycling Industries. Up to 2014 the TEE product range was predominately focused on North American biomass sales through the production facility in Farwell Michigan, however, in the background plans were in place to complete the biomass range and rapidly assemble a full recycling product portfolio to give a truly global product offering. The acquisitions of U.S. based Continental Biomass Industries (CBI) and Austrian based Neuson Ecotec, combined with the launch of numerous new recycling products from the facility in Northern Ireland have allowed TEE to realise these ambitious targets.

For over a quarter century, CBI has defined the biomass processing industry with world-class machinery and equipment designed around customer preferences. "Over the last few years, Terex has looked at a lot of potential acquisitions and one of the main attractions of CBI was its product and brand reputation," said TEE Business Line Director Tony Devlin. "The throughput and reliability of CBI products is legendary and we really wanted to buy a company that has the best products. The team at CBI are a passionate bunch and that really

The acquisition of Neuson Ecotec Environmental Technology was a significant development in the recycling and compost equipment plans for TEE. With products incorporating the renowned TIM Range of shredders and trommels, this acquisition gave TEE additional chipping, shredding, screening, and composting products and was a perfect fit to the portfolio.

While the acquisition activity was happening TEE engineering were busy designing and testing the recycling equipment needed to complete the range. The launch of the TDS 820 double shaft slow speed shredder and TTS 620 trommel was quickly followed by the much anticipated TDS V20, Medium speed shredder. This unique machine within the industry combines medium speed technology with an end product

sizing screen and an

intelligent protection

system. This highlight

offer existing

recycling

equipment

but to shape

the industry

TEE's desire to not only





TEE also offers a range of waste handlers, recycling screens and high capacity trommels guaranteeing all customer requirements are met.

This complete product offering is sold via the Terex Ecotec division of TEE, a carefully selected dealer network has been assembled to support customers with quick availability of machines, spare parts and fully trained service technicians.

Terex Ecotec is one of three main divisions making up TEE, the Tree Care Division has a comprehensive range of hand fed chippers, skid steer loaders and stump grinders primarily used by tree-care specialists, utility line maintenance, and construction / landscaping contractors.

While CBI specialist high capacity mobile equipment and customengineered static solutions are supplied through the 'CBI a Terex Brand' division of the



TEE fully understand the importance of listening to customer needs and responding to the ever changing requirements of the wood processing and recycling industries. A relentless focus on Research & Development will ensure that further new products will be launched in 2016 and TEE will continue to push these industries to new levels.

Terex Ecotec will be holding an open day on the 30th September 2015, in Mitcham, London. There will be an exciting lineup of Ecotec products, live demos and any opportunity to learn more about Ecotec products. To register for this event please visit our website www.terex.com/environmentalequipment or contact steven.aiken@terex.com





Blue Group supply new Westeria AIRBASIC to save costs for Peak Waste in Derbyshire

The HUB recently visited Peak Waste near Ashbourne in Derbyshire where Blue have recently installed a new Westeria AIRBASIC air separator, as part of their overall recycling facility. Peak Waste take in the majority of C&D and mixed municipal waste across Derbyshire having their own fleet of 35 refuge and skip vehicles, each dropping several times per day into the huge facility. Here the lighter waste is then shredded, and passed over a picking line where as much as possible is separated. It then goes through a large 40mm trommel and the extracted <40mm material is fed onto a conveyor and loaded into a Powerscreen Warrior 1400 Screen. The process here is to run the material over a 35mm screendeck, taking >35mm out, and then whatever is left is passed over the tail conveyor for stock piling and baling as RDF for export to Holland.

Underneath the 35mm screen there is a 10mm screen which takes out everything smaller than 10mm, giving an inert product. Now here's the interesting bit, previously the 10-35mm material would have ultimately had to go to landfill, costing a considerable amount. However now, this material is loaded into the Westeria AIRBASIC where it goes through an air separation process taking out the lighter material which is blown onto a roller and out via a conveyor. This lighter material is then baled as

The heavier waste material falls down onto another conveyor and is then taken out via a side conveyor. This heavier fraction material is then passed over a flip-flow screen for final separation and is then sold as rubble to local companies, meaning that nothing needs to go to landfill and actually there is a small revenue stream from that 'rubble' product.

We spoke with Richard Martin, one of the Directors at Peak Waste, "We are currently processing between 45 to 50 tonnes per day through the Westeria ande are very pleased with what the machine is achieving. Firstly we are getting around 20 tonnes per day of aggregate which is being sold for £5 per tonne, however the main benefit is the quality of the RFD material that remains. And of course it means nothing has to go to landfill, meaning a saving of over £80 per tonne in landfill

We've dealt with Blue for over 18 years now, and are extremely happy with the service we receive. Their advice on new machines and technologies greatly assist us in the overall recycling process."



Richard Martin showing the heavier material coming from the Westeria

Airbasic

Mobile - compact - independent!

Airbasic is part of a new generation of air separator technology. It is the result of innovative advancements in the patented Westeria air separator technology. Hundreds of improved details and new ideas combine to provide a persuasive next step for mobile air separator technology.

Fields of Application - Individual settings

The variable settings for the acceleration belt speed, tilt and dram distance in conjunction with additional settings such as flow rate, spray angle and opening gap of the blow nozzle make for optimum separation of everything from RDF to construction waste.



The final 'rubble' product after going through the final flip-flow screen

Material separation / processing of:

- Construction waste
- Glass
- Compost
- Scrap

- Mixed construction site waste
- Wood
- Commercial waste
- Incinerator slag

Equipment

- Sturdy base frame for optimum mobility
- Pipe supports mechanically adjustable for height
- Feeder belt with material distribution for optimum separator results
- Reversible output belt for heavy fraction waste
- Conveyor belts with integrated impact tables on the inlets
- Easy-to-operate application control with large touch screen
- Optional fully automatic setting of the air separator according to formulas
- Construction advantages
- Simple, sturdy setting of the air separator feeder belt via cable winches as a result, no fixed spindle jacks
- Integrated air hose for cleaning the machine
- Sufficient revision gaps to facilitate maintenance and cleaning tasks
- Separator drum with optional Hardox design
- Process air recirculation through the roof segments, resulting in minimised dust emission
- Very large air inlet grille in the expansion chamber with large maintenance flaps for cleaning
- Optimised construction for standard transport via lorry or ships





Daniel Tomlinson of Blue, with Richard Martin, Director of Peak Waste

For more information on Blue and the range of Westeria products please visit www.blue-group.com or call blue group on 0345 217 8755

AIRBASIC



www.hub-4.com/directory/2260

MEXCETIA

Riverside Machinery are gearing up for RWM 2015

With less than 2 weeks to the largest recycling exhibition of the year, Riverside Machinery Ltd are eagerly anticipating a busy show.

Riverside Machinery, sole UK dealers for Portafill, Neuenhauser and CityEquip will be on Stand 5R125 at the RWM Exhibition, NEC, 15th-17th September.

John O'Neill comments: "this is one of most most important trade shows of the year and we are expecting great results from show. On the stand we will have several products including a Neuenhauser Star Screen, Portafill Tracked Screener and City Equip Hook Lift Crusher"





Harris/IPS and Jarshire at RWM 2015 - stand no 5R60

Together with Jarshire Ltd, distributor for UK/Ireland, market-leading two-ram baler manufacturers Harris and IPS will be exhibiting on the same stand for the first time outside America at RWM 2015. Harris purchased IPS in 2014, and shortly afterwards appointed Jarshire, IPS's existing sales distributor, to represent both ranges.

Harris/IPS and Jarshire will focus their presence at RWM on their market-leading range of two-ram balers, over 100 of which are in operation in the UK and Ireland. On offer is the widest range of two-ram balers available anywhere in the world including 'entry level' 40 HP machines for throughputs of around 2-4 tph depending on material, extending to 200 HP wide-box machines capable of handling over 50 tph.

Of particular interest to processors of multiple or more difficult grades is the option of a pre-compression lid, available on many machines in the range. Depending on grades, the lid is proven to provide a dramatic increase in production rates, as well as reducing wear on liners and knives.



For customers looking for maximum output across a wide range of materials, the unique IPS/Harris BT model incorporates an extended bale chamber that allows a bale to be ejected while the next is being made. Available with either 100 HP or 200 HP power-packs, throughputs in excess of 50 tph for some materials are claimed for this machine.

In addition to two-ram balers, Harris/IPS also offers a comprehensive range of open- and closed-end horizontal balers, as well as shears, shredders and balers for ferrous and non-ferrous metals.

Harris/IPS has its own parts and service operation in the UK. Working closely with Jarshire, they offer full installation, commissioning, trouble-shooting, parts & service support for all machines in the area.

Staff from Jarshire and Harris/IPS will be on hand throughout the show to discuss customers' requirements in detail.







Extensive stocks of chain, slats & sprockets + a team of unrivalled experts

We hold the UK's biggest stock of replacement conveyor chain, slats and sprockets for the Waste & Recycling sector, so we WILL have what you need, WHEN you need it. What's more, with industry leading technical support and over 90 years combined experience supplying major OEM's across the UK & Ireland, you're guaranteed a solution that's right for you every single time. So next time you need replacement chain, think Chain+Conveyor

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Bruce Tackle Burning Issue of LOI

Bruce engineering of Cookstown, Northern Ireland are a well established manufacturer of aggregates and waste processing plants. Due to demand from existing and new customers in the skip hire industry Bruce now offer a wet/dry trommel fines clean up system to help clients achieve compliance with increasingly demanding Loss of Ignition regulations. Materials traditionally taken to landfill are now no longer admissible at the gate of the local tip because they contain amounts of non inert contaminants. The argument is that these materials contain too much contamination to qualify as inert (even if derived from C&D or construction waste streams) and therefore should attract higher rates of landfill taxation. These levels of contamination are ascertained by taking samples of the product and burning anything within the sample that will burn. The weight of the sample is compared pre and post firing to establish what percentage of weight loss has been achieved. Hence, loss of Ignition.

The ruling

After 1 April 2015, landfill operators will also be required to conduct LOI (loss of ignition) tests on qualifying (lower-rate) fines received from every waste processor disposing fines at the landfill site, and for each of their processes producing qualifying fines.

The sample of fines tested must be representative of the whole quantity and must:

- be taken from across the whole quantity of fines (i.e. top, middle and bottom);
- include a composite (master) sample from a mix of random subsamples taken from at least six or more places across the whole quantity of fines; and
- ensure sub-samples are thoroughly mixed to ensure that a representative one kilogramme (1kg) composite mix is sent for testing.

A second representative sample of the fines will also need to be taken to retain in records.

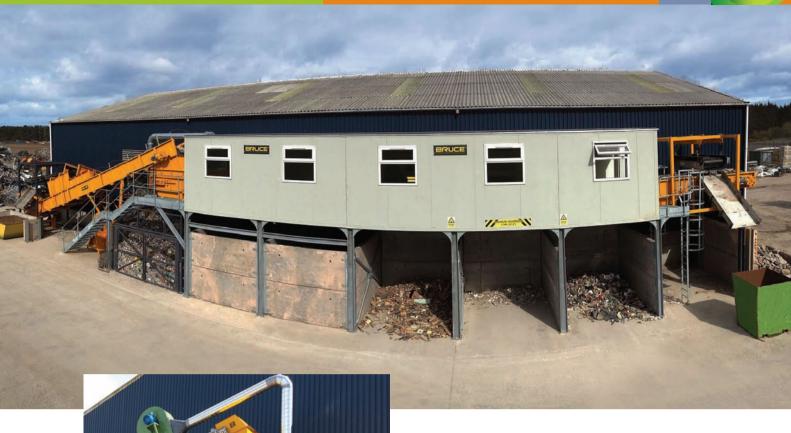
The LOI test must then be undertaken to determine the organic content of material and will inform whether the waste is liable to the lower rate of landfill tax or not (however, this is not the only determining factor).

For this test, the 1kg sample must:

- be air dried until 'constant mass' is achieved:
- be coned and quartered to establish a 100 gramme subsample that must be ground to a particle size of 2 millimetres or less to produce a homogenous sample; and
- subjected to a standard LOI test on 20 grammes of the homegenous ground sample, at a temperature of 440 degrees Celsius for five hours.

These will be categorised as low medium or high





Low category will be less than 8% (less than 12 % up to 31st March 2016) 1 load / 1000 loads to one received or every 6 months whichever is first . The last 20 LOI results must be below the LOI threshold.

Medium category will be between 8 & 10 % (12 to 15% up to 31st March 2016) 1 load / 500 loads of fines received or 3 months whichever is first.

High category will be over 10% (15% up to 31st March 2016) 1 load / 20 loads of fines received or 3 months

> whichever is first. In this high category every load must be tested.

So, over a certain percentage and the material does not qualify as having enough naturally arising or inert content to be tipped at the low rate of tax. The implications of this are dramatic for the balance sheet. On costs for disposal of these materials may rise by as much as £100 per tonne! (Dependant on geographic influences). Now, £100 pounds isn't much in today's money but do the maths:

You produce a nominal amount of fines per hour while you are processing, say 20-40 tonnes. Let's say in a smaller operation that only has to run for half a day to process their heavy skips that's a minimum of 80 tonnes per shift, times 5 working days equals 400 tonnes, times the nominal £100 extra costs if the material does not comply. Unbelievably, that's an estimated £40,000 per week to find. So that's a big issue for any size of operation and more importantly, try getting the average householder never mind one of your key commercial accounts to view the value of a skip at £500 plus.

Therefore, the waste industry has been given an unsavoury challenge; clean your fines for combustible, non naturally arising materials or close the gates. This is where various manufacturers may be able to help with all sorts of screening and air separation options but the truth about the characteristics of these waste streams is that they are consistently inconsistent. For example, set an air system up to blow lights from heavies and you have to have a close ratio between your largest and smallest particles in order to avoid blowing smaller heavy, inert particles with combustibles, so you may need several costly wind sifters. You also have to remove fines prior to density separation and typically this will have to be done at a very small aperture to avoid contamination even after costly reprocessing.

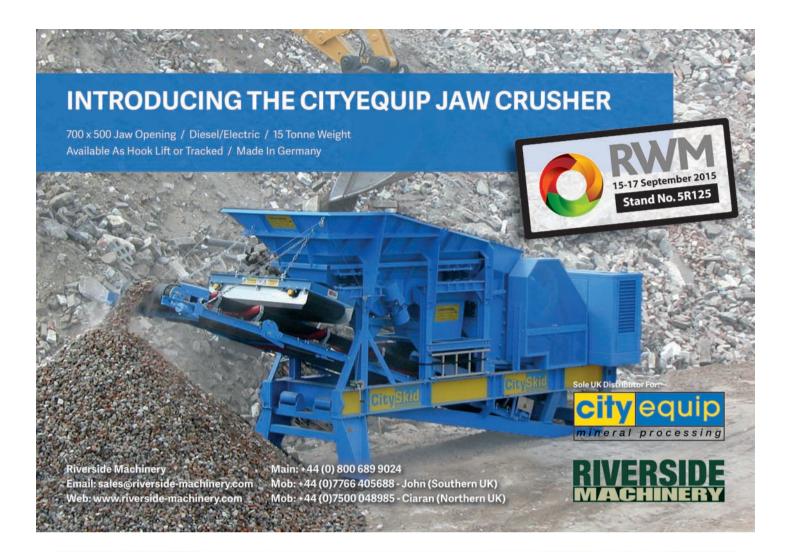
The same can be said for water floatation; some items float and other which appear to have the same characteristics don't. The whole thing is very frustrating if you are desperate to find a solution.

Bruce have come up with the simplest resolution to the problem in recent installations.

They leave nothing to chance by first; screening the product to remove fines (flip-flow, star, vibratory, trommel, dependant on moisture content, throughput, budget) Dry air separation to remove lighter fraction which might become water logged and sink. Wet separation to remove larger floating objects. So far customers say they are extremely happy with results.

For further information call 02886763684 or email sales@bruce-eng.co.uk





ENGINEERING EXCELLENCE



The Greenbank Group UK We're coming to you at RWM...



Our team of expert engineers will be out in force over the three days of the show, bringing with them a wealth of experience when it comes to delivering engineering solutions to the recycling and waste management industry.

They'll bring with them extensive knowledge in the development of wear protection and continuous weighing systems that are already playing a vital role in a number of recycling plants, as well as in heavy industry and power stations across the globe.

Our proven products and bespoke solutions are ideal for handling particularly abrasive substances such as:

WASTE DERIVED FUEL FOSSIL FUELS AND WOODY BIOMASS

MINERALS, SILICAS AND CEMENT PARTICULATE

WASTE FUEL, ASH AND DUST

To arrange a visit to your stand at the show from one of our team, or to set up a meeting at your plant, just call 01283 817200 and ask for a member of the RWM Contact Team or email info@greenbankgroup.com.

A screening bucket helps saves time and money on Hydro Electric Power Installations in the Scottish Highlands

A REMU Screening Bucket from Worsley Plant has helped Wyvis Plant & Power Ltd to save time, money and the environment in the Hydro **Electric Power Industry in the Scottish** Highlands.



Wyvis Plant & Power Ltd is a family owned business based in Strathpeffer Ross-shire, Scotland. It is presently run by two brothers, Ian & Alan Stewart. The company was established in 1968 by their father Kenneth. They specialize in installing Hydro Électric Power Stations for their customers.

Hydro Electric Power now accounts for around 12% of all Scotland's electricity, and over half of Scotland's hydroelectric schemes are in the Highlands and Islands area. Currently there are around 145 hydro schemes of various sizes operating in Scotland.

What is Hydro Electric Power?

Hydroelectricity is the term referring to electricity generated by hydropower; the production of electrical power through the use of the gravitational force of falling or flowing water. It is the most widely used form of renewable energy in the world today. Whilst a lot of focus has recently been on wind and solar, hydroelectricity offers Scotland significant energy capacity for the future.

Many of the Hydro Electric Power stations that Wyvis Plant work on are in hard to reach areas of the Scottish Highlands, where accessibility to the site is often poor. Roads are located high up in the mountains and moving plant and vehicles is difficult. The potential to take materials off site and bring in new material is a lot harder.

With some projects involving laying pipeline of over 1km in length, there is a lot of material being excavated, followed later by the need to backfill the newly laid pipes. Wyvis Plant could see the potential benefit of screening material on site. This would mean material could be reused, rather than taken off and bought onto site.

Alan researched screening buckets and was aware, from events he had attended, that Sean Heron, MD of Worsley Plant recommended REMU buckets as the best on the UK market. He made contact with David Marshall, Worsley Plant's Area Sales Manager for Scotland, and made the decision to purchase a REMU EX140, which Wyvis Plant are now reaping the benefits of using on their 14t and 18t excavators.

The cost savings achieved when material from an excavation is screened on-site and used in the padding process of pipe





excavation makes this the fastest growing application for the screening bucket. On-site bucket screening increases the time that machinery is used for profitable work by eliminating down time associated with waiting for the next truck to arrive with

Alan, of Wyvis Plant says: "The REMU screening bucket has saved us considerable time, as well as transportation and material costs. The nature of our work, with the difficult site access, means that recycling materials not only makes the job more cost effective, but is also kinder to the environment. We are extremely pleased with how the REMU bucket works. Even with sticky material it performs well when others wouldn't. Being in the Scottish Highlands material is often damp with a high clay content and the REMU bucket hits the mark.

When working with a screening bucket, you can screen the material from the excavation, and:

- Use it for padding
- Dump the oversized material on top of the padding
- Even finalize the landscaping by using the topsoil from the

David Marshall, Area Sales Manager for Scotland, has been instrumental in setting up Worsley Plant's Scottish Depot, which is now based at Glenfoot Farm in Tillicoultry, Clackmannanshire. This will allow us to be more focused on the needs of our Scottish customer's and increase our response times on service and delivery.



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Liebherr to exhibit two specialist materials handling machines at RWM

Liebherr-Great Britain Limited is exhibiting once again at RWM inside Stand Number 5P10-R11. On display will be two specialist materials handling machines from the company's comprehensive range of equipment, designed and factory built for municipal and commercial waste management, transfer stations, recycling operations and secondary metals handling.

The LH22 on display is equipped with a straight boom 5.5 m and a 3.5 m industrial stick with tipping kinematics as well as a Liebherr 0.75 m³ sorting grab with perforated shells.

Other features of the machine configuration are the operator's cab with hydraulic height adjustment as well as the four outrigger supports at the front and rear. With this working attachment, the LH 22 M Litronic is optimally equipped for recycling and sorting tasks.

The LH 22 M Litronic material handling machine combines comfort, performance and reliability. Furthermore, it offers the winning combination of ground-breaking fuel efficiency, high lift capacity and long reach distances.

The L538 offers end users a high degree of flexibility and productivity thanks to the enhanced hydrostatic drivetrain from Liebherr. The hydrostatic transmission coupled to the unique positioning of the six litre engine, to the very rear of the machine, allows higher tipping loads to be achieved with a lower overall operating weight which ultimately leads to lower fuel consumption and higher productivity.

Brake life is significantly increased on the Liebherr range of wheeled loaders thanks to the hydraulic braking action of the driveline resulting in lower operational and repair costs.

The hydrostatic driveline also incorporates the newly developed Liebherr Power Efficiency (LPE) system which optimises the interaction between the drive components increasing efficiency and has resulted in an 8% saving in fuel use compared to Tier3 engine technology. The machine software takes the electronic signal from the accelerator pedal and calculates the most efficient way of putting that command into practice. Linked with continuously adjusted tractive forces, wheel spin is almost eliminated resulting in reduced tyre wear of almost 25%.



Waste & Recycling Day at JCB World Headquarters

The HUB were recently invited with a selection of European press to attend the JCB Waste and Recycling Day at the World Headquarters in Staffordshire. After giving the press a sneak preview of the new JCB 457 Wastemaster Tier 4 Final which will be officially launched at RWM, they were treated to a complete tour of the Heavy Products factory and then immersed in the 'History of JCB Exhibition', a must see when at JCB HQ. LiveLink, JCB's new telematic fleet management system was also presented and integrated into the presentations, which offers fleet managers and machine owners additional data to help them reduce fuel consumption and operating costs, while improving utilisation and machine productivity.

Then it was live action with a performance at their nearby JCB Quarry where a selection of waste and recycling machines were put through their paces in true and entertaining JCB choreographed style. These included the new 5CXWM backhoe loader, the 560-80 Wastemaster Telehandler, the versatile 20-tonne JS20MH Waste Handler, the new JCB 457 Wastemaster, the 35D 4x4 TeleTruck which has the ability to manoeuvre in very tight spaces and the 86c mini excavator.

JCB has been supplying dedicated waste and recycling machines since 1983, when the 528 Landfill Compactor was launched. Recognising the opportunities in, and needs of, this sector JCB then launched the renowned Wastemaster brand in 2001. There are now 35 Wastemaster machines - the largest range in the sector - designed and built especially for use in the waste and recycling industry, including wheeled and tracked materials handlers, and telescopic handlers and loaders.

5CXWM backhoe loader

JCB's new 5CXWM backhoe loader delivers unprecedented levels of efficiency, versatility and cost savings and is perfect for household waste recycling centres, transfer stations, sorting, shredding or baling facilities.

560-80 Wastemaster Telehandler

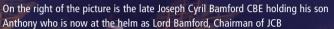
The high capacity 560-80 Wastemaster is a heavy duty machine engineered for arduous waste management applications, which has a six tonne maximum lift capacity. It has been designed as a telehandler with wheeled loader performance and can lift to a maximum height of 7.9m (25' 11"). Its two-stage boom carries a heavy-duty implement carriage, with a broader boom nose.

JS20MH Waste Handler

The versatility and durability of JCB's first dedicated material handler for waste and recycling is proving a hit the world over. The 20-tonne JS20MH is winning customers from across the globe, from the UK to Australia, from Venezuela to Puerto Rico as well as France, Germany and Italy. Powered by the 93kW (125hp) JCB Tier 4 interim compliant Ecomax engine and fitted with a dedicated 5.7 metre straight boom, the JS20MH is tailor-made for excellent material handling performance. The machine can be fitted with either a 4m 'goose neck' dipper for maximum reach, or a 3.6 m material handling dipper for extra attachment versatility.

The press launch of the new JCB 457 Wastemaster







The JCB Experience



- Officially launched at this year's RWM

The powerful JCB 457WM is the first machine to show off the completely new cab structure, engine cover and rear counterweight design, all of which contribute to improved visibility, lower noise levels, increased internal space and an enhanced working environment for the operator.

The 457 Wastemaster can be tailored precisely to the needs of waste and recycling with the addition of high visibility red and white chevrons, additional cab air filtration, rear object detection system, on-board automatic fire suppression system and puncture proof tyres to eliminate machine downtime. >

In addition, the 457WM is the first large JCB wheeled loader to meet Tier 4 Final emissions standards, with the adoption of a powerful MTU diesel engine that is perfectly matched to the machine's operating duties. The engine contributes to a massive fuel saving of around 16% compared to the previous model. As with other JCB machines, the engine in the 457WM meets Tier 4 Final without the need for a costly diesel particulate filter (DPF), relying on an efficient combustion process, with a selective catalytic reduction (SCR) system and an exhaust fluid additive to meet the regulations.

New JCB CommandPlus cab - The 457WM is the first machine from JCB to utilise the company's next generation JCB CommandPlus cab. With operators at waste and recycling sites regularly spending all day in their machine, huge focus has been put on providing the best in cab comfort. The totally new ROPS structure has A pillars that have been moved out to the same width as the rear of the cab, providing a larger interior with a panoramic front windscreen. The machine features JCB's Command Driving Position, with revised pedals, a new adjustable steering column and seat-mounted hydraulic controls.





All switches and auxiliary controls have been repositioned on the right hand A pillar, providing the operator with a simplified interior and easy access to all machine controls. The 457WM has two full colour LCD screens, one in the central console and a second at the top of the right hand A pillar. This second screen incorporates access to the loader's operating menus and acts as a monitor for the machine's rear view camera.



The JCB CommandPlus cab delivers increased internal space as the heating, ventilation and air conditioning system has been repositioned outside the main cab structure. This provides additional storage for the operator, both behind the seat and in pockets in the front and side consoles. The new cab, in combination with the MTU engine, a hydraulicallydriven on-demand cooling fan and the repositioned air conditioning system, contributes to a huge reduction in internal noise levels, from 71dB(A) to a class-leading 67dB(A).

Operators also benefit from LED lighting all round and the option of electrically adjustable and heated mirrors, for maximum visibility in all operating conditions. The rear view mirrors are now mounted in front of the repositioned A pillars, making it easier for the operator to see all around the machine. The cab door is hinged at the front, allowing easier access and exit from the machine for the operator from the steps. This also makes it easier for technicians to access the engine for regular maintenance and service work.

More Power, Lower Emissions - The JCB 457 Wastemaster is powered by a 7.7-litre MTU Tier 4 Final engine, delivering 193kW (258hp), up from 186kW (250hp) on the previous machine, despite the smaller engine capacity. More importantly, the engine delivers this increased output at lower rated engine revs, cutting fuel consumption, noise and emissions. JCB has also fine-tuned the match between engine, torque converter and transmission, to perfectly match the engine with both the standard four-speed and optional five-speed transmissions. This has resulted in fuel efficiency gains of up to 16%. As with other JCB machines, the 457WM achieves Tier 4 Final emissions standards without the requirement for a costly and complex DPF. This reduces cost and service time for customers, increasing uptime and profitability.

The most visible change to the 457WM, aside from the new cab, is the adoption of a sloping one-piece engine canopy. This engine cover can be electrically raised away from the cab to provide improved access to the engine and drivetrain for regular maintenance. The rear section can also be hinged away from the machine to provide access to the cooling pack, which now features a swing-out hydraulically-driven, on-demand cooling fan

situated at the rear of the machine.

The new JCB wheeled loader design, with improved operator environment, easy access to regular service points and class-leading levels of comfort and control, will be adopted by smaller models in the line as they move to Tier 4 Final emissions standards over the coming months.

The Tier 4 JCB 457 Wastemaster will come as standard with JCB's LiveLink telematic system. This provides fleet managers and owners with remote access to real-time fuel consumption and machine working data, including operating hours and fault codes. JCB LiveLink also allows customers to set working hour curfews, outside of which the machine will not function, along with geo-fencing. This permits the owner to set a geographical area in which the machine can work. If the loader is taken out of this area it will not start, preventing theft from site.

JCB, the world's third largest construction equipment brand, has 22 plants on four continents: 12 in the UK, six in India and others in Brazil, the USA, China and employs more than 12,000 people worldwide. JCB has been supplying dedicated waste and recycling machines since 1983, when the 528 Landfill Compactor was launched. Recognising the opportunities in, and needs of, this sector JCB then launched the renowned Wastemaster brand in 2001. There are now 35 Wastemaster machines - the largest range in the sector designed and built especially for use in the waste and recycling industry, including wheeled and tracked materials handlers, and telescopic handlers and

loaders.







JCB 560-80 Wastemaster Telehandler













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KTR manufacture high quality flexible shaft-to-shaft and flywheel couplings for diesel engine and hydraulic pump connections: standard and bespoke flanges and housings available for SAE standard and non-standard dimensions. KTR also manufacture a range of oil/air blast coolers and hydraulic power pack components.

www.ktr.com

Metberg Enviro Launches

NEW trommel

Metberg Enviro, the Northern Ireland based portable conveyor manufacturer to the mining, quarrying and recycling industries are pleased to announce the launch of the Metberg Enviro 3000 series Trommel Screen.

The 3000 series Trommel has been introduced following demand from customers who require a machine that is compact mobile and able to handle volume and feed size. Metberg Enviro Sales Director Jody Kinghan said "We are excited to add these two NEW machines to our existing product portfolio. We have listened to our customers and dealers worldwide and both products are full of new features. The W3000 /T3000 trommel will continue to push the boundaries in the mobile screening industry. The launch of the new machines follows a stringent development cycle having been tested and proven in a diverse range of product applications and we have every confidence that these machines will be a success".

The New 3000 series trommel is the ultimate in modern design, offering operators unrivalled application flexibility, production rates and serviceability. A highly efficient engine (CAT 2.2 Turbo) and hydraulic drive system offers maximum production combined with minimum costs. It is ideally suited for screening compost, biomass, soil and gravel, and waste.

With a rapid setup time of just 5 minutes, special consideration has been given to minimize change out time for the screening drum and the interchangeable screen mesh. The process which takes a matter of minutes places the Metberg Enviro trommel as a market leader.

Unprecedented levels of service access, catapults the Metberg Enviro 3000 series trommel into a league of its own. All conveyors are built to a modular design allowing each one to be removed independently for ease of maintenance.

Hinged doors on both sides of the drum offers unobstructed access for maintenance and cleaning. The machine has been designed to run at a low engine RPM reducing fuel usage emissions and noise levels.

Tackling the volume of waste going to landfill has been an issue for waste companies for many years. As the landfill tax has increased the effort to recycle has intensified with millions being spent on equipment to help recover anything that has value. For some it means elaborate waste systems with serious investment to aid this recovery, for others a much smaller investment can save lots of money.

Metberg Enviro has witnessed a significant increase in the need for a compact trommel to reduce trommel fines. The trommel screen steadily works its way through huge piles of waste, saving the operator money in landfill taxes as well as potential revenue from the segregated waste.

The Metberg Enviro 3000 series trommel provides the solution to separate the 'qualifying materials' from the 'non qualifying materials' prior to landfill and therefore avoiding the higher rate of tax. The 3000 series trommel has a return on investment of only a few months. From the moment the mixed waste enters the trommel it is broken down and smaller particles such as soil are sifted out.







Further separation of the oversized waste can be further separated by trained 'picking operatives' who remove only wood, plastic cardboard or other valuable recyclable materials. An option of an overband magnet can also be fitted to collect any scrap metal.

Excellent throughputs, robust build and easy to use functions are only a few of the comments received from customers buying or renting the Metberg Enviro 3000 series trommel.

Due to ever changing market conditions and demands of the modern trommel the machine will be available in wheeled, pintle drawbar, or tracked configurations.

For more information regarding brochures, videos and specifications please contact Jody Kinghan at sales@metbergenviro.com, call him at 07530 818901 or visit www.metbergenviro.com



The right brake for each purpose

No matter whether it's marine, conveying or mining technology, on or off-shore applications, or crane manufacturing: the brake systems of KTR are used worldwide across a wide variety of industries. For more than a decade KTR-STOP brake systems have met the high technological demands of the wind industry for reliability and performance of braking and locking systems. From the wind industry, KTR has gained a competence and understanding of braking applications that is effectively transferred into other core markets.

KTR also realizes that every braking situation is different and that brake systems must be matched and adjusted to the individual conditions of each application. KTR brake systems are designed in a way that allows maximum adaptability to varying applications and flexibility across a wide range of performance demands.

KTR brakes are used in Sierra Leone

Sierra Leone is rich in mineral resources: chrome, diamonds, gold and platinum. In particular, the major iron ore deposit of Africa - possibly of the whole world - is located in Sierra Leone with an estimated total volume of up to 12.8 billion tons. The Tonkolili district, in the heart of the Sierra Leone, is the central extraction area in the country and the mineral resources located here could make West Africa an critical supplier of raw material for the worldwide steel production beyond China, Australia and Brazil! The brake systems of KTR currently contribute to the mining of this great mineral resource.

Strong drive - smooth brakes

The conveyor system in the ore mining of Tonkolili consists of an overland conveyor system, 2.6 km in length, that is kept operated by way four high-performance drives. The belt transports around 3,500 tons of ore-containing tailings each hour - a load that needs to be moved powerfully but also controlled and braked in a reliable and responsible fashion. Each conveyor belt operates with 12 KTR-STOP®-disk brakes (image 1) with a clamping force of 150 kN each (total clamping force 1,800 kN). However, this power needs to be appropriately applied otherwise the belts could be overloaded, leading to damages with high financial impacts. Accordingly, KTR-STOP® brake systems transmit power sensitively via an electronic control system IntelliRamp® (image 2). This system constantly compares the nominal and the actual values of the system: if the belt speed is below the nominal value, the brake force is reduced; if it exceeds the nominal value, the brake force is increased. Three brake brake scenarios are available:

Typical frequency converter braking: monitored by the IntelliRamp® control system, the belt can gently and safely come to a stop within 20 seconds.



Brake disc with hydraulic brakes



The ore deposit Tonkolili is connected with the main Atlantic seaport of the capital Freetown through a rail line.



- If the frequency converter is overloaded or fails due to a potential power outage, the emergency stop function makes the system come to a stop within 10 seconds.
- In outright emergencies there is an immediate and unregulated emergency stop.

Ultimately, the combination use of KTR-STOP® and IntelliRamp® works like an intelligent ABS car brake system just larger, stronger and more flexible!



The high-performance and resistant KTR-STOP® brake systems were developed particularly for the use under hardest environmental conditions



The intelligent brake regulation enables controlled and coordinated braking operations that can be accurately adjusted to the requested parameters.



The new EMB-STOP brake systems are the flexible and clean solution for an extremely long service life with low operating costs and maximum safety of the system.



The "KTR Competence Center for Brake Systems" is located in Schloß Holte-Stukenbrock in East Westphalia.

Withstand wind and weather

Brakes have to be tough. The climatic conditions in Sierra Leone are just that - heat, wind, sand, dust and more than 4,000 l of rain per year scratch surfaces and crawl in to every pore. Therefore, all vital components of the KTR-STOP® brakes are completely encapsulated and thus optimally equipped for use under rough environmental conditions.

The right brake for each purpose

KTR brake systems stop conveyor systems, bucket wheel excavators and lift systems on the mainland, but also reclaimers and stackers. On the high seas they brake rope & anchor winches and deck cranes while azimuth- and rotor brakes reliably keep wind power units under control even in cases of a stormy headwinds. However it's not always about the controlling of large forces; adverse environmental influences also need to be addressed. In order to withstand mud, air humidity, salt, rain, cold, dust and heat, KTR Engineers have optimized the material composition of the brake, improved the corrosion protection and extended the brake selection process.

KTR-STOP®: Revolution instead of evolution

Recently our staff in Rheine has intensively re-designed our hydraulic brakes. In the new KTR-STOP® product line the technology has been decisively improved in many ranges, lifting performance levels to new heights. The installation space of the KTR-STOP® line has been optimized enabling a high force with low weight - from 1 to 1,400 kN, in active or spring-actuated design. The compact dimensions have extend the application range while reducing the transport, storage and assembly costs at the same time. The KTR-STOP® brake system is rounded off with the respective offer of suitable hydraulic power packs as well as an intelligent control system - IntelliRamp® - for precise control of braking processes.

Electromechanics completes hydraulics

Taking over the East Westphalian EM Brake Systems AG (EMB), KTR has extended its portfolio of high-performance brake components with the addition of electromechanical brake systems. The brake systems of the EMB-STOP (image 3) series are suitable for systems conceptualized without hydraulics. The maintenance work usually required for hydraulic units is not necessary here as the clamping force is electromechanically generated - up to 400 kN. The special feature of these brakes is the setup of the braking force: it can be softly applied by the touch of a button, continuously increasing until achieving the maximum braking performance.

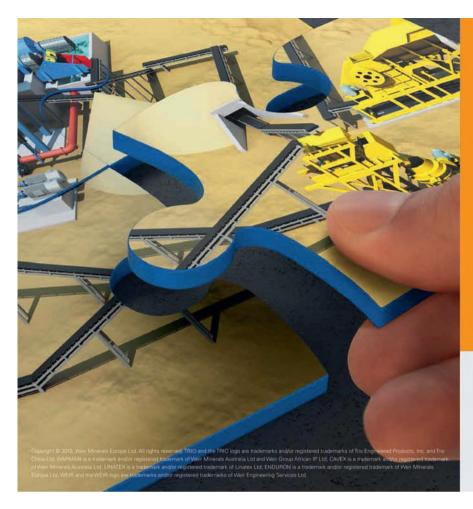
Competence Kompetenzzentrum für Bremsen

All activities of the KTR Group relating to brakes, brake systems and brake components are concentrated at KTR Brake Systems GmbH (formerly EMB Brake Systems AG). The "KTR Competence Center for Brake Systems" is located in the East Westphalian Schloß Holte-Stukenbrock (image 4). In addition to the development and construction of the brake components, extensive function tests of the KTR-STOP® and EMB-STOP lines take place there, for example: in a special low temperature climate chamber enabling tests with ambient temperatures of up to -50° C.

Two systems from one company

The hydraulic KTR-STOP® and the electromechanical EMB-STOP of KTR's portfolio are two brake systems with different characteristics. The advantage is here is customer choice and the selection of a system solution adjusted to the respective conditions of each individual application.





Weir and Trio, the perfect fit.

Together, Weir and Trio complete the picture to form a portfolio of best-inclass sand and aggregate solutions. Already a leading manufacturer of crushing and separation equipment, Trio is now backed by the Weir Minerals commitment to superior material technologies to deliver better solutions – and lower your total ownership costs. Combine this with the Weir Minerals global service network, and it's just another reason why, whenever, wherever, we'll get the job done.

Find out more at weirandtrio.com

WARMAN® CAVEX® LINATEX® ENDURON®





Minerals
weirminerals.com



Howcroft Industrial Supplies Shaft Mounted Gear Units (SMSRs) offer a rugged heavy duty external design, with an innovative internal design that delivers the highest power rating and reliability available on the market

Howcroft **SMSRs** are manufactured in eleven sizes **A-L** with normal ratios of **5:1, 13:1** and **20:1.** Bespoke gearbox requirements are also available on request. All of our gears are helical, hardened & ground of alloy steel to close tolerances. Available with keyed bores or taper clamps and **directly interchangeable** with the **Fenner, Challenge** and other local brands, our SMSRs are regarded as the best 'Pound for Pound' box you can buy.

We have already seen our SMSRs help to reduce our client's **downtime by lasting longer than the ones they have replaced** and our competitive pricing structure has **provided them with cost saving reductions of up to 43%**.









Started in 1998 by Colin Orchard and later joined by brother Gary, Steelpro has carved itself a real niche in the recycling industry with Hardox wear plate, especially across the scrap and metal recycling industries. This family run business with a team of six, has over the years, proved that Steelpro is definitely the place to go for the heavier Hardox speciality wear plate.

Steelpro have many regular clients including large quarrying and scrap metal groups together with shredder manufacturers where they manufacture OEM wear parts under licence. Included in the range of parts offered to metal recycling companies, Steelpro manufacture cutters , heavy wear liner plates and hammer pins which are supplied to the UK and overseas. With 80% of business now dedicated to Hardox and Weldox/Strenx, they carry on average around 300 tonnes of these grades of plate in stock at all times and specialise in the heavier plate up to 160mm, the maximum thickness in the current SSAB production schedule.

This commitment to SSAB stock is serviced by their high quality production facility, and we spoke with both Colin and Gary about this. Colin started by saying "We have three CNC vertical machining centres , one fitted with a twin pallet changer, allowing us to work quickly and effectively as our daily workload is always very high, but it also means that we can help any

client who may need urgent parts the next day for a breakdown . We operate a 6 day a week operation. with the added flexibility to easily go 24/7 if needed to assist with our client's urgent needs. Our turnover increased last year and we are definitely on-track to achieve the same level of business this year with the Hardox wear and Weldox/Strenx high strength plate."



Colin and Gary are heavily involved with the business and are fully immersed in making sure that the client has the best experience possible and the highest quality parts, from visiting site to getting involved with work on the production side. Steelpro was the fifth wear parts centre taken on by SSAB in the UK, becoming a dedicated Hardox wear parts centre in 2009, having bought Hardox wear plate for many years previously from SSAB.

Gary added "Our Messer CNC flamecutting machine is superb and it allows us to cut very accurately and allows us to deal with any remnants very effectively. This helps keep production at a maximum and reduce lead times for clients and also provides a very high quality end product. Some of our other recent work includes the production of bespoke cutters for a number of international metal recycling companies WEEE plants, chute wear liners for waste to power stations, and even Weldox parts for some of the jigs used at a famous Formula 1 racing team.

Machining capability

Steelpro operate many machines including 3 Machining Centres, 2 of the machines are from the Mazak AJV range, the larger one being a 60/120 with a work envelope of 3700 x 1400 mm and the second machine is a 30/85, this machine is particularly useful for repetition work as it is fitted with a twin pallet changer assembly. Both the machines are linked for file /programme transfer and are both fitted with through coolant and 50 tapers. The third machine is a Cincinatti Sabre 1500 with 40 taper/ through coolant.

Profiling Capability

We operate 2 flame cutting machines, a Messer Statosec 6500P CNC Gantry machine fitted with 6 torch suspensions, cutting area is approximately 12 metres x 6 metres. The secondary profiling machine is an ESAB Suprarex SXE P-5000 Portal machine. AN Esprit Lightning HD130 High Definition Plasma Cutting Machine is also used, with a 6000 x 2000 cutting bed., All machines run on similar controllers and are linked back to a host PC.

Steelpro form, roll, drill, mill and weld all grades of Hardox up to and including Hardox600 grade.

HARDOX WEARPARTS CENTRES - THE ONE STOP SHOP FOR WEAR PRODUCTS AND **SERVICES**

Hardox Wear Plate is world renowned for its strength and durability, even in the harshest, most aggressive operating environments. Now, customers can benefit from a specialist service providing high quality replacement parts for a wide range of quarry and mining machinery and equipment, delivered through a network of regionally based Hardox Wearparts Centres.

As a global initiative, there are Hardox Wearparts Centres operating in more than 40 countries around the world. In the UK, there are currently nine strategically located Wearparts Centres, from Scotland in the north, Northern Ireland through to South Wales and South East England covering all the primary industrial centres - and this figure is expected to increase further over the coming years.

Each Hardox Wearparts Centre has access to the complete product programme and full technical support provided by SSAB for its Hardox brand, which translates to an extremely comprehensive offering of wear parts and services for the quarry and mining industry.

RWM Exhibitor Preview Messer CNC air vented

portal flame cutting . machine

Services include:

Site visits and technical advice - including technical analysis of requirements and measurements.

In-house design engineering - redesign of replacement components to provide longer operational life using inhouse CAD/CAM and worldwide reference data base.

Component manufacture - including collection of components and comprehensive in-house manufacturing services.

Delivery and install - direct delivery and full installation and re-commissioning of replacement parts.

On-site welding services - an extended service offering, with specialist welding vans creating the possibility to make on-site repairs.

Ongoing support services - including service agreements, real life wear performance and analysis, plus wear monitoring analysis.

One of the benefits of using Hardox Wearparts Centres is being able to access to literally thousands of wear products for buckets, tippers, crushers, dozers, shovels, chutes, feeders and pulverisers, plus many more. Accuracy and product quality are key drivers in the business and linked to this significant parts resource, enables replacement wear products to be manufactured, often to higher specification standards, to suit customers specific operating requirements. Hardox Wearparts Centres will undertake the complete replacement or upgrade of a wear part, from initial discussion and site visit, specification recommendation, design and manufacture to installation.

With their strategic regional locations, Hardox Wearparts Centres can often react faster to get replacement wear parts installed quicker than many traditional sources and this, coupled with their knowledge and support through SSAB has proved to be a winning combination for its industry customers.

For more information please visit www.steelpro.co.uk, email wearplate@steelpro.co.uk or call 02476 392000.



Steelpro provide the complete wear part service, hammer pins/axles/shafts are supplied up to 180mm Diameter in various material grades depending on

Fully Machined Rotor End Disc for Aluminium Shredder ... USA



Fabricated wall liner for a metal recycling shredder, the impact wall is 120mm thick in Hardox 400/450

CFR - Fabricated conveyor feed roller located at the Shredder in-feed entrance.



quad shaft type rotary shredder

Packaged shredder wear parts prior to shipment.







INTRODUCING



THE INNOVATIVE NEW TRACK MOUNTED HIGH VOLUME CONTINUOUS MIXING PLANT FROM RAPID.



The first of its kind to market. TRAKMIX features high output capabilities of up to 250TPH. Patent pending features also include a superior control system that weighs all materials and a double hopper cement weighing system. Suitable for numerous mixing applications including soil recycling, emulsion mixes, bentonite enriched soils and many more.

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The Greenbank Group -

Innovative engineering solutions from a great team of companies



With more than 60 years of experience in the design, manufacture and installing wear management systems in bulk materials handling industry, The Greenbank Group now offers a single source engineering solution for plant

A number of different companies within the Group can now offer recycling and waste management plant engineers a wide range of products and services to help them combat wear, extend plant operational hours and improve efficiency.

Ray Moorehead, Group Sales Director at Greenbank explained: "On a daily basis Greenbank applies its expertise to proactively deal with and prevent disruptive and severe wear to plant and equipment caused by highly abrasive fuels during transportation be it by pneumatic, hydraulic, conveyer belt or chute

The Group's services are developed and delivered by separate companies within Greenbank, including:

- GAIM -Studying and analysing particulate flow to understand and produce optimum designs and answers to help eliminate or minimise wear on plant and equipment handling abrasive fossil fuels, renewable fuels and waste gasses.
- Greenbank Terotech -Engineering the detail into fabricated products, ducting, wear resistant lined and unlined piping and chute work.
- GMH Design, manufacture, supply and installation of continuous weighing products, weighers and bespoke feeders for accurate measurement and handling of fuel feeding and ashing systems.
- Greenbank Engineering Services Aftermarket engineering support, refurbishment and maintenance services.

"The Greenbank Group of companies have often successfully dealt with and overcome wear problems for clients across traditional heavy industries handling bulk materials and fuels," Ray said. "There are already areas within the renewables and waste energy sector where we are applying protective lining systems and it will become the norm as more operators recognise how they can benefit and extend the effective working life of plant and equipment whilst reducing maintenance costs.



Vision Techniques

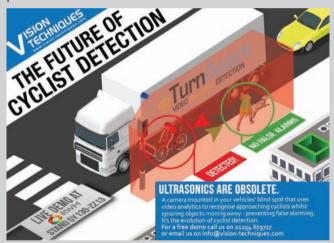
demonstrating ultrasonic beating cyclist detection at RWM

Vehicle safety experts Vision Techniques will be demonstrating new technology to the waste industry at RWM this year that makes ultrasonic sensors obsolete.

The growth in cyclists in city centres has led to raised awareness and a requirement to provide improved cyclist safety across all large road vehicles. Government schemes such as FORS and CLOCS have started to request different levels of technology on vehicles as standard.

Currently, vehicles are often expected to have audible and visual alarms to alert cyclists when a vehicle turns left and in some cases such as Crossrail, ultrasonic sensors are expected to detect hazards approaching the vehicle.

Ultrasonic sensors are based on the same reversing technology often found in cars, adapted and mounted onto the side of a truck or lorry to detect a cyclist as they pass. Unfortunately these sensors also detect road furniture, passing pedestrians and other cars, leaving the driver with a constant 'false alarm' from the cab





Recently Vision Techniques officially launched 'VT TurnAware', a blind spot mounted camera that covers the left or right side of a vehicle

where cyclists often approach. The system uses video analytics to process movement and alert the driver of their presence.

The advantage of the new system is that the hardware is able to recognise if a cyclist is moving forward or away from the vehicle and can therefore ignore other objects, like road furniture preventing any false alarming.

The first wave of TurnAware systems are being trialled on industry leading businesses and councils across the UK to prove their accuracy and help to eliminate the inefficiencies of the current ultrasonic technology.

The system will be demonstrated at RWM using the latest virtual reality application along with cyclist and driver go-pro footage which will let visitors experience what it's like to be on the road using the brand new detection system.

TurnAware is supplied by Vision Techniques; www.vision-techniques.com, 01254 67971



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Eriez to launch new dual frequency separator at RWM 2015



Eriez Europe to showcase latest developments in recycling separation equipment with new Eddy **Current Separator (ECS) design at RWM 2015 on** September 15th to 17th, at the NEC in Birmingham, UK. The new NG-24 ECS is suitable for multiple applications and features a new cantilevered design, which allows for the ECS belt to be changed in as little as 10 minutes by maintenance staff.

Eriez Europe will be showcasing the latest developments in their range of metal separation solutions at this year's RWM. Visitors to stand 5S06-T07 will be the first to see the new NG-24 Eddy Current Separator - the dual frequency unit is capable of processing large and fine fractions, making it suitable for multiple applications and saving costs with reduced production downtime and increased end product purity. The new NG-24 features a unique cantilever design allowing for easy belt changes, which can be completed in as little as 10 minutes. Visitors are encouraged to bring sample materials to the show to see the separation performance of the fully operating NG-24 ECS.

Operating at the show will also be the ST22-40 Eddy Current Separator for optimum separation of smaller sized particles (PET flake) and the EZ Tec 9100 metal detector, designed for the removal of metal contaminants from granulated plastics. Visitors can also see the Eriez Metal Loss Monitor, which is

fitted to conveyors to track and measure the amount of metals lost to a waste stream over specific periods of time. The equipment on display is just a small selection of the extensive range of equipment Eriez supplies to the recycling industry.

The developments come following the company's recent launch of their state-of-the-art Recycling Test Centre at their European headquarters in South Wales, UK. The purpose-built recycling centre allows customers to visit with bulk samples of material and see how accurately and efficiently the range of equipment on offer separates it, helping to determine which combination of machinery is the best fit for their waste processing needs. The facility is equipped with Eriez' full range of recycling products, including their complete line of eddy current separators, vibratory feeders and metal detection equipment.

On exhibiting at RWM, Gareth Meese, Sales Director at Eriez Europe says: "We are continuing to work with some of the largest recycling companies in Europe as well as many smaller MRF site operators to provide separation equipment, which offers the best possible performance. The continual developments Eriez offers customers in this sector will be clearly visible at RWM with our range of latest products. We're looking forward to the show, where the team will be on hand to advise the most effective solutions for removing metal contamination."



UNTHA to showcase industry's most profitable single-step SRF shredder at **RWM 2015**



Visitors to the renowned RWM exhibition on 15-17 September 2015 will have an unparalleled opportunity to learn how to produce Solid Recovered Fuel (SRF) in a single pass, with the help of the UNTHA XR waste shredder.

The machine made its UK debut at the 2014 event, attracting vast crowds eager to see the latest innovation from the Austrian-owned shredding experts. But all eyes will be on the XR's pioneering 'Cutter' concept, at this year's show.

UNTHA UK's managing director Chris Oldfield explains: "Single-step shredding to produce SRF is not a new concept. However, we've spent four years researching, designing, engineering and testing our own methodology - with a new Eco Drive - which can achieve double the output tonnage per hour of competing machines and with 50% less power when compared to conventional electro-hydraulic shredders. This reduced energy consumption can equate to electricity savings in excess of £500,000 over the lifetime of the machine, which would offset the cost of the shredder and more."

Cost savings will be a significant theme for UNTHA on stand 5R20-S21. Visitors will also be able to use UNTHA's on-stand calculator, for example, to work out how much they can save per tonne, with the help of the XR.

Chris continues: "This shredder has definitely shaken up the market, reminding people how important it is to carefully analyse both the profitability and environmental efficacy of their shredding operations. Globally, UNTHA is currently working on proposals for more than 250 potential XR Cutter projects. This is in addition to almost £4m of orders secured in the past six months alone. It's a very exciting time for us indeed."

As an industrial shredding specialist across many applications, UNTHA's focus at RWM won't just be waste. The recycling team will be demonstrating an entire four shaft shredding system - complete with exit conveyor and Fe separator - which can be used to process WEEE, metals, wood, food, cables, medical and confidential waste, to name just a few.

Chris concludes: "Once again we'll have a light, spacious stand where people can come and network, learn and guiz our shredding experts on the best-practice waste handling techniques for their own plants. We don't believe in simply handing out brochures and leaving visitors to make their own minds up. We're here to help and look forward to the conversations we'll have. RWM 2014 was a record year for us, so the 2015 event has a tough act to follow."

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HUB Features 2015/2016

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

The HUB magazine is posted out to 6,000+ individually named recipients, and it is delivered to place of work, not their home address. This means that we get to end users and sites, and our 'pass-on' rate is currently at around 3 meaning that our estimated readership is 18,000 each quarter. Plus, our reader-ship don't have to pay any subscription to receive the Magazine.

August 15





RWM Recycling Special Edition

Recycling special edition in association with the RWM exhibition. Distributed at the RWM Exhibition and mailed out to all of our Recycling database of end users and sites.

October 15

QUARRYING - Asphalt & Concrete plant + associated equipment.

Concrete retaining walls and storage solutions. **RECYCLING** - Compaction, baling and wrapping equipment.

BULK HANDLING - Explosion control, fire suppression, detection and control. IBC's + FIBC's technology

January 16

QUARRYING - Washing and screening technologies, equipment and plant including sand plant, cyclones, barrels, scrubbing, rinsing, separation, drying, classifying and fines treatment. Drill rigs and blasting.

RECYCLING - Ferrous and non-ferrous metal separation and processing for recycling. Automotive recycling equipment and solutions. BULK HANDLING - Weighing technology,

weighbridges, and on-board weighing.

March 16





BAUMA 2016 Show Preview

QUARRYING - Dump trucks, excavators & wheeled loaders. Tyres and tyre chains, wheel washina equipment.

RECYCLING - Excavator Attachments, Screening Buckets, Crushing Buckets, safety couplers, Grabs, Pulverisers and Shears.

BULK HANDLING - Storage & handling, level measurement & control - hoppers, feeders and chutes.

May 16





HILLHEAD 2016 Show Preview IFAT 2016 Show Preview

QUARRYING - Tier 4 Engine Technologies and Associated Equipment, Dual Power Technologies. Health & Safety equipment and technology. Vehicle Reversing and Camera Safety. **RECYCLING** - Waste sorting and separating equipment and solutions for the waste industry.

BULK HANDLING - Conveyors, stackers, stockpilers, elevators, feeders, chutes & hoppers.

July 16





RWM 2016 Show Preview

QUARRYING - Mobile and static crushing and screening equipment. Crusher spare and wear parts. Screens and screen media.

RECYCLING - Shredders, Grinders & associated technology. Recycling of plastics.

BULK HANDLING - IBCs and FIBCs technology for weighing, filling and processing screw, pipe and pneumatic Conveyors, silos, blowers, valves and discharge systems.

September 16

QUARRYING - Construction and quarrying machine control systems, survey & positioning equipment and associated technologies. Pumps & associated technology. Dust Suppression and Control.

RECYCLING - MRF's and associated equipment in the waste process line, including trommels, magnets, air and ballistic separation technology. Recycled secondary aggregates.

BULK HANDLING - Port equipment, logistics, railways & associated technologies in the movement of bulk materials.

November 16 **IRISH Special**

- Spotlight on Ireland



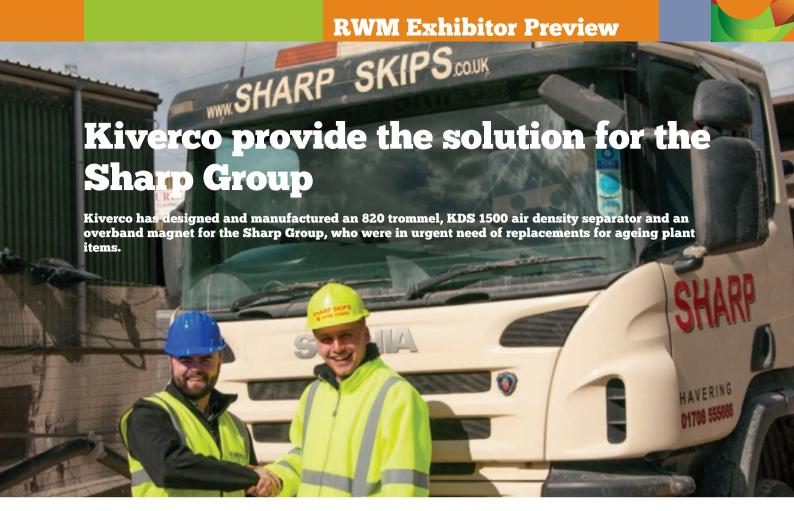
POLLUTEC 2016 Show Preview

QUARRYING - Asphalt & Concrete plant + associated equipment. Concrete retaining walls & storage solutions.

RECYCLING - Compaction, baling and wrapping equipment - waste compactors, cardboard balers, waste balers, vertical balers, horizontal balers, baling twine, balers, mill balers, balina equipment.

BULK HANDLING - Biomass industry equipment and technology. Processing of Energy from Waste.





Sharp Group - Essex.

The business was started by Terry and Tom Sharp in 1983, in Upminster and has until recently been known as Sharp Skips. The focus is mainly on waste from the C&D market, although lately the company has started handling some types of industrial waste too. Operating throughout Essex and East/South London, annual volumes have increased steadily and are now over 75000 tonnes, through this 24 hour operation. This privately owned business, now operating from a site in Rainham, operates over 25 vehicles and employs 50 people. Terry and his team are passionate about giving high quality and best service and this is evident throughout the operation. Customers come from many segments, with particular focus on Local Authorities and large local businesses. Sharp Group is accredited to ISO 9001 and is also registered with the Achilles database system, which means that the company operations are audited annually to ensure compliance with the highest standards of operation.

THE CHALLENGE

Having seen spectacular growth over recent years, the business had simply outgrown its original equipment and 12 years after first being installed, urgently needed to replace some worn out items of plant. This posed a special challenge to the successful supplier as it was critical that downtime and disruption on this busy site was minimised. Whilst the new equipment needed was not unusual, Terry Sharp identified that the chosen supplier had to have the experience and capability to successfully install the equipment on a congested site and to a tight timescale. After spending some time reviewing the options for possible suppliers, Kiverco and its Area Sales Manager JP Devlin were awarded the contract.

Terry Sharp, Managing Director - Sharp Group, commented, "From the moment I met JP Devlin, he worked tirelessly to ensure that we got the plant we wanted, at a fair price and crucially, when we needed it. When Niall McAlinden, the lead engineer, arrived on site and introduced himself to us, I knew we were in good hands. I am delighted with the outcome and pleased with my decision to employ Kiverco."

THE SOLUTION

Kiverco designed and manufactured an 820 trommel, a KDS 1500 air density separator, together with an overband magnet and associated conveyors. The support framework for this installation was specially manufactured to meet the exacting requirements of Terry Sharp and is concreted in to a depth of 300mm!

The equipment has been designed to process over 40 tonnes per hour of mainly C&D waste, with the density separator being used to clean the heavy fraction to remove light material from this product. Kiverco's installation team arrived on site with a plan to complete the work in 5 days and actually installed and commissioned the new equipment in 3 days, meaning that lost production and down time was kept to an absolute minimum.

John Lines, Sales & Marketing Director, commented, "We were extremely pleased to win this order. This was a congested site where the experience of our engineers, in being able to operate to a very tight programme, was a critical success factor. Sharp Group now has modern, high performance and reliable equipment at the heart of this busy operation and will be able to handle their growing volumes with confidence".





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On stand 5T152-V153 at RWM 2015 (NEC, Birmingham 15-17th September 2015), Bunting Magnetics will be displaying and demonstrating new Magnetic Separation Technology with the High Intensity Separation Conveyor (HISC), which has been specifically developed to separate stainless steel. This will be the first time the Stainless Steel Separator has been exhibited in Europe.

Separating and recovering valuable Stainless Steel is a problem faced by recycling companies globally. Following a prolonged period of research and development, Bunting Magnetics has developed and is launching a sophisticated and high intensity magnetic separator specifically to solve the problem of stainless steel separation.

There are 5 types of stainless steel, with Ferritic, Martensitic, Duplex and Precipitation Hardening (PH) all being magnetic, and Austenitic being weakly magnetic in certain circumstances.

On the High Intensity Separation Conveyor, magnetic susceptible stainless steel is separated using a complex, unique and exceptional strong magnetic pulley configuration. In operation, a material mix of non-metallic and stainless steel is transported along a two pulley conveyor belt into the high intensity magnetic field of the head pulley. In the intense 'Separation Zone', weakly magnetic stainless steel is attracted and separated from non-magnetic material.

The ability to separate the weakly magnetic stainless steel is due to the design of the magnetic head pulley. The design and configuration of the high intensity permanent Rare Earth Magnets in the head pulley produce a unique magnetic field and thus enables even stainless steel with very weak magnetic properties to be attracted and separated. The design work was undertaken by experienced Bunting engineers and took over 12 months to perfect.

There has already been a huge response from recycling companies in the USA and UK, with the first European installation planned for August 2015. In particular, there has been a great deal of interest from companies recycling UPVC window frames, where stainless steel removal is a huge issue. On their stand at the RWM show, Bunting will be demonstrating a working High Intensity Separation Conveyor. Carlton Hicks, Bunting's **UK Sales Manager** explained:

"Seeing is believing and we are thrilled to be exhibiting newly

developed equipment that addresses the age old problem separating and recovering stainless steel. Being able to launch this in Europe at RWM is fantastic as we know that the show attracts visitors from across the world. Of course, the key to any successful separation is sizing and preparing the material before it is processed on the High Intensity Separation Conveyor and this means recovering and removing the magnetics using Drum Magnets and Pulley Magnets. Also, to reduce the loading and enhance the level of separation on the High Intensity Separation Conveyor, it is best to first pass the material over an Eddy Current Separator to recover non-ferrous metals. The Eddy Current Separator doesn't recover stainless steel, but we will then be left with a material mix which includes the valuable stainless steel and non-metallic materials. RWM will be a very exciting show for us."

On the stand at RWM, Bunting will be promoting a full range of Metal Separation equipment for all sectors of the recycling industry, including Overband Magnets, Drum Magnets, Pulley Magnets, Plate Magnets, Grate Magnets and Metal Detectors. With a collective 30 year plus experience in supplying the recycling industry with metal separation solutions, the Bunting technical sales team will be available to discuss any aspect of metal recovery and separation.

For further details on the Bunting range of Magnetic Separators and Metal Detectors please contact Carlton Hicks (carltonhicks@buntingeurope.com) or our technical sales team on 01442 875081.



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Cantech are well-established specialists in the design, installation, service and support of process control systems covering a wide range of plant and applications in the construction materials industry.

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You will need to demonstrate PC skills and a basic understanding of electrical systems and instrumentation, however specific training in our control applications will be provided. Just as important will be a professional and positive approach and a willingness to commit to a task through to full completion: this will often involve staying away from home for extended periods, and as such your home location is relatively unimportant providing there is reasonable access to the motorway

In return we offer a competitive basic salary plus opportunity for considerable overtime earnings plus generous overnight stay allowance and a good quality company car.

For further details view us at www.cantech-controls.com: to apply email a CV and covering letter to recruitment@cantech-controls.com or mail to Cantech, Unit 2 Fairview Estate, Henley on Thames, Oxfordshire, RG9 1HG







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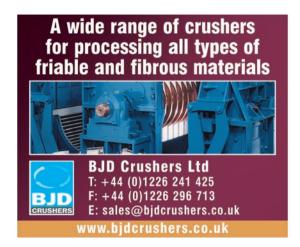
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