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In this issue

NEWS	
INTERMAT	20
CQMS	26
QUARRYING	27
CRUSHING & SCREENING	35
RECYCLING	51
MRF'S	75
BULK HANDLING	82
BULK WEIGHING	96



Spring 2015

Sales & Advertising Enquiries: +44 (0) 20 3637 0385

Global Sales Manager

David Roberts

david@hub-4.com

Editor

John Edwards john@hub-4.com

Strong market growth for block paving producers

For the first time in a decade, the production of concrete block paving has shown growth against the previous year. This is one of the key findings reported by industry specialist BDS Marketing Research Ltd in its latest annual report on the industry entitled "Estimated Outputs of Concrete Block Paving Plants in Great Britain". The market has also seen a halt in the contraction of the industry with no plant closures during the year. This follows ten years of down-sizing which saw around 20 plants cease production - 40% of all plants.

The growth in the market is being led by the housing sector, with new housing starts up by 20% in 2013 and a further 12% in 2014. This is now being followed by other construction sectors of importance to block paving manufacturers with both commercial and industrial building activity improving during 2014. New legislation due in April 2015 covering Sustainable Urban Drainage Systems (SUDs) is likely to provide a further boost for some producers.

BDS estimates that Marshalls is the leading block paving producer, operating eight plants throughout Great Britain. Brett, Aggregate Industries and Plasmor are the other leading companies which, combined with Marshalls, account for almost 80% of the market between them. A total of 29 plants and 13 separate manufacturers are identified in the report.

www.bdsmarketing.co.uk



CMB continue to provide leading edge crushing and screening services....

CMB International continues to provide leading edge crushing and screening services with their range of innovative and efficient processing machinery. Combining advanced technology along with mineral processing fundamentals, CMB can now offer a comprehensive range of mobile and static crushing and screening equipment.

CMB have created an impressive family of processing plant, including Jaw Crushers, Cone Crushers, Screens and Feeders.

The CMB Cone Crusher family is made up of the RS150, RS225 and will shortly include the RS185.

All CMB Rockstar Cone Crushers compose of modern high strength cast steel, and all roller bearing that featuring hydraulic adjustment that enables the operator to rapidly alter the close side setting, if necessary during operation. The machines' hydraulics also incorporates tramp metal release, automatic reset and an unblocking feature, which will clear the crushing chamber in a matter of minutes.

The RS150 cone crusher is capable of processing up to 140tph depending on the closed side setting, and can take a feed of up to 150mm. The crushing components are made up of high strength cast steel and are designed in such a way as to get maximum crushing force to gain impressive reduction ratios. This machine is ideal for secondary and tertiary crushing applications where good product shape is required.

The RS225 cone crusher is capable of processing an impressive 330tph and can take a maximum feed size of up to 280mm. This heavy-weight machine has a large unobstructed feed opening, where there is no large mantle nut. The one piece upper frame eliminates the requirement for holding down bolts. The automatic, hydraulically tensioned wedge is a feature that allows for easy maintenance operations. CMB have allowed for thicker manganese to provide longer life between re-metals, along with a specially curved profile to allow for unscreened feed and producing

good shaped material.

The recently developed RS185 sits perfectly in between the RS150 and the RS225. This cone crusher is the smaller version of the RS225, maintaining the same advanced features that have been developed for its "big brother" but have been adapted for smaller applications. The capacity exceeds the RS150 due to having a wider feed opening and a larger crushing chamber. Applying the crucial crushing forces, as with the other Rockstar crushers, you get a lot of "Bang For Your Buck!"

The CMB Rockmonster 1100 x 800 Jaw Crusher has been created to withstand the most extreme crushing conditions. The rugged design ensures the longevity of integral parts, giving maximum support in areas where the major crushing forces are applied.

The Rockmonster allows for high output of good shaped material, with minimal maintenance and unattended operation.

Understanding the evolution of mineral processing and realising the high demand for mobile plant, CMB have designed a complete range of tracked and wheeled plant that is capable of performing in some of the world's most extreme environments. The mobile plant has been developed around the impressive range of static

equipment that CMB supply. Crushing knowhow and experience has rocketed CMB to the forefront of the competition, with machines being shipped across the global market. Forging a close and personal partnership with Atlas Copco, who rely on CMB for the crushing component (RS150) on the PC1000 mobile plant is an indication of CMB's intentions and capabilities.





Our equipment can accommodate whatever screening media is specified by our customer (wire cloth, polyurethane, rubber punch plate etc.) and we will custom-design a screen or feeder to fit your application, whether

Inclined Screens

new or existing.

CMB bespoke screens can be constructed to fit your new or existing application. Sizes range from 900 x 1800 (6' x 3') to 2700 x 9400 (30' x 9'). One, two, three or four deck screens are available.

Horizontal Screens

Horizontal or low-angle screens are ideal where height is critical. One, two, three or four decks are

1500 x 9600 (8' x 30').

Four Bearing Screens

CMB four-bearing screens feature rugged construction and a positive circular vibrating motion. They are ideal as scalpers for large aggregates or, as screens for difficult, sticky materials. This screen can be offered as a direct replacement for Niagara screens.

Dewatering Screens

CMB dewatering screens are designed to efficiently remove moisture from sand and coal slurries.

Vibrating Feeders

CMB vibrating feeders combine scalping and feeding in a single operation. Providing a regulated flow of material to primary crushers, CMB feeders can be custom-built to suit your installation and requirements.

CMB have recently launched their new RC150 Rubble Crusher - the ultimate, self-contained mobile crusher; a simple but extremely effective machine. A robust build coupled with minimal maintenance the RC150 is easily towed by light vehicle to your destination of choice to crush or recycle material, with immediate start-up to produce crushed material.

The RC150 Rubble Crusher has numerous applications:

- Recycling
- Demolition
- Infrastructure
- · Natural stone quarrying, mines, gravel pits and river beds
- Gold mining



The advantages of the new RC150 Rubble Crusher enable the user to become time efficient and eliminate unwanted costs by crushing on site enabling re-use immediately.

Environmentally friendly the RC150 is a true 'green' machine with huge cost savings instantly available eliminating landfill costs, skip hire, transportation costs, external crushing and bought aggregates from quarries all removed from the processing equation.

With three models currently available including a 'stand- alone' crusher the new RC150 Rubble Crusher is simply a 'total solution' for low to moderate crushing projects; featuring a 650 x 350 single toggle jaw crusher (throughput capacity of 10-60tph) mounted on a heavy duty chassis, complete with fixed hopper and foldable conveyor. With no electrics required the RC150 is powered by a Hatz 3L41C air cooled silentpack diesel engine, 28kW@1800rpm with 22.5kW phase electrics.

CMB carry a comprehensive stock of crusher wear parts including various types of bowl liner and mantles to suit the application, jaw liners, and VSI rotary tips. CMB also supply other essential crushing wear parts such as mantle nuts, cheek plates, and frame arm shields. Along with wear parts, CMB also supply integral spares for cone and jaw crushers. Whether it is shafts, toggle plates, seals, or cast components; CMB aim to provide superior quality parts at a competitive

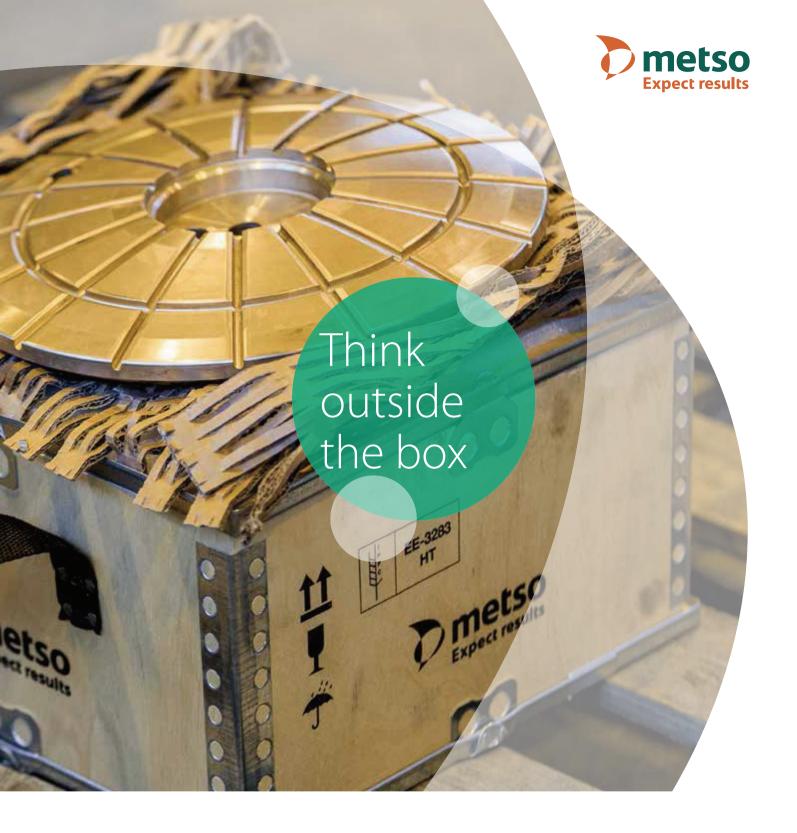


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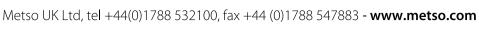
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MPA Data Highlights Continuing Concern on Future Aggregate Supply

Against the background of increased aggregate demand, the Mineral Products Association's (MPA) latest Annual Mineral Planning Survey (AMPS) Report reveals signs that the planning system may have difficulty dealing with any resulting upsurge in planning applications.

The AMPS3 report is based on planning data provided by MPA members for the period up to the end of 2013. It shows that inertia in the planning system has not reduced and, unless the situation changes, at some point in the near future the options for maintaining a steady and adequate supply of aggregates could become seriously limited. That supply is essential to the construction industry and to the economy.

For the first time this report is being made available in summary form. The full report is available on the MPA website here:

http://www.mineralproducts.org/documents/AM PS_Report_Summary_2014.pdf

Key findings from AMPS3 include:

- The number of planning applications for new reserves remains low.
- Despite that low number, determination times continue to rise.
- Around 90% of all mineral applications are successful.
- The greater proportion of new permissions granted since 2006 were for sites that were not allocated in mineral plans.
- Very few significant aggregate producing areas have complete development frameworks in place.
- Sand and gravel landbanks continue to decline, as a result of a 10 year average replenishment rate which is running at less than 50%.

The MPA believes that, although its members have been cautious about submitting applications due to the economic and political uncertainties over recent years, the lack of completed mineral development frameworks has had a significant contributory effect, resulting in a significant decline

in the tonnage of permitted aggregate reserves, particularly sand and gravel. Even by the end of 2014, only 24 mineral planning authorities in England had a complete mineral planning framework in place and the majority of those were not in significant mineral producing areas.

"Without mineral plans and the allocations they contain", explained Nigel Jackson, Chief Executive MPA, "the costly process of submitting a planning application is a heightened commercial risk which only a limited number of operators are willing to take, unless they have no option.

"The plan-led system has always given added certainty to developers seeking to secure new aggregate reserves and the commercial decisions that go with it. But without more commitment from planning authorities to produce up-to-date, fully functional mineral plans, there is little incentive for operators to engage in the process. It is particularly unacceptable that none of the top three aggregate producing areas has a complete plan."

The results of AMPS3 also indicate that, since 2006, MPA members have secured more planning permissions for sites that were not allocated in plans, than for sites that were allocated.

Nigel Jackson added, "That speaks volumes about the health of the plan-led system and is worrying as it weakens an already difficult situation, since those who engage with the plan-led system are paying twice for gathering data and putting sites into the system, only to see other sites getting permission at lower cost. Either we have a plan led system, or we don't - some are beginning to wonder why we need plans at all."

It seems likely that unless planning authorities and other decision makers show more commitment to both the plan-led system and the presumption in favour of sustainable development, options for maintaining 'steady and adequate supply' will continue to narrow. Some shortages of certain materials are emerging in some high demand areas which reflect the lack of replenishment of sand and gravel reserves over the last 10 years, particularly in London and the South





Hubert Watson

Mr Hubert Watson has been appointed as new Global Sales Manager to drive the Company's World-wide expansion

Mr Watson, who brings three decades of global management experience to Maximus, will help the company respond to escalating demand for its Crushers & Screeners across the globe. His extensive experience & knowledge within the manufacturing sector will assist & guide the company's continued world-wide growth.

"Hubert has an impressive track record leading sales organisations, collaborating with businesses and achieving aggressive goals. He knows what it takes to grow businesses exponentially and we're confident he will do it again with Maximus. Our company will benefit from his expertise. We are very pleased to welcome Hubert to the team of Maximus and wish him all the best in his new role", says Shane O Neill, M.D.





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New Terex® Cedarapids CRS620S Screen Plant handles wider range of applications and more capacity



Terex® Minerals Processing Systems (Terex MPS) has expanded their CR Series portable plant line with the addition of the Terex® Cedarapids CRS620S screen plant. The revolutionary plant features the next generation, patent pending LJ-TSV screen. The new screen increases production and handles applications not possible with traditional horizontal screens because it combines the legendary El-Jay™ high g-force oval stroke motion with adjustable slope operation.

This plant can handle larger deck loads and larger screen openings. Hydraulics quickly change the screen slope in 2.5° increments up to a maximum of 7.5° to best fit the application. Screen openings up to 6" (152mm) are possible. Patent pending "slant spring" screen suspension provides stability at all slopes. The plant utilizes large capacity conveyors to handle the high production capabilities of the new LJ-TSV screen. The 48" (1219mm) wide fines conveyor with its elevated discharge and the two 30" (762mm) wide reversible cross conveyors which extend up to 42" (1067mm) beyond the main frame, easily feed off-plant conveyors.

Roll-away blending chutes and extended walkways allow easy access to screen cloth. The patented low-maintenance flex shaft screen drive eliminates drive belt influence on the screen motion, belt whip, belt slippage, and spring loaded belt tensioners. There are no drive adjustments necessary when the screen slope is altered. In addition, the new flex shaft drive folds for travel, without shaft disassembly, to minimize plant transport width.

Ed Sauser, Product Manager at Terex MPS states, "The addition of this new plant to our CR series portable plant line gives our customers a product that will handle more applications than other screen plants on the market. The increased capabilities, higher production, enhanced durability, and maintenance friendly features make it an industry leader in productivity."



Sales Growth Fuels Expansion of manufacturing Facilities at QMS

Leading manufacturer and supplier of crusher wear and spare parts QMS, have further expanded their manufacturing capabilities with the installation of new CNC machining equipment.

The investment driven by a surge in worldwide demand and sustained sales growth increases capacity for machining medium to large work pieces.

The new machinery has been installed at their UK factory in Coalville, Leicestershire. The investment demonstrates their commitment to meet their customer demands and investment in UK manufacturing.

The significant investment compliments the existing manufacturing facilities at QMS, which together enables all turning, milling, slotting, grinding, drilling, welding, cutting and boring operations required for the manufacturing of precision machined crusher spare and wear parts.







The UK CONCRETE Show

THE UK CONCRETE SHOW

25-26 Feb 2015 NEC, Birmingham http://ukcs2014.businesscatalyst.com/



INTERMAT

20-25 April 2015 Paris-Nord Villepinte, France http://parisen.intermatconstruction.com/



WORLD OF ASPHALT 2015 / AGG1 AGGREGATES ACADEMY & EXPO

17-19 March 2015 Baltimore, MD, USA www.worldofasphalt.com



PLANTWORX

2-4 June 2015 Bruntingthorpe Aerodrome, UK www.plantworx.co.uk



PAWRS 2015

9-11 June 2015 Paignton, Devon www.pawrs.com



IARC 2015 (Automotive Recycling)

25-27 March 2015 Berlin, Germany www.icm.ch



WASTE '15

2 July 2015 AJ Bell Stadium, Manchester www.wastexpo.co.uk



CQMS '15 (Construction & Quarry Machinery Show)

17-18 April 2015 Tullamore, Co. Offaly, Ireland www.machinerymovers.ie/cqms







RWM

15-17 Sep 2015 NEC, Birmingham, UK www.rwmexhibition.com



ICBR 2015 (Battery Recycling)

23-25 September 2015 Montreux, Switzerland www.icm.ch



BULKEX 2015

21-22 October 2015 Harrogate www.mhea.co.uk



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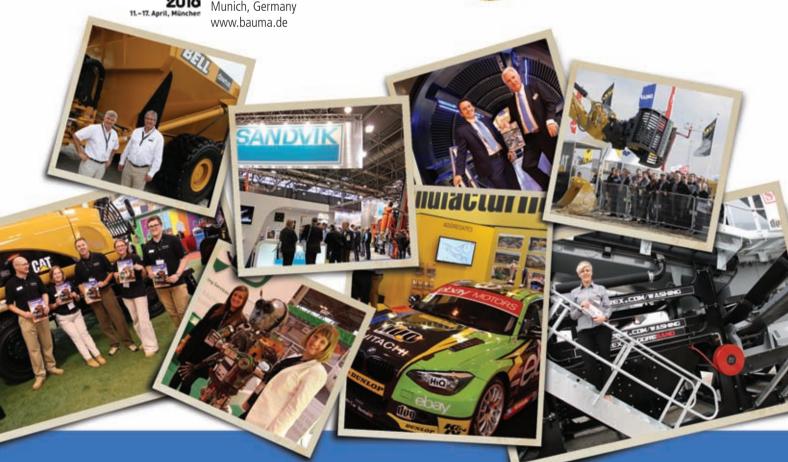
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News



Earlier this month, Crusher Spares Ltd celebrated its 5th birthday. Since we were founded in October 2009 by brothers Calum and Craig Garwood, we have established ourselves as one of the leading parts suppliers in the crushing, mining, quarry and demolition industries worldwide.



Crusher Spares Ltd was originally founded with the objective of supporting the many Brown Lenox and Kue Ken crushers still being used in the industry, but following significant demand for crusher spares that were made to an exceptional standard, CSL expanded their range in offering crusher spares to suit many other leading brands such as Extec, Parker, Sandvik, Pegson, Finlay, Hartl, Metso, Tesab, plus many others.



As the Garwood brothers have built up many friendships and trust worthy suppliers and customers in their combined 35 years in the industry, it is evident that repeat business is a show of their quality, durability. Even as competitive prices continue within

the industry, CSL are going from strength to strength. Recent sales figures showed that 80% of our revenue comes from repeat custom; this is a testament to the quality of the parts that we produce and the outstanding level of customer service that we provide.

Managing Director, Calum Garwood added that even though turnover has increased year upon year we have kept the same staff levels as year one, yes the working hour day is longer with the company exporting parts on a daily basis but keeping everything in house with family staff members ensures things are made correctly, purchased correctly, packed and shipped on time, every time.

- Huge stocks of high quality jaw plates, mantles/concaves, and blow bar hammers, which are replenished from our foundries on a weekly basis.
- 24 hour machine shop hand turn / machine eccentric shafts to suit most makes / models, plus toggles plates, seats, bearing housings, seal housings etc.
- CSL makes brand new grizzly feeders to order from sizes 30 inches wide x 10 ft long to 48 inches wide x 16ft long.
- CSL refurbish crushers and carry out repairs upon request at our South Wales workshop.

For more information on Crusher Spares please contact us on +44 (0)1443 228329, visit www.crushersparesltd.co.uk or email: sales@crushersparesltd.co.uk.



Providing Finance options for your burner & Plant upgrades!

Vulcan Burners are proud to announce that we can offer a comprehensive range of finance options for your burner upgrade and efficiency projects, either for individual plant upgrades via Carbon Trust loans and finance options, or multiple plant upgrades in association with private finance funding options.

In 2014, a number of our customers have availed of this service to upgrade their asphalt burner systems. Some have obtained 0% interest loans from the Carbon Trust whilst others have received assistance from Decarbon Capital. All our customers have remarked on how quick and easy the process has been with the average turnaround from application to installation being around 8 weeks.

Decarbon Capital are able to offer a variety of favourable packages for small or large projects based on "Pay as you Save/Consume tariff", so please get in touch for further information. We can organise a site survey to establish what energy savings can be achieved and how best the project can be funded.

We take huge pride in being completely honest with the customer and giving the most accurate advice, to the customer, on where savings can be best made across the asphalt plant. All advice and sales are explained by our highly skilled and experienced engineering team, allowing you to have confidence in the information we provide. Any quotation request will have a complete technical site survey carried out, so the quote you receive will have a full analysis of what to expect.

The Vulcan Burner range is versatile to all plant types and can offer applications for fuel oils, natural gas, LNG and LPG.

The Vulcan burner range is an efficient combustion solution for Asphalt and Aggregate Drying Plants. Manufactured with the latest innovative technology, it is proven to reduce fuel costs for drying aggregates in the Asphalt Industry and has become the superior burner product throughout the UK.

Vulcan Burners have an established track record with major international operators offering significant and proven savings for asphalt operations. Innovative dual fuel technology, including natural gas, LNG and LPG pioneered





by Asphalt Burner Services is increasing the overall competitiveness of operators in Europe and Asia. Major operators include Aggregate Industries, Cemex UK Materials and Eurovia Infrastructure. Monitoring shows average fuel savings of 20 per cent. Vulcan Burners are based on experience of Asphalt Burner Services Ltd Engineers, in asphalt burner maintenance, for over 40 years, that has enabled the company to develop burners with a unique and highly effective dryer combustion to optimise asphalt recycling and reduce carbon emissions.

The benefits of the installation of a Vulcan Burner include; Increased RAP production, reduced fuel consumption, reduction in emissions and increased reliability of the burner.





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New exhibition and seminar launched for materials handling industry

A brand new exhibition and combined seminar programme for 2015 has been launched by the MHEA. BULKEX 2015 will debut at the Harrogate International **Conference Centre on 21-22** October and will provide an unrivalled opportunity to bring together senior executives from all areas of the materials handling industry.

"We're delighted to announce this brand new event for our members and the wider materials handling industry," comments Mike Redmond, Chairman "Historically, the Association has organised separate, smaller scale exhibitions and conferences, but for the first time ever, we are bringing these together under one roof to provide visitors and exhibitors alike with a much more comprehensive marketing and learning opportunity."

More than 50 exhibitors covering a wide range of areas are expected to showcase their products and services to industry colleagues. In addition to seeing the latest products on offer, visitors will be able to hear about the latest developments affecting their business in a series of seminar sessions that will cover areas such as power, cement, ports, mining, recycling and building products.

BULKEX 2015 will be free to attend for visitors meanwhile companies wishing to exhibit at the event can take advantage of early bird exhibitor and sponsorship packages if booked before 31 January

For further information about BULKEX 2015, call Julie Claus or Trudi Joyce on 01787 226 995





The Hope Valley site is the largest in the UK and has a

multitude of wet and dry spillage and waste handling requirements. Following a blockage within the centralised pipework system of the site's waste-derived fuel plant, Hope Construction's Project Engineer Steven Salt decided the best solution to clear the obstruction was to hire a DISAB BagVac™.

The site's waste-derived fuel plant uses shredded carpet to partially replace coal as a sustainable fuel, but the shreddings can occasionally block bends in the pipework system. Using its massive suction power at the nearest inlet valve, the DISAB BagVac™ easily removed the line blockage, and because it could also be used for general waste and dust removal tasks and be carried by forklift to any part of the site, its flexibility meant the DISAB BagVac™ soon became a regularly used item of equipment.

Steven's happy with the results: "We chose the BagVac[™] over other machines because it offered us better flexibility. Besides clearing pipework blockages, the BagVac's got more than enough suction power to carry out all sorts of other dry waste and dust removal tasks on site for materials up to 50mms in size.

"DISAB showed us that it's both proactive and flexible. This coupled with the advice and support given us in the first place has impressed us, and with our 170 other sites around the UK, it's great for DISAB UK's relationship with Hope Construction Materials'.'

For more information visit www.disab.com













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Finning's 7 year relationship with Miller Argent weighs in at 5 million tonnes

Miller Argent's Ffos-y-fran mining facility has reached the landmark figure of five million tonnes of processed coal. After seven years of refining its processes, the huge land reclamation project based in Merthyr Tydfil, South Wales, now produces up to a million tonnes of coal per year.

Much of the finished product is used to fuel nearby Aberthaw Power Station, which generates enough electricity to power five cities the size of Cardiff. Port Talbot Steelworks is also a beneficiary, using the fuel to produce steel products used in heavy construction, as well as hundreds of every day consumer items such as cars.

Finning has been an integral part of the project since its inception in 2007. Although the UK's exclusive Caterpillar dealer has supplied a fleet of more than 50 Cat® machines, its involvement goes way beyond equipment. Finning also work with Miller Argent to manage onsite solutions, with field based engineers, analysts and operation managers permanently stationed at the coal mining facility.

Jason Davies, Health and Safety Advisor for Miller Argent at the Ffos-y-fran site commented on this relationship with Finning: "Over the last 7 years at Ffos-y-fran, Finning have provided an exemplary service with the on site repair and maintenance team. Together with us at Miller Argent, we have ensured plant productivity is maximised and through this process our working relationship has grown stronger each year.

"The efficient extraction of coal from Ffos-y-fran can only be achieved by the full involvement from both our teams, ensuring targets are met and mining equipment well maintained. To hit five million tonnes is a great achievement, but if our operation were not profitable it would be inconsequential."

The Ffos-y-fran facility has also provided a raft of opportunities for local young employment, with three Finning apprentices currently on site and two integrated into mining operations within the local region. The three mining engineer apprentices and two admin apprentices are being involved fully in the operation. These young professionals are acquiring essential knowledge and skills in the process, therefore enabling a prosperous future within the plant sector.

Denis O'Riordan, Mining Operations Manger for Finning in the South West, added: "Finning are excited to be integrated in the Ffos-y-fan mining project to such an influential level. The 51 Cat machines on site, from articulated dump trucks to hydraulic excavators, perform a range of strenuous tasks with premium fuel efficiency. However, it is the additional managed solutions Finning provide that optimises the value we provide to Miller Argent."

"I work with a dedicated team of 10 Finning staff, from engineers to project planners who all contribute greatly to the day to day running of the site. With the use of Finsight® we are able to monitor all operational activity, from operator performance to fuel economy to the site layout, making sure that everything is running as efficiently, productively and most importantly as profitably as possible."

Denis closed by stating: "The last seven years have been a real benefit for both ourselves at Finning and Miller Argent. I look forward to the Ffos-y-fan project achieving the next five million tonnes."





Versatile and powerful -Industrial gear units from SEW-EURODRIVE



SEW-EURODRIVE offers suitable industrial gear units for applications requiring high torque ratings. The modular concept once again provides optimum adaptation of industrial gear units to meet a wide range of different applications. Besides the great flexibility of our standard products, we can provide bespoke units tailored to your individual specification up to 5,000,000 Nm. SEW-EURODRIVE is your competent partner for all areas, from process planning, through project planning all the way to startup. These services are supported by our renowned, worldwide service for a comprehensive guarantee of reliable completion of all process stages. SEW-EURODRIVE—Driving the world.

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info@sew-eurodrive.co.uk

RDS LOADMASTER α 100 on-board weighing system



RDS Technology is pleased to present the LOADMASTER a 100 on-board weighing system, described by the UK based manufacturer as being the industry benchmark in terms of accuracy and ease of use in difficult conditions and terrains.

The RDS LOADMASTER α 100 is a CAN based system combining cutting edge sensor technology and signal processing techniques providing precise and consistent weight information.

With the ever increasing focus on productivity, LOADMASTER aloo has been designed to operate within the fastest loading environments and toughest of conditions compensating for uneven, sloped ground and restricted loading areas reducing cycle times and maximising tons per hour performance.

Loading correctly first time eradicates return trips to the stockpile reducing vehicle movement, fuel usage and machine & tyre wear.

The RDS LOADMASTER of 100 uses a 7" colour, resistive touch screen display and additional physical keys providing a modern and ergonomic operator interface.

Suitable for use with up to 10 different attachments e.g. buckets or forks, the system can be retrofitted onto wheeled, telescopic and tractor type loaders.

The system continually measures hydraulic pressure using up to 4 sensors. The pressure signals are captured and filtered through a weighing 'arc' provided by inclination sensors measuring the angle of the main boom.

All signals are processed in the RDS Smart Box and the resultant weight calculation is sent to the terminal mounted in the cabin.

It has an SQL database capability with up to 8 reference fields providing virtually unlimited inputs of products, customers, trucks, hauliers, locations, destinations, mix blends and notes.

GPRS or Wi-Fi connectivity provides one or two-way communication with the back office to send and receive job information.

Video input for switching head unit into reversing camera mode removes the need for additional screen, releasing valuable cab space.

For more information on how RDS can help improve your operations, visit www.rdstec.com or call 0044 (0)1453 733300.



Kiverco appoints Paul **Rothwell** as **Managing Director**



The Dungannon based waste processing specialists have appointed Paul **Rothwell** as their new managing director.

Founder and Directors Aidan and Anne McKiver are looking for Paul to work with them to develop and grow the business significantly.

Paul who has 30 years' experience in management and leadership roles in a variety of competitive market led sectors in industrial manufacturing, food sector, retail, and service. Companies he worked for range from heavily structured and disciplined world-class PLC through to relatively small and informal local

When asked why he took on this challenge, Paul replied: "I was initially asked by Kiverco to give them an independent view of their plans for development and growth. In doing that I saw a successful company with a 20 year record of quality products and great customer service, but still full of ambition and with no sign of complacency.

As I got to know them better it was clear the ambition wasn't just a pipe dream. It was supported by financial stability and matched by a well balanced team with the quality, experience, and attitudes to really make it happen. That's a rare combination in my experience and it's very, exciting when you do

Paul Rothwell joined the business in December and he has great plans for developing and growing market share, nationally and internationally. Paul said: "Our plant stands up in any global market, and I know that Kivercare - our aftercare offering - reflects the really impressive commitment to customer service. We are making major investment in innovation and capacities within the business to ensure we continue to lead for a long time to come.

We already have many customers and partners across Europe, Middle East, North America and in Australasia and the plan is to develop those further. By the end of next year, we want to increase our channel overseas by 20%, while further developing the strength of our brand in the UK. I am very excited about this opportunity and look forward to the challenges ahead."



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Innovation In The Limelight At

INTER Paris

The essential "must visit" event to discover new and emerging machinery, equipment and processes for construction and materials production



From 20 to 25 April 2015, INTERMAT will once again be the key global event for construction materials, machinery and techniques.

As it has always been the case throughout the show's history, INTERMAT 2015 is the event where the vitality and energy of industry members in the fields of innovation and the development of new solutions will be brought to the fore.

The 2015 edition promises to offer a high level of creativity and exceptional events to promote the building materials and machinery industry and the companies that use them.

One of the new features of this 2015 edition is World of Concrete Europe (WOC Europe), bringing together the entire concrete industry and its full range of products. Innovations will once again be recognised and championed with the INTERMAT Innovations Awards. Live demonstrations, held under the label Paris Demo, will provide visitors with a spectacle of machinery in action.



ORLD OF CONCRETE EUROPE OC EUROPE)

In Las Vegas, World of Concrete has become the leading event for the concrete industry in North America. To meet the needs of the European concrete market and to tie in better with visitors' demands to have an overall view of the sector, S.E. INTERMAT and Hanley Wood have signed a partnership agreement to sector, S.E. INTERMAT and Hanley Wood have signed a partnership agreement to create and launch World of Concrete Europe (WOC Europe) which will be one of the headline events at the next edition of INTERMAT 2015. World of Concrete's ambition is to welcome all of the industry players along the concrete chain, from purchasing influencers to layers, in Europe and French-speaking African and Middle Eastern countries.

Organised for the first time in Europe on the occasion of INTERMAT, WOC Europe will display an exhaustive offer from the concrete industry, from the earliest stages of the concrete cycle (materials, products and additives) to its final use (decorative concrete, coatings and cements, engineering and services).

Alongside the presence of exhibitors in a dedicated space, WOC Europe will also offer an educational seminar programme whose aim is to flag up technical innovations and processes to help to deliver truly exceptional works. Five major themes will be covered and studied in detail: worldwide innovations, concrete fundamentals, maintenance and repair. fundamentals, maintenance and repair, special concretes, demolition and recycling.

WOC Europe will also see workshop features dedicated to demonstrations. Visitors will discover, all day long, concrete product applications and exhibitor innovations to succeed in decorative, polished, scrabbled or printed concrete, etc. These features will also highlight placing methods and demonstrations of tools and equipment marketed by concrete industry specialists. marketed by concrete industry specialists.

Among the exhibiting companies which
will be putting on workshops at WOC
Europe: Blastrac, Dustcontrol, Holcim,
HTC, Mapei, MCS and Moderne Methode.

A panel featuring well-known European specialists from the equipment industry will reward the best innovations. The Interval of the best innovations. The INTERMAT Innovation Awards, chaired by the French FNTP, this year will reward the latest technological advances. They will be divided into five new categories which mirror the lifecycle of a project:

- Raw Material Extraction
- Construction Equipment
- Equipment & Components
- Engineering & Systems
- Digital applications

Two special awards will be made in addition to these categories:

- The special World of Concrete Europe
- The special Sustainable Development

Results will be announced and trophies awarded on 22 January 2015 at the Pre-INTERMAT gala

PARIS DEMO

A leading attraction at INTERMAT 2015, Paris Demo is the only live exhibition of equipment in action on an outside demonstration zone. On a showground spanning 30,000 sqm, professionals will be able to discover at first hand the know-how of manufacturers and the dayelopments in the developments in the performances of machinery and equipment in real-life operating conditions.



A NEW SHOW LAYOUT IN TUNE WITH VISITOR REQUIREMENTS

In 2015, INTERMAT goes to the heart of the industry's issues, presenting a new sector organisation to promote equipment for all the phases in the construction cycle:

- Mines and quarries, production and use of construction materials
- Concrete industry, World of Concrete Europe
- Buildings and Work sites
- · Lifting and handling
- Drilling, boring and special foundations
- Earthmoving and civil engineering
- Construction and maintenance of road infrastructure
- Vehicles and transportation for materials, equipment and people
- Components, equipment and accessories
- Environment, demolition and recycling
- Topography, engineering, automatic systems and new technology
- Services and communication

Along with this new segmentation is a new show layout to give visitors an overview of the full life cycle of a project, from start to finish. Lastly, to meet visitors' expectations, three cross-cutting themes will be clearly indicated in the different halls: recycling, material re-use and demolition.

In all, there will be 375,000 sqm of exhibition space for exhibitors and visitors, with five indoor halls, five outside exhibition areas and one large demonstration zone.

AN EXCEPTIONAL PROGRAMME DEDICATED TO THE EMEA ZONE

INTERMAT has a long standing tradition as an important event for industry figures from the EMEA zone (Europe, Middle East and Africa), and the 2015 show will be no exception, providing further proof of its leadership.

To give full effect to the exhibition's influence and drive in this economic region, a number of specifically-dedicated events will be taking place during the show, to strengthen ties and business relationships between markets. All construction industry players are invited to join in: manufacturers, building contractors, investment banks, market specialists, architects...

SCHEDULE OF EVENTS:

Turkey Day: Monday 20 April 2015

- Presentation by INVEST IN TURKEY of major construction projects in Turkey and the country's attractive economic prospects
- Presentation by IMDER of market opportunities in construction machinery and equipment in Turkey

Algeria Day: Tuesday 21 April 2015

- Round table on a public works issue specific to Algeria dealt with under a technical and macroeconomic angle.
- Market presentation: the public works market, presented by a sector specialist
- Business meetings between exhibitors and visitors

Middle East Days: Wednesday 22 and Thursday 23 April 2015

Saudi Arabia:

- Presentation of projects between now and 2030
- Breakfast business meetings between distributors and exhibitors

United Arab Emirates:

- Presentation of challenges and opportunities stemming from the Dubai World expo 2020
- Breakfast business meetings between distributors and exhibitors









INTERMAT IN FIGURES

- FREQUENCY: every three years
- DATES / TIMES: 20 to 25 January 2015, 9am to 6pm
- VENUE: Paris-Nord Villepinte Exhibition Centre, France
- SURFACE AREA: 375,000 sqm
- KEY FEATURE: the only show with a 30,000 sqm outdoor demonstration zone
- EXHIBITORS: 1,500 (including 70% international from 37 countries)
- PROFILES: manufacturers of equipment, components, machinery and accessories, distributors, rental companies, service companies for the construction and materials industries.
- VISITORS: 200,000 visitors expected (including 34% international from 148 countries)
- PROFILES: project managers, construction companies, engineering firms, architecture firms, surveyors, plant distributors and rental firms, handlers, materials traders, mine and quarry operators, financial organisations and service companies.





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20 - 25 April 2015
Paris-Nord Villepinte - France



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The NEW Terex® Finlay J-1170AS is a high performance primary mobile jaw crusher built around the renowned and aggressive Terex® 1100mm x 700mm (44" x 28") jaw crusher, with a proven track record in recycling, aggregate production and mining applications. A key new feature of this model is the on-board detachable sizing screen

The Terex 1100mm x 700mm (44" x 28") jaw chamber provides excellent material reduction and product sizing in the processing of blasted quarry rock and ore material. The jaw chamber is also available with optional hydraulic release, an excellent feature when crushing construction and demolition debris. The hydraulic release option has an automatic overload protection system to prevent damage by uncrushable items in the feed material.

The machine is powered by either a Tier 3 / Stage 3A Caterpillar C9 261kW (350hp) or a Tier 4i Scania DC9 70A 257kW (350hp).

Hydrostatic transmission of the jaw chamber offers operators reversible operation in the event of a blockage. The hydrostatic system also provides variable chamber speed to suit given applications. The crusher features hydraulic assist Chamber CSS (Closed Side Setting) adjustment, and can be changed in a matter of minutes.

The machine has a heavy duty variable speed vibrating grizzly feeder (VGF) with integrated pre-screen, providing an aggressive action to separate fines material efficiently. The variable speed VGF ensures continuous choke feeding of the crushing chamber for optimal productivity. Material from the pre-screen can be diverted to a stock pile via the on board bypass conveyor, or join the crushed product on the main belt.

The large 9.6m³ (12.55yd³) hopper has hydraulically folding sides and an innovative hydraulic self-locking mechanism to provide efficient and faster machine set up and tear down times.

"The J-1170AS with its onboard sizing screen will enable operators to produce a spec'd product without the need for a

secondary screen. The sizing screen can also be detached without the need for additional lifting gear means that the machine can be used as 'straight' J-1170 jaw crusher, giving the operator versatility for applications that do not require sizing. When you combine these factors with the excellent crushing capabilities and the ease with which the machine can be transported ensures the demands of owner operators and crushing contractors are easily met" said Nigel Irvine, Sales and Marketing Director.

Key Features:

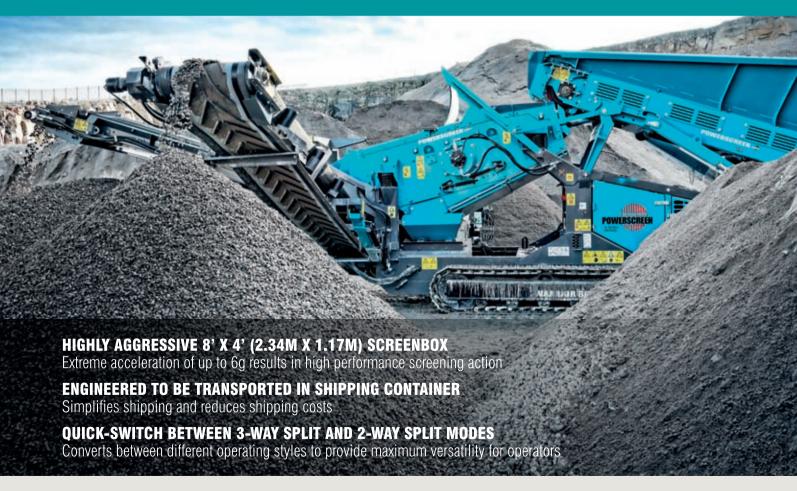
- Robust proven Terex 1100mm x 700mm jaw crusher for high capacity and large reduction ratios in quarrying, mining, demolition and recycling applications.
- On board After Screen delivering a single sized product removing the need for a second machine.
- After Screen system can be removed quickly allowing the operator to use as a standard unit, giving the operator versatility depending on the application.
- Automatic variable speed VGF ensures continuous choke feeding of the crushing chamber for optimal productivity.
- High powered hydrostatic drive ensures precise chamber control and reverse functionality for clearing blockages and assisting in demolition and recycling applications.
- Hydraulic assisted closed side setting adjustment minimises downtime and offers quick adjustment.
- Compact dimensions and quick set-up make the J-1170AS the optimum solution for contract crushing as well as demanding in-pit applications.
- Hydraulically assisted closed side setting adjustment minimizes downtime and offers quick adjustment.
- Excellent fuel economy
- Safe, quick and easy service points for regular maintenance



POWERSCREEN® WARRIOR® 600 LAUNCH

The new high performance Powerscreen® Warrior™ 600 mobile screen will be officially launched at Intermat 2015. It is the newest addition to the globally successful Warrior range of heavy duty screens. It has been specifically designed for operators for whom versatility, manoeuverability and transportation are of key importance.





www.powerscreen.com

Contact us or your local Powerscreen distributor to learn more about the Warrior 600 screen. **Tel:** +44 28 8771 8500 **Email:** sales@powerscreen.com





With real growth returning to the Irish construction and quarrying equipment market in 2014, 2015 looks set to be even better with some predicting as much as 100% growth. Many operators have postponed vital investment for as long as possible during the recession, but the industry is now crying out for a forum where it can see the latest equipment operating in authentic conditions so it can finally make those long overdue informed purchasing decisions.

The launch of CQMS'15 - the Construction & Quarrying Machinery Show which will be held at Molloy's Quarry in Tullamore, Co. Offaly on April 17 and 18 - by Machinery Movers Magazine should meet all the industry's requirements and much more besides. So successful has the CQMS concept proven that by the end of 2014, the organiser, Machinery Movers Magazine, had confirmed over 80 exhibitors and sold out the live demonstration areas. With growing interest in early 2015 Machinery Movers publisher and show organiser Brian Coogan has now confirmed that extra space has been allocated to meet the unprecedented increasing demand. "We are thrilled but not entirely surprised that we have had to extend the show's footprint," he said. "We have made sure we can meet this growing demand but any organisations

interested in exhibiting need to get in touch pronto!"

Over 80 organisations have already committed to the show including such major players as Finning/Cat, JCB, Hyundai, Kubota, Hitachi, Case, Takeuchi, Komatsu, Terex, Sandvik, Volvo and a host of others. With headline sponsorship from Close Brothers Finance, the show has certainly gained the backing of some of the biggest names in the business. In addition, new signings since the start of the year include Smiley Monroe, Powerscreen, Irish Tesab dealer Irlequip, Breffni Plant and CDE Global.

Many in the industry have voiced their strong support for the new show. Rory Flynn of Ashbourne, Co. Meath-based Breffni Plant Hire comments, "This is a very positive development for spring 2015. I believe that the country is ready for this show having been through seven or eight years or really hard times when it wouldn't have had a chance. It's a great location and there's plenty of positivity in the industry. We intend to do lots of business at the show and sink a few pints afterwards! We are ready to rock!"

Gearoid O'Callahan of Atlantic Plant Hire of Lissycasey, Co. Clare is also excited about the event. "Things are looking very positive for 2015 and the next couple of years too. It is definitely the right time for a show, it should inject a bit of confidence back into the

market. It is important for people to get out and see the new machinery operating, it's something we haven't really had a chance to do for some time in Ireland."

Exhibitor and quarrying equipment specialist Sandvik's Kevin Dooley comments: "This show is something that the industry really needs and it has to be done! This is demonstrated by the excellent response the show has received so far. It is a sign of the returning confidence and that the market is picking up. It is important that Sandvik Construction exhibit at the show so customers can see the full product range along with live demonstrations."



Register online for the event at: www.machinerymovers.ie or for more information contact **Brian Coogan:** brian@machinerymovers.ie; Tel: +35 (0)83 433 5968. Or In Northern Ireland: **Cathie Blackwood:** Cathie@machinerymoversuk.com Tel: +44 (0)7834 560985.

Steelweld Fabrications Ltd a leader in quality laser cutting and fabrication services

With over 30 years' experience, Steelweld Fabrications Ltd has firmly developed into a leader in quality laser cutting and fabrication services across the UK and Ireland. This has resulted from a determination to deliver quality products, on time every time, at competitive prices to their growing list of partners.

Historically operating in the quarrying and mining industry, growth of the Steelweld team has been strategically planned to integrate engineering and manufacturing experience from the construction, agriculture, transport and recycling sectors.

Working closely with their diverse range of customers, the Steelweld team prides itself on being the chosen partner to assist them in meeting their

Steelweld Fabrications Ltd has made significant investments over the years to ensure sustained success in terms of delivery, quality and cost and ultimately the success of their partners both locally and internationally. They continue to invest having recently installed two new 3040 Trumpf lasers and a Durma 640 ton, 8m tandem press-brake. This increased capacity will enable Steelweld to satisfy the increased demand for steel kits and fabrications into the industrial centres in England, Scotland, Wales and further afield in mainland Europe.

Full capabilities include:

- Three Trumatic 4mx2m 4kW lasers, a Trumatic 6mx2m 6kW laser and an Esab Hi-Definition 10mx2.5m Plasma. Two lasers are equipped with automatic Liftmaster technology. Lasers cut up to 25mm, plasma up to 50mm
- 160t x3.5m, 300t x4m and 640t x8m tandem (2x4m) Durma press-brakes and 130t x3.2m and 320t x4.2m Trumpf press-brakes
- All fabricators are certified to BSEN287.Pt1. They have several fabrication production lines set up for: flexible volume production of heavy fabrications, small batch cells for light fabrications and high volume lines.
- Steelweld have particular expertise in large heavy fabrications with dedicated product lines set up for large chassis. They are one of the largest suppliers in the UK of chassis for machines such as quarrying crushers and screeners. 13m, 10ton fabrications are the norm for many of their skilled fabricators
- Leading shot blasting technology and two state of the art 13m spray booths with combi-oven. They can blast and spray paint to exact customer's specified standards and ensure controlled cure cycles at temperatures up to 80°C
- Finished product solutions where they complete full, finished assembly, PDI, manage quality and dispatch documentation, package and ship product directly to their client's end users or distributors. Their flexible assembly line is currently assembling and shipping material conveyors around

To demonstrate their commitment to their customers, employees and the environment, Steelweld have achieved and maintain the following accreditations: ISO 9001:2008, ISO 14001:2004, BS OHSAS 18001:2007, Investors in People.

Steelweld understand it is equally important to develop the infra-structure to support increased capacity and ensure sustained high performance in delivery, quality and cost. Equipment investments are being accompanied by investments in their operational and management software systems. Alongside an already existing culture of lean manufacturing and continuous improvement, there are plans to further expand the engineering support department.

Far from the typical, detached customersupplier relationship, the Steelweld engineering department gets fully integrated with their customers engineering, production and quality departments. Through processes including new product implementation and design for manufacture reviews, they strive to break down the silo walls and work with customers to ensure right first time delivery and to deliver design improvements and cost reductions. In many cases Steelweld will complete design work for customers and create full 3D models working with SolidWorks design software.





Quarrying

Reducing Submersible Pump Downtime

One of the problems often encountered by users of pumps in quarries, is that the pumps fail regularly due to the abrasive nature of the fluids being pumped. Often pumps used in quarries are modified versions of pumps developed for other, less aggressive applications. Here we look at how you can reduce submersible pump downtime.



Audex Pumps -Designed with Your **Industry in Mind**

The Audex® range of submersible pumps have been developed for use in the toughest and most abrasive applications and environments. Specifically,

they are in used by many of the world's largest aggregates and quarrying companies in dewatering applications.

A Winning Combination

A unique feature of the Audex® range is the pairing of a polyurethane lined volute with a high-chrome impeller. This gives you a pump with incredible wear resistance. Your Audex® will sit in your quarry quietly performing day after day. The regular purchase of expensive replacement parts and downtime due to pump failure becomes a thing of the past.

The Future is Modular

Shipping a pump off site for repair means a much longer downtime. Audex® pumps have a modular design which allows most repairs to be performed on site. The wet end is designed to be repaired by the operator without a requirement for special tools.

The Audex® Pump Protector

All Audex® pumps are built with the ability to incorporate the Audex® Pump Protector. This device detects any moisture coming through the primary seal and shuts the pump down before any expensive damage is done to the

pump. You then only need to replace the seal, avoiding the expense and downtime of a full rewind (typically costing up to 70% of the new pump value.)

Available From Stock - For Purchase or Hire

The full range of Audex® submersible pumps is stocked by Atlantic Pumps of Sheffield, UK, ready for despatch to quarries worldwide. Atlantic Pumps are a pump company focused entirely on solutions for abrasive pumping applications, and are specifying the Audex® range to some of the world's largest aggregates and quarrying companies on a daily basis. The full range is also available for hire if you have a shortterm need.





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Superior Industries, Inc., a major U.S. manufacturer and global supplier of material handling systems and their related components, says its washing fines recovery system was granted patent protection from the United States Patent and Trademark Office.

This exclusive technology, manufactured into the company's Aggre-Dry Dewatering Washer, reroutes minus 25mm material fines from an onboard dewatering screen back to the integrated sand screw. Traditionally, the company says, these fines are lost to waste ponds, but the recovery system processes this material to the saleable stockpile. Depending on production rates, the extra material can add tens of thousands of dollars to sand producer's bottom line.

Superior's Aggre-Dry Dewatering Washer is a single machine integrating a fine material washer and a dewatering screen. Sand processed through the equipment is stockpiled with a moisture content of just 8%, meaning the saleable product requires no drying time and can be accessed immediately.

Alternative uses to this technology include traditional sand screws, which produce high moisture material that can takes weeks to dry; dewatering screens without partner material washers lose up to 15% of sand to waste ponds; and cyclones use excessive amounts of horsepower, at least double the consumption of an Aggre-Dry Dewatering Washer.

Aggre-Dry Dewatering Washers are available in single or twin screw configurations and in screw sizes of 36-inches (914mm) to 60-inches (1,524mm). The twin screw 60-inch model is capable of processing up to 800 TPH. The maximum material size that can be process through the machine is 3/8-inches.

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Bucket Bundie - the off-highway operator friendly bowser

The Bucket Bundie allows operators of machines with buckets to simply scoop up the bowser and drive it across sites, making it easy to get fuel or other fluids to where you need them, especially in difficult terrain.

No additional equipment is needed, drivers simply aim the bucket at the slots in the support legs (part of the patented Bucket Loading System) and then tilt the bowser back in to the bucket.

Bucket Bundie is available in three sizes - 450-litre, 1,000-litre and 2,250-litre - and all are ruggedly built by ACE Plant at its Old Stratford HQ near Milton Keynes. Quality and the heavy duty construction are key features of the bowser, as well as being UN IBC certified.

Many users have found the Bucket Bundie solves the problem of refuelling in remote locations and the security issue involved with leaving fuel on site overnight. With the Bucket Bundie, operators can simply pick up the bowser after a day's work and store it in a secure area.

The Bucket Bundie can be fitted with various pump/filter combinations for dispensing fuel or water. Pertinent with the introduction of Stage IV emission regulations at the beginning of this year, Bucket Bundie can also be used for the transport and dispensing of adblue®.

ACE Plant is the sole agent in the UK and Europe. It is manufacturing and selling the Bucket Bundie (with the patent protected Bucket Loading System) under licence from inventor, Mick Tye.

Mick, a life-time plant man, came up with the idea for the Bucket Loading System and the design was inaugurated at the Site Equipment demonstration ground where it won a silver medal in 1998 as the Tye Bucketbowser. This forerunning

BUNDIE BOWSER.co.uk

design has subsequently been further improved and modelled, with the latest variant, now called the Bucket Bundie, on show at the Hillhead exhibition.

A 1,000-litre Bucket Bundie is currently in use at Packington Estates' new sand and gravel guarry at Stonebridge. Quarry manager, Lindsay Smith said: "The Bucket Bundie offers a really efficient solution to what can otherwise be a logistical challenge. It can be transported by the equipment that's already on site. It is safer than trying to tow a static bowser behind a loading shovel. It saves time, money and wear and tear on machinery and prevents any contamination from one end of the quarry to the other."

ACE Plant Managing Director, Frank Cundell said: "The Bucket Bundie is really starting to take off. The simplicity and convenience mean that operators can quickly move bowsers without any hassle. Furthermore, we are starting to roll out the idea into other products such as water tanks, tool boxes and dust suppression units as we see this system as a bit of a game-changer."

Michael Tye said: "Working with the ACE Plant team has been a delight. They have developed the original concept into a practical and useful product that is dramatically changing how operators around the world are working on sites.'

ACE Plant's director Alan White will be looking after all sales (in the home market and export).

The Bucket Bundie will also be on show at Plantworx 2015.

Miller Plant invest seven figure sum in Sandvik Mobile C&S equipment

Aberdeenshire based Miller Plant Limited, founded in 1968, provide plant hire services to the agricultural community, local authorities, construction companies and estates. The company made its first foray into the crushing and recycling market in 2006 with the purchase of an Extec C-10 Crusher. However, recent investment in mobile crushing and screening equipment from Sandvik Construction has enabled the company to broaden its service portfolio to include the demolition and quarrying industries.

The Miller Plant business has grown to become one of the key earthworks contractors in the North East of Scotland. A key factor in its success has been the acquisition of the most advanced and productive machines available, with the company's fleet including machinery from manufacturers such as Caterpillar, JCB, Volvo CE and Hitachi. The choosing of plant from the Sandvik Construction Mobiles range was thus an ideal way to compliment this already impressive fleet.

The investment in mobile crushing and screening equipment has enabled Miller Plant to develop a service specifically for the quarrying, demolition and recycling industries. As a business it is committed to promoting the use of secondary aggregates and recycled products wherever possible. The use of Sandvik mobile crushing and screening equipment provides advantages, commercially and environmentally. These include less material being removed from site, and less needing to be imported, reducing road haulage, saving time and also helping to reduce its carbon footprint. Furthermore the fleet is

effectively capable of converting what was originally thought of as waste into a valuable asset, which can then be re-used as sub-base, 6F2, crusher run, infill and a variety of other products.

Following the acquisition earlier this year of a QA340 Doublescreen and a QE340 scalper, Miller Plant has now invested in the QH331 tracked cone crusher. The QH331, recently redesigned to provide customers with a more environmentally friendly, economical and efficient machine through its direct drive system, is compact and ideal for easy transportation and on site maneuverability.

The QH331 features the CH430 cone crusher; an innovative crusher design from Sandvik's Hydrocone range, the world's most technologically advanced cone crushers. The hydraulically adjusted Hydrocone is one of the most flexible and maintenance-friendly cones available today as it can be serviced entirely from above, which helps to simplify maintenance work and reduce costs. Hydrocone crushers' compact and easy-to-service design makes them a perfect choice for mobile installations. The QH331 also features a hydroset system and an automatic setting regulation system that keeps track of liner wear, making it easy to plan liner changes and optimize production. Operators can also benefit from the fact that the QH331 does not have crusher backing behind the liners enabling rapid liner changes so crushing can recommence as soon as the change has been made, rather than waiting 8 to 12 hours as is the case with many other models on the market.



Quarrying

Miller Plant has also invested in a Sandvik QA451, the world's only triple-decked Doublescreen. The QA451 is designed to complement a primary, secondary or tertiary crusher in order to produce the cleanest aggregates with ease. Utilizing Sandvik's unique patented Doublescreen technology, the advanced triple-deck Doublescreen system allows for individual changes to the drive, angling, vibration and meshes of each screen box. This allows the customer to firmly remain in control of the size and specification of the finished products with the added reassurance that throughput requirements will be met.

Most recently saw Miller Plant acquiring a QJ241 and now a QJ341 tracked jaw crusher - the flagship of the Sandvik jaw crusher range. Both the smaller and larger model have been designed to be equally productive in both hard rock and recycling applications. They feature hydraulic adjustment, a reversible jaw and with a high crushing speed they are capable of delivering maximum productivity with excellent reduction ratios.

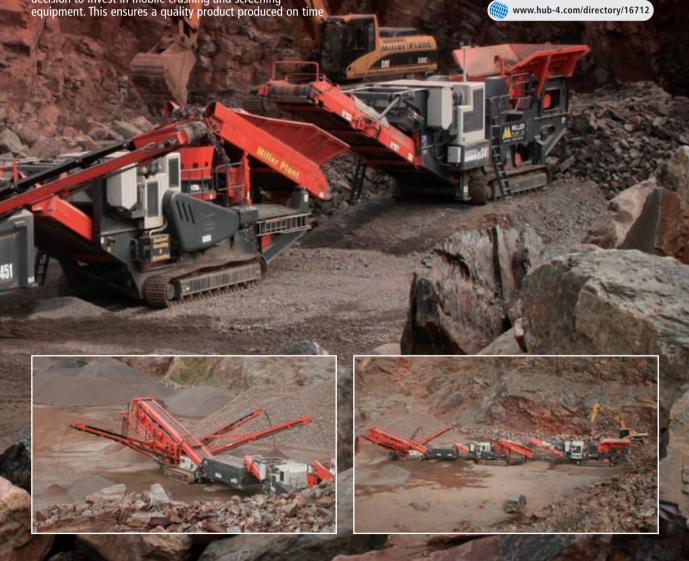
Since Miller Plant's investment in the Sandvik Construction Mobiles range the company has been able to undertake major contract work in quarries, recycling plants and civil engineering projects. This has seen the crushers working on Aberdeenshire granite rock, one of the hardest materials in the country. This has proved no match for the Sandvik crushers which are capable of efficiently processing this exacting material, dealing with between 4,000 to 250,000 tonnes of rock on each individual project.

Being able to adapt the plant to suit various environments and cost requirements has been essential to Miller Plant's decision to invest in mobile crushing and screening

and to the clients' exact specification, with the versatility of the Sandvik fleet proving to be a key component. Furthermore providing the best equipment and expert industry knowledge are paramount to Miller Plant's business, and keeping the machinery operating at peak performance is provided by its Fleet Support Team. In maximizing the efficiency of its equipment, Miller Plant has also benefited from Sandvik aftermarket support that places emphasis on ensuring essential parts can be dispatched rapidly, and offering proactive machinery service from experienced service professionals.

Over the years Miller Plant has built up a reputation for excellence, undertaking a variety of projects across different industries, using a combination of experienced operatives and quality machinery. The company now services the requirements of customers from some of the most prestigious names in construction, ranging from multi-national construction companies to local authorities and small local builders. The use of mobile crushing and screening equipment from Sandvik Construction has further enabled Miller Plant to more fully service the requirements of the industry.

"Sandvik equipment has proven to be a strong and reliable partner over the past 8 years. Their reputation for providing quality machinery with expert support and service made them the ideal choice for us when considering where to invest for mobile equipment. The innovative solutions have allowed us to expand our business into new areas and grow our customer base. Overall we're very pleased with the service from Sandvik and they will be our first choice for any future investments" Ian Miller, Managing Director of Miller Plant.



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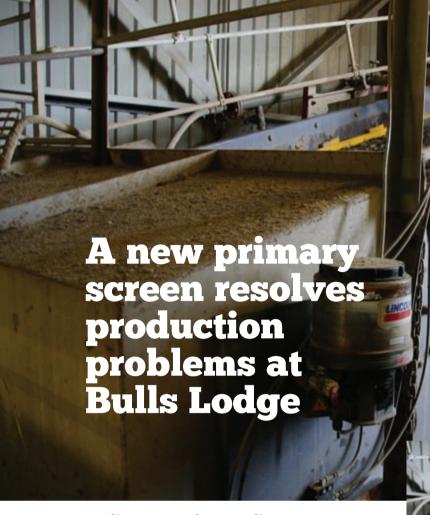
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- T. +44 (0) 1530 817 000
- F. +44 (0) 1530 817 111
- E. sales@cmscepcor.com







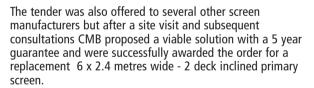
Leading Quarry Plant supplier CMB International has recently supplied a replacement primary screen to Hanson's Bulls Lodge Quarry near Chelmsford, Essex.

Bulls Lodge is a high profile site and is owned and operated by Hanson UK. The site itself has a chequered history; once a WW2 airfield operating Buccaneer bombers, this was followed by a period after the war with motor racing which was organised by the West Essex Car Club until 1955 when the Ford Motor Company used the old airstrip for truck testing. The old airstrip was then dismantled by Pioneer Aggregates in the 1990s to get at the valuable gravel reserves below, with Hanson taking over in 2000. Since operations commenced the plant has processed a minimum of 650,000 tonnes per annum and with a 4 million tonne extension there is approximately 15 years of reserves to process. Today the plant supplies product primarily to local concrete plants as well as supplying its own concrete plant, asphalt plant and an on-site bagging plant.

Replacement Primary Screen.

With such a high profile plant it is essential that any downtime is kept to the absolute minimum and having suffered on-going issues with the wash plant primary screen for a considerable time a decision was made to replace the

Alex Smiles - Quarry Manager, commented, "We had serious issues with the original primary screen for a considerable time and although several attempts were made by the manufacturer to resolve the problem the proposed changes were too expensive, so we decided the best way forward was to replace the screen. As CMB screens were operating at our Needingworth site in Cambridgeshire, and after confirming with a colleague that they were performing well I decided to approach them to supply a replacement."



Liam Holland - General Manager of CMB, commented, "After our initial discussions we realised that the main issue was in the design of the old screen. Protecting the steelwork was a prime concern and also the issue of the deterioration of the rails and the subsequent effect on the cross members. Working together we resolved the issues and the screen and structure was redesigned by Chris Hall here at CMB which included improving access to the lower decks."

Installed in March 2014 the new screen was successfully installed and commissioned within three days over a weekend by CMB appointed contractors.

Alex further commented, "CMB were very thorough and their design resolved all the old issues and ensured it would fit perfectly. So far it has performed faultlessly and is screening a feed of 200mm max with some clay content at 425tph."



Crusher Spares Ltd.

Keeping your Crushers Crushing



QMS Introduce Modular Vibrators to Range of Screening equipment

QMS's range of SVI- Inclined and SVH -Horizontal screens are now available with Modular vibrators. The extremely compact and interchangeable units make maintenance far easier compared to a conventional shaft design. With two bearings per vibrator they offer exceptional long bearing life. The vibratory mechanism is located at centre of gravity, giving circular motion at all points of the screen. The development of the modular vibrators compliments the existing class leading features.



QMS's Design Chief Artur Bodula commented:

"Compared with other screens on the market, the QMS SVI & SVH offers the maximum space between decks, making it easier and safer for operators during maintenance intervals.

This is not the only thing that contributes to the fact that the screens are very maintenance friendly, the unique deck frames are designed to handle modular, side tensioned and end tensioned screening media, making it easily interchangeable from one to the other. Easy and quick replacement of screening media, wear liners, and spare parts gives the customer maximum uptime and improves their profitability.

The QMS screen design comes from various intense studies carried out by the QMS research and development team, including FEA and Fatigue Calculations, bench testing, theoretical calculations, CAD tools and on-site tests.

Design features include:

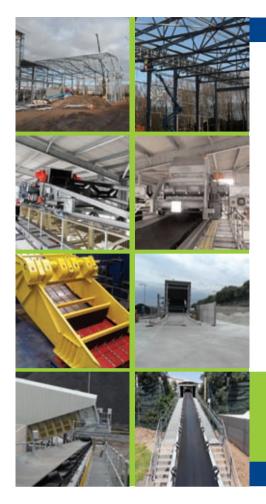
- Strong, long-lasting design
- The adjustable stroke means the screen can be fine tuned to a specific application
- Standard and custom design options
- Dust encapsulation system
- Optional Spray Pipe System, ideal for wet screening

QMS's substantial investment in purpose built Fabrication and Manufacturing facilities allows them to offer the most cost effective screens on the market. All QMS screens and components can be manufactured to suit customer's individual requirements, with a typical delivery time of 3 weeks from receipt

All screen wear and spare parts have been standardised, creating high availability and eliminating downtime. A range of screening media from various manufacturers can be applied to the QMS SVI & SVH Screen, allowing flexibility for different applications and replacements.

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SCREENS FEEDERS . CENTRIFUGES





Hewitt Robins supply bespoke replacement screen to Acheson and Glover

Bulk Handling Equipment Specialist Hewitt Robins International (HRI) - a TATA Enterprise, have recently supplied a replacement doubledeck screen to Acheson and Glover (A&G) who are based in County Tyrone, NI. The family owned company has been established over 50 years and currently employs in excess of 400 people, with an annual turnover of £40 million.

Recognised as one of the most trusted concrete products suppliers in the UK and Ireland the company own three quarries in total; two hard rock, and one sand and gravel operation at Pomeroy, County Tyrone.

With the need to replace an existing screen on their wash plant at Pomeroy, A&G were recommended HRI by a third party and after a subsequent site visit by HRI engineers they placed an order for a replacement.

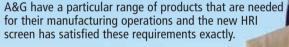
Lyle Cairns - Operations Manager, commented, "We chose HRI based on recommendation and the simple reason that they were prepared to configure a screen to our precise requirements, which fitted our footprint exactly."

With a very busy sand and gravel operation at Pomeroy washing over 216,000 tonnes/annum it was essential that the new screen was installed and commissioned within a short time frame.

Lyle, continued, "The installation was done by our engineers and commissioned by HRI. This was completed within expected timescales with no disruption to downstream activities; the only modifications were new mounting pads. We are very pleased with the new screen it's a quality build, well designed and easy to maintain."



HRI supplied a bespoke Hewitt Robins Vibrex VC16 - 2.4m x 7.2m long, double-deck screen designed to fit the existing structure. The new screen has a duty of 250tph, with four products of +22mm, 18mm-22mm and -18mm, -12mm, -7mm and -2.5mm. Screen media is side tensioned rubber, which from A&G's previous experience with the abrasive product has the most durability and cost effectiveness.



www.hub-4.com/directory/1901



Terex Finlay Launch Dual Power Crushing & Screening Train

Terex Finlay recently launched a dual powered variant of their industry leading J-1175 jaw crusher and C-1540 cone crusher. These two machines join the Terex Finlay 694+ dual powered inclined screener that was launched early in 2014. These product launches means that Terex Finlay can now offer operators a full mobile crushing and screening train that can be powered from mains electric and has the flexibility to run self-powered if required.

The dual powered crushers are electrically driven allowing users to run from electrical supply with the aim of giving significant savings on energy costs. These machines are also fitted with an onboard gen-set allowing the operator to move and use the machine where there is no electric supply giving the flexibility and versatility of current standard models.

In applications where a full train is powered by the on-board gen-set configuration the crushers generate sufficient energy to enable the operator to run the Terex Finlay 694+ dual power inclined screen for 'free' when used in conjunction with the J-1175 dual power jaw crusher.

Terex® Finlay introduce dual powered J-1175 tracked mobile jaw crusher.

The dual powered Terex Finlay J-1175 jaw crusher offers operators the flexibility to power the plant either by mains electric connection or the onboard genset powerpack configuration. Either power option presents operators with significant power, servicing and maintenance cost savings in direct comparison to a diesel/hydraulic powered plant.

The plant incorporates the robust Terex JW42 high performance electrically driven single toggle jaw chamber and a heavy duty VGF feeder to give optimum production in quarrying, mining, demolition and recycling applications. Additional benefits include, rapid set up time, ease of maintenance, high reduction ratio, high output capacity and advanced electronic control system.

The jaw chamber is hydrostatically driven which offers operators reversible operation for clearing blockages that may be experienced in demolition and recycling applications.

The hydrostatic system also provides variable chamber speed to suit given applications. Chamber CSS (Closed Side Setting) adjustment is fully hydraulic, and can be changed in a matter of minutes.



Key Features:

- The plant's electrically driven power systems provide significant cost advantages and efficiencies.
- Superior performance in dusty applications and in high altitude environments.
- The robust high performance hydrostatically driven single toggle jaw chamber provides high capacity with large reduction ratio's.
- Automatic variable speed VGF ensures continuous choke feeding of the crushing chamber for optimal productivity.
- High powered hydrostatic drive ensures precise chamber controls and reverse functionality for clearing blockages and assisting in demolition and recycling applications.





Terex Finlay C-1540 dual power cone crusher

The dual powered Terex Finlay C-1540 cone crusher offers operators the flexibility to power the plant either by mains electric connection or the onboard genset powerpack configuration. Either power option presents operators with significant power, servicing and maintenance cost savings.

This energy efficient and productive machine incorporates the proven Terex® 1000 cone crusher with direct electric drive automatic tramp relief and hydraulic closed side setting (CSS) adjustment.

The dual powered Terex Finlay C-1540 can be fitted with an optional patented pre-screen module which allows fines materials to bypass prior to being fed to the crushing chamber offering better wear rates in the crushing chamber. These fines materials can also be prepared a separate and discharged via the optional on-board side conveyor.

The large hopper/feeder has an automated metal detection and a purge system to protect the cone and reduce downtime by removing metal contaminants via the purge chute.

Key Features:

- The plant's electrically driven power systems provide significant cost advantages and efficiencies.
- Superior performance in dusty applications and in high altitude environments.
- Optional pre-screen module maximizes production and reduces wear on the chamber by removing fine material before it enters the cone.
- Metal detection system on feed belt with 'auto-stop' protects the cone from tramp metal and the purge system removes contaminants from the machine.

Terex Finlay 694+ dual power inclined screen

The Terex Finlay 694+ dual power inclined screen provides customers with the option of running this class leading machine by either diesel or electric mode depending on the resources available at each particular site. In territories with wide disparities in the quality of fuel or where the price of fuel is an issue vs electricity prices the machine will also have particular advantages.

As standard the Terex Finlay 694+ dual power uses 2 x 37kW IE2 Electric motors which operate at 50Hz and are suitable for most regions, however, a 60Hz and/or IE3 set-up can be configured to suit particular regions such as the USA.

The intuitive and user friendly electrical and hydraulic system allows the customer to switch between diesel and electric mode at the flick of a switch. The primary operation and controls of the machine remain the same regardless of the selected power. It is possible to power the 694+ inclined screener using the onboard genset of the J-1175 dual power crusher meaning that operators can essentially run the screener for free!



The Terex® Finlay 694+ dual power features a large 6.1m x 1.525m (20' x 5') triple deck inclined screen giving a total screening area of 28m² to provide efficient screening and high

Key Features of the Terex Finlay 694+ diesel / electric machine are:

- No issues with work at high altitude
- No issues working in dusty environments
- No servicing of engine (or reduced depending on the amount of tracking being done)



THE SANDVIK QJ241 DRIVEN BY YOUR NEEDS

Designed in partnership with you. Our QJ241 is ideal for your smaller operations with low operating costs and maximum productivity. The QJ241 utilises a substantial 1000×650 mm / 39×26 " jaw powered by a highly economical 168kW / 225hp engine. The QJ241 is the perfect solution for recycling sites yet equally productive for your hard rock applications.



Striker machines - Built to last

What happens to a Striker machine at the end of its working life? Well the short answer is we don't know, and don't think we are going to find out any time soon. In 2002 Striker's first track machine was designed and built, an 1110 track impactor for a quarry contractor in Western Australia's mid west. The machine has since gone on to do over 40,000 hours operating in some of Australia's harshest conditions. This is not the only machine that has clocked up thousands of hours in Australia, one of Strikers mining customers has a JM1310 track jaw crusher that has been working in WA's remote Iron Ore mine sites and has just completed 55,000 hours of service, this is just a couple of the many examples of how Striker machines are yet to have a use by date. Our moto BUILT TO LAST is not taken lightly at Striker, and we ensure that we continue to design and build every machine with our moto in mind.



As the sayings go, if you want to be dazzled by marketing you talk to an American. If you want to talk finance, you go and see an Englishman. If you want a tall building you can talk to a Malaysian and if you need manufacturing you go and see the Chinese. And so it follows inarguably that if you want to discuss mining you talk to an Australian.

The Australian 'brand' in mining is recognised worldwide as a benchmark to mining methodology, equipment selection and operational expertise. Australia's vast landscape and often hostile environment coupled with high input costs has weeded out all but the most robust, cost effective and production efficient mining solutions. And this is precisely how Striker Australia emerged from the Australian landscape onto the world stage.

Versatility is the key, no two mines or quarries are the same. Neither are their plans, regulations, lifecycles, ore body distribution, topography, commodity prices or budgets. How then do you develop a market for a standard range of machines that suits such divergent conditions and countries?

Answer: You don't. Your range of machines and ideas must be as diverse and adaptable as the countries and clients you have. This is where Strikers team has channelled their energy and ensured that each model of machine can be adapted to the clients exacting requirements.



Striker have now successfully built more than 1000 machines for unique projects all around the world. Standing behind our moto 'Built to Last', not knowing what happens to a Striker Machine after its life span is something Striker is proud of, and one of the reasons behind why Striker is now offering the new 5 year structural warranty.

Having spent all his working life in the crushing and screening industry in Australia and Asia, Craig Pedley Strikers founder says" I feel Striker is very different to our European counterparts. Our Australian way is much more consultative. I see my colleagues working side-by-side with our clients and I hear them representing our clients, always seeking to add value and offer the most cost effective solution, and always ensuring every machine is built to last. I am extremely proud of what we have achieved. We've kept our feet on the ground despite our rapid growth and I am still really excited about www.hub-4.com/directory/13284

Metso HP3 Cone Crusher maintains the high productivity at Gallagher's

Metso has recently supplied a new tertiary HP3 cone crusher to Gallagher Aggregates who own and operate Hermitage Quarry, near Maidstone which is the largest Kent Ragstone quarry. The deposit comprises an inter-bedded 50 - 50 mix of Ragstone and Hassock which is a relatively soft sandy material with a high, but variable, silt content.

In recent times the busy operation has seen increased demand for product which in turn has brought more pressure to increase production with the introduction of new . uprated machinery in the process line. Part of this new focus involved replacing an existing aged tertiary crusher with a Metso HP3 Cone Crusher to increase efficiency.

The current production process.

As dug material is fed into a trommel which is divided into three sections. This feeds a 0-75 material onto an overhead binder screen which scalps off a 0-12 (back to landfill). The feed material then moves forward into the rinse plant where it passes over a rinsing screen to separate the sands for the cyclone. The rest of the material then moves forward, with the oversize +75 separated to one side and the rest of the material 75-6mm being fed into the log washer and then under a final rinse screen.

The end products are a 6-10 and a 6-13 and stockpiles of 20/40/75mm, which is all regenerated material with no crushing involved. The middle section of the trommel provides a 75-175 with a proportion of hassock with it. This material can be used for road base material (6f2), anything larger then travels through the trommel to the end, with the attrition on itself. The coarse material that is discharged from the trommel screen is crushed in a Nordberg LT125 primary which prepares the material for the secondary Nordberg NP1315 impact crusher. This product is then passed over a Nordberg screen to produce a type 1 material and occasional Gabion stone.

After the Ragstone has been processed through the impactor the oversize material is found to be a more competent stone and suitable for use in concrete products. After trials with different types of crushers over a period of time it was proved that a cone crusher would be most suitable to make further reductions and produce aggregate and sand products.



Crushing & Screening



The HP3 Cone Crusher.

The HP3 follows the HP4 and HP5 as the third model of an all new range of high performance cone crushers which benefit from the latest Metso technology. Its heavy duty design coupled with 70+ years of experience with the Symons cone is world renowned for its rugged construction and application versatility.



Benefits.

Highest performance

The HP3 cone crusher enables much finer products to be produced with fewer crushing stages, thereby lowering investment and saving energy. This is possible with a combination of optimized speed and large throw as the HP3 provides the highest reduction ratios of any current cone crusher. Due to its super-efficient crushing action, the HP3 has the best power utilization per cone diameter; hence a double saving with lower kWh per ton of crushed end product and with lower recirculation load. Additionally, higher cavity density improves interparticular crushing action for end products with more consistent gradation and superior shape (cubicity).

The new HP3 maintains the proven threaded rotating bowl design. Comparative tests have shown equalized wear and more consistent setting around the entire circumference of the crushing chamber. Also the use of a newly designed tramp release system, with fixed return point, makes sure that the crusher setting is instantaneously maintained even after passing a piece of tramp iron.

Less downtime

The HP3 delivers less downtime and increased operator confidence. Dualacting hydraulic tramp release cylinders let the HP3 pass tramp iron that would stall, or damage, many other crushers. If the crusher does stop under load, the dual-acting cylinders provide a large clearing stroke, independent of liner wear, to quickly clear the crushing cavity. An advanced fastening system for the mantle and bowl liner makes backing material unnecessary, and makes liner changes faster. Thicker liners mean more material to wear. When liners are changed or the crusher is reconfigured, the same hydraulic motors that rotate the bowl for setting adjustment will rotate the bowl completely out of the adjustment ring threads, greatly simplifying liner replacement. If you pull the head you will find a new fixed counterweight guard that protects the counterweight and seals out dust

Easy to maintain

Bronze bushings used throughout provide superior load capability in the dusty, high shock crushing environment. They cost less than rolling element bearings and are easy to replace in the field with normal tools. The HP3 is easy to disassemble with all components accessible from the top or side. The bowl and head are easily removed; no interference fit to contend with.





www.strikercrushing.com







AUSTRALIA

9 Egmont Road Henderson WA 6166 Australia Phone: +61 (08) 9437 3533 Fax: +61 (08) 9437 3544

SOUTH EAST ASIA

No. 44, Jalan Johan 2/4, Estate Perindustrian Pengkalan 2, Fasa 2, 31550 Pusing, Perak, Malaysia Phone: +60 (05) 366 8188 Fax: +60 (05) 365 2688

USA - CANADA - MEXICO

837, N. Glendora Ave, Covina, CA 91724, USA Phone: +1 626 966 2484 Fax: +1 626 966 2489

CHINA

Room 3010, Royal WanXin International Mansion, Shenyang 110003, China

Phone: +86 (24) 2353 4388 Fax: +86 (24) 2353 4288



Crushing & Screening

The Facts of Hardness

What is hardness, really? Yield strength, tensile strength or hardness - whatever we call it, we know that this is the property that keeps the structure in shape without any deformation. Hardox is built to take a beating - Rocks, sand, coal, minerals, scrap metal and many other hostile materials have a hard time making a lasting impact on Hardox wear plates. Hardness is the property that provides excellent wear protection during the entire service life of a Hardox wear plate. Hardness minimizes wear since it is difficult for the 'edges' of other abrasive material to cut into the hard surface, and the hardness does not conflict with Hardox's structural performance.

The LH Group's Quarry Plant division provides valuable expertise supplying Hardox plate to the quarrying and mining industry globally. This includes the supply of Hardox bucket lips, cutting edges, wear strips, cheek plates, toggle plates and toggle seats, all prepared to OEM guidelines. The huge benefit of using a Hardox wear part centre is the fact that the wear plate is always in stock and cut to specific requirements, meaning speedy service and high quality production. The LH Group are also specialists in using higher grade Hardox plate if the application demands. Having used 50% more Hardox plate in 2013 than 2012, and with new Hardox developments including carbide plates, forgings, castings and steel bars, the business is set to grow substantially over the coming years as a dedicated Hardox Wearparts Centre.



But that's not all, founded by Laurie Caswell in 1968 the LH Group has a very rich history with major milestones such as being the top ESCO dealer in Europe, a renowned worldwide Metalogenia (G.E.T) dealer and a Lokomo (Metso) dealer, and has huge experience and knowledge of supplying castings and ancillary spare for the worlds leading crushing manufacturers to a global customer base.

LH Group purchased two companies in the early nineties, Baxter Crushers and Marsden Crushers. These two companies were two of the oldest crusher companies in the world, adding to the experience and portfolio of the LH Group. Manufacturing of parts and service for these machines, are still processed through their in-house facility.







Crushing & Screening



The LH Group has also made huge efforts over the past decade to help solve its customers' problems pro-actively, looking for solutions across various industries including quarrying, mining, metal, wood and recycling where Hardox plate can be used to overcome these issues and save clients money.

Now, moving forward to the present day, with ISO 9001-2008 certification, the LH Group has three distinct elements to the business, which are all growing successfully, the Hardox Wearparts Centre, a Crusher Spares Division, and an in-house Machining Shop Facility.

The highly respected machine shop carries out work for crusher repairs, and the manufacturing, oil and gas, steelworks, renewable energy, petro-chemical and recycling industries, with previous sub-contract clients including Metso, Sandvik and Pegson. New investment here includes Huron and Doosan machines, allowing for high quality custom CNC work.

North East Steel Sales, a company within the LH Group was the first supplier of non OEM crusher spare parts in the UK and today continues to play a major role in the business accounting for 60% of the group turnover. With continuing sales growth supplying both wear parts and internal components, 70% of this business is currently exported and with a dedicated dealer in the USA, Charlton Equipment, LH Group's market share continues to grow Stateside

Integrally linked, the LH Group also manufacture their own specialised crusher, using all of their knowledge and expertise, and have recently supplied two such machines to Harsco projects in India with another being supplied to a local mine within the UK. Plastic recycling is also something that the LH Group are developing with Hardox plate, supplying new and maintaining existing machines.

The synergy is abundant to see between the LH Group and SSAB, with management reflecting the family focussed business and providing high levels of customer and staff care and take very good care. Apprentice schemes are key to the growth of the business and always have been so. David Green, Engineering Director started as an apprentice over 30 years ago, and is testament to the ethos that runs through the company and its partners. New apprentices are now benefitting from this environment and







are learning their trade correctly through high quality knowledge transfer within the organisation.

With the investment from both SSAB with the Hardox range, and from the LH Group, this is definitely a solid base for long-term company growth. For more information on the LH Group and its Hardox Wearparts, please visit http://www.lhgroup.co.uk or call +44 (0)1642 769735.









QMS are Europe's premier manufacturer and supplier of crusher spare and wear parts, offering the genuine alternative to the original equipment manufacturer.

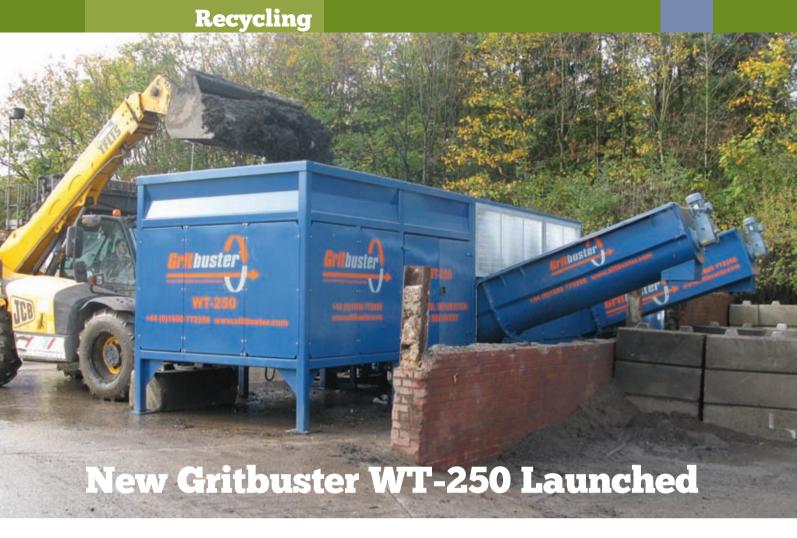




QMS manufacture an extensive range of wear and spare parts for the world's most popular crushing brands; including Sandvik, Svedala, Metso, Nordberg, Extec, Terex Pegson, Powerscreen, Fintec, Finlay, Kue-Ken, Brown Lennox, Lokomo, Symons, amongst many more...

Quarry Manufacturing & Supplies Ltd W: www.qmsupplies.com Grange Road, Bardon Hill, Coalville, Leicestershire, LE67 1TH, United Kingdom





Siltbuster, one of the UK's leading providers of wet waste separation systems, has launched the Gritbuster WT-250, a larger version of the company's highly successful material washing, separation and aggregate recovery system.

The original Gritbuster (WT-100) unit was designed around processing road sweepings tipped directly into the system by Road Sweepers and Gulley Tankers, whilst the WT-250 can be fed by telescopic loader removing the need for the bucket wheel and enabling a larger trommel to be installed, increasing capacity.

The Gritbuster WT-250 is aimed at the road sweeping & trommel fines waste recycling markets and is capable of handling in excess of 25 tonnes per hour. Using well established wet separation processes, the plant separates feedstocks into washed gravel and sand products.

The Gritbuster Process:

- Raw material is loaded via a loading shovel or telescopic loader from existing stockpiles
- A screw feed auger ensures both dry and wet feedstocks are handled with ease
- The wet trommel is specifically designed to wash and separate the aggregate whilst minimising the risk of contaminating the sand product with organic matter producing a clean sand product
- An integral hydraulic density separator is used to separate coarse aggregate from plastic, sticks, etc, increasing recycling potential.
- Allows the recovered sand and gravel to be reused as nonstructural fill or secondary aggregate if processed in accordance with the WRAP Protocol

- Minimises fresh water requirements by operating in a closed loop when used with a Siltbuster Water Treatment Plant and Filter Press
- · Compact design allows installation on existing sites and integration with existing processes
- A key aspect of the new design is the integral hydraulic density separator. Siltbuster MD and Gritbuster designer, Dr. Richard Coulton, describes how this has made the new Gritbuster WT-250 ideal for handling trommel fines and other drier feed material.

"We have always been able to produce good quality sand and grit by removing the fine organics, but by now incorporating a hydraulic density separator we can separate the larger material fractions on density rather than just physical size. This means heavier recyclables such as stone and aggregate are recovered in a cleaner recyclable form, from the lighter recyclables such as plastic, paper, wood and other floating materials. This has obvious advantages in terms of LOI reduction, but it also means the lighter items can themselves be recovered and go for recycling.

From April 2015 the Gritbuster WT-250 will enable waste recyclers to reduce their landfill tax bill by £80 per tonne (due to HMRC's plans for fines with an LOI greater than 10% to be taxed at £82.60/t rather than the lower rate of £2.60/t) For a typical operator processing 10,000 tonnes of trommel fines a year this means a tax saving of £720,000 per annum as well as providing a salable stream of recovered materials providing further savings.

The new Gritbuster WT-250 can be supplied on its own or with a packaged Water Treatment & Recycling System and Filter Press.





Riverside Machinery Ltd Deliver A **New Portafill 3000 Screen To** O'Hara Bros, Wembley, London

O'Hara Bros a family run company based in Wembley, London have taken delivery of their first Portafill 3000 tracked screening plant.

The Portafill 3000, designed and manufactured in N Ireland, is being put to work at their Atlas Road depot where it's main duties will include the screening of asphalt and the screening of post-crushed recycled aggregate.

The Portafill 3000 tracked has a very small footprint measuring only 10 metres long x 11 metres wide in working position yet is not compromised on throughput due to the 'positive energy" screenbox which offers tonnages normally associated with larger screens in the marketplace.

The Portafill 3000 is also unique in that it is the only machine in its class that can be fitted with a vibrating grizzly which is a vital requirement for O'Hara's.

Another feature is that the machine can be used as either a two-way split or three-way split machine (see picture).

John O'Neill of Riverside Machinery Ltd comments "this is a hugely important order for us and we are thrilled to have fought off such stiff competition from other potential suppliers, it's a great reference for us and we look forward to a great relationship with the team at BDR".



In addition to the Portafill 3000 manufacture a range of screeners and crushers which are all designed to be used where space is at premium. More info on the Portafill range can be found at www.portafill.com

If you would like to hear how a Portafill machine could benefit your business or please do not hesitate to contact us on +44 (0) 800 689 9024 or sales@riverside-machinery.com

Additional information can be also be found on our website www.riverside-machinery.com





How to solve the problem of lack of space when loading





If your waste or recycling facility is low on room for machinery to manoeuvre, this may affect the efficiency and productivity of operations. Fred Bell, JCB's business manager for the waste, recycling

and demolition industries, reveals how a smart machine choice could make the difference by utilising the space available in the most effective way possible.

In an ideal world, every material recycling facility (MRF) would be designed to provide plenty of space in which to handle a wide variety of materials, with the scope to adapt and extend as market forces, legislation and technological advances dictate. However, in the real world this seldom occurs. MRFs tend to be constructed with the kit that they will house in mind, with less regard to the materials to be handled, or the machinery required to move them around the

This provides a significant challenge to site managers and operators. How can they operate safely and efficiently if space is limited Luckily, vehicle manufacturers have recognised this problem and one particular machine has been developed to provide space saving benefits - namely the JCB Teletruk, with its ability to perform single-side loading.

> The Teletruk has evolved from the powerful forklift, which is a familiar sight in many different settings, such as

distribution centres. These specialist machines offer additional features not found on conventional forklifts which make Teletruk's more suited to recycling and waste management operations. The Teletruk is as capable with a grab bucket attachment or bale clamp as it is with forks and have a telescopic boom, rather than the standard straight mast that is found on many forklifts.

The Teletruk's telescopic boom enables operators to load and unload materials from just one side, which conventional forklifts are unable to do, thus increasing safety and efficiency. This benefits site operators, as loading lorry trailers from only one side with a Teletruk allows the other 50% yard loading space to be used for other tasks. As well as improving the management of yard space, site safety is also increased because working areas for forklifts can be separated from pedestrian walkways.

Extremely busy and congested sites could benefit from oneway traffic flow, and Teletruks can make this happen. Singleside loading allows the saved space to become operational, where narrow roadways make it impossible for conventional forklifts to work both sides of a trailer.

Adequate room to perform loading tasks safely and efficiently is key to the success of any MRF. However, if business has grown, but facilities cannot be expanded to cope with this increase, extra productivity may be found by looking at how an addition to your vehicle fleet - in the shape of a Teletruk -





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Over recent years, it seems equipment manufacturers, have increasingly begun to produce materials handling and mobile plant equipment to be used with multiple attachments. In line with demands from customers in expanding industries, where versatility is key, multiple attachments have been developed as customers' requirements have become more diverse and demanding, whilst still wanting to remain cost-effective.

With more and more varieties and machine specifications being put to use year on year, it is vital that those using them know how to do so safely, appropriately and efficiently. With this in mind, Mentor present their top tips for attachment safety:

1. Establish Safe Systems of Work (SSoW):

It's well publicised that risk assessments are vital to workplace safety but don't forget the resulting SSoW which is just as important. A risk assessment should be carried out for every task to ensure that any potential risks have been identified; the SSoW is established to eliminate or reduce them, where possible. Be sure that your systems include all of your attachments as well as the machines themselves and that everyone who needs to have sight of them does so.

It goes without saying that operator training is crucial to safe operation but specific training on each attachment and its use should not be overlooked. A good course will cover fitting, checking, using and removing the attachment and will also cover the operational functions for which it will be used within the delegates' job role.

It's important not to generalise; with new attachments being launched all the time, ensuring that your training covers your attachment specification is key. For example, if buckets on your site come in standard and four-way varieties, your training should reflect the full functionality of the equipment so that



delegates understand how to use it safely and efficiently. Also, bear in mind that the same attachment, used for different tasks may warrant further jobspecific training.

Operators must understand the effects that different attachments may have on the performance of the machine they are using. They have the potential to cause instability, decreased visibility, a need for longer braking distances, and an increase in overall machine dimensions, any one of which could cause a serious incident if not taken into account.

With so many attachments on the market these days, take care to ensure that the machine and attachment are compatible with each other and that, when used together, they are fit for requirements. Always check with the manufacturer of the machine and the attachment that they provide the best solution for the job.

Remember, a machine's capacity changes according to the attachment fitted, so this should be checked before use and if you adapt, weld or change an attachment to suit a particular application, this will also affect the weight and influence capacity. De-rating plates should be applied to any fork lift trucks on which an attachment might be used, and in telescopic handlers, this capacity information should be available



via load charts mounted to the dashboard. Each attachment requires its own plate/chart as it will affect the machine in a unique way.

Attachments are a great way to make machines versatile for your site. But it is important to recognise that the safest way to operate, is with the right machine for the job. Using an existing machine which isn't fit for the task with a vaguely suited attachment may save you money in the short term but the risk of an accident, dropped load or equipment damage far outweighs those short term cost savings. Assess your requirements and, where possible, invest in the best matched equipment to the tasks carried out on a regular basis.

The best practice to follow when it comes to attachments is to use them only when it is safe and appropriate to do so, and never without the skills and knowledge to operate them safely and efficiently. Ensure that they aren't overlooked as extensions of the machine; you and your team need to understand the risks to keep your working environment safe.

For further guidance on the safe use of attachments, please call Mentor on 01246 555222.

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A new Titan 20 Shredder from Munson Machinery reduces the volume of scrap plastics, resins, fibrous products, fibreglass, wood products, paper/cardboard, gypsum wallboard, aluminium, glass, and other industrial, medical and manufacturing waste products by up to 80 percent.

The shredder features dual rotors with extended cutter teeth that chop and shred heavy volumes of large solids with minimal power consumption, while self-cleaning without binding, plugging or increasing the material's temperature.

The cutter blades are mounted along two parallel shafts that are hexagonal in cross section, reportedly yielding

higher strength and greater fatigue resistance than traditional keyed bar shafts. The cutter blades are constructed of 4140 material that is heat-treated, through hardened and resharpenable.

The Titan 20 Shredder is constructed of stainless steel (shown) or carbon steel, in chamber lengths of 711 mm, 1067 mm and 1524 mm, with 15 kw, 37 kw and 75 kw motors respectively.

Options include smart auto-reversing controls, ram feeders, extended support legs, specialised hoppers, and gravity or pneumatic transitions.



For finer grinding, the unit is available integrated with Rotary Cutters. Hammer Mills or other size reduction equipment manufactured by the company. Also available are Maxum Shredders for shredding of abrasive materials.

The company also offers blending equipment including Rotary Batch Mixers, Ribbon, Paddle and Plow Blenders, Vee-Cone Blenders, Rotary Continuous Mixers and High Intensity Blenders.



Riverside Machinery Ltd Supply New Neuenhauser Star Screening Plant To BDR Waste Partnership, **Rotherham**

Riverside Machinery Ltd are pleased to announce that they have been chosen as sole supplier of compost screening equipment to the prestigious BDR Waste Partnership in Rotherham.

BDR is a partnership of Barnsley, Doncaster and Rotherham councils set up more than 10 years ago to jointly manage waste generated in the three boroughs.

The turnkey plant supplied by Riverside Machinery consists of a Neuenhauser 6 metre star screen and a Riverside Machinery feeder hopper along with all the necessary controls which includes a state of the art control panel system.

The star screening plant will be used to screen a biomass down to a -10mm compost

The site will be fully operational from March 2015 and is being operated by Shanks Group plc.

John O'Neill of Riverside Machinery Ltd comments "this is a hugely important order for us and we are thrilled to have fought off such stiff competition from other potential suppliers, it's a great reference for us and we look forward to a great relationship with the team at BDR".



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Oakfield invest in another McCloskey machine supplied by AGG-PRO

Aggregate, Processing and Recycling Ltd, (AGG-PRO) exclusive Central and Northern **UK distributor for McCloskey** mobile crushing and screening machines have recently supplied a J45 heavy duty mobile tracked recycling / primary jaw crusher to Oakfield Construction for duties within their Recycling Division.

Oakfield is divided into three divisions within the Construction, Plant and Transport and Recycling Industries. Oakfield Recycling is based at Wigwam Lane Industrial Park, Hucknall in Nottinghamshire where the new McCloskey J45 Tracked Jaw Crusher is employed on processing incoming waste feeds. These waste feeds originate from industry and the general public, mainly consisting of brick, concrete, tiles, tarmac and topsoil which the company process and recycle into end products. These end prodúcts include 6f2, hardcore, type 1 consisting of concrete and tarmac, road planings, fill sand and topsoil and various size gravels which are then sold back to either industry or the general public, or used for Oakfield projects.

With a company ethos of maintaining and operating 'state-of-the-art' equipment, Oakfield made the decision to replace their three year old McCloskey J50. Severál competitors' machines were demonstrated but a long established relationship with AGG-PRO and a very successful demonstration made it a straightforward decision to choose the J45.

Gary Harby - Oakfield Site Manager, commented, "The decision was easy to make, the McCloskey J45 processed wet materials with ease and the machine design was superb. It also has the added benefit of the pre-screen which has increased our production considerably, it's just brilliant! As we do a lot of type 1 we fitted 50mm meshes in the pre-screen which provides 50mm down off the side conveyor before it even goes in the jaw. Therefore we mix that back in with the finished product which limits wear and tear and increases production. It also gives us the option of producing a saleable product from the feed material before crushing."

Oakfield operate a very busy site which is open 5½ days per week with the operation processing up to 75,000 tonnes per annum. The new McCloskey J45 spearheads the crushing and screening operation currently processing 200tph depending on material feed.

Gary, further commented, "We've known AGG-PRO and the McCloskey product for some time. They have always listened to us and have provided us with a machine that does the job. When we started to look for a new machine we looked at build quality and the residual value in three years' time; also the machine doesn't rely on a computer which is so much better. McCloskey ticked all the right boxes, it was a simple decision!"

J45 Heavy Duty Mobile Jaw Crusher

The J45 high capacity jaw crusher supplied to Oakfield features a true 45" x 27" jaw, with both level and load sensors to ensure the most efficient material handling across applications. Measuring 14.85' x 7.75' the J45 hopper boasts close to 9 cubic yards (6.8m3) capacity. A powerhouse of productivity, the J45 combines a robust single toggle jaw with an independent pre-screen option also available for the feeder

The J45 iaw crusher also incorporates a large gap between the crusher discharge and the main conveyor feed boot to eliminate bottlenecks and bridging. Easy to move from site to site, the J45 crusher can be operational in a matter of minutes utilising its folding hoppers and conveyors. Quite simply the J45 is a rugged and versatile machine that offers the field-tested reliability required for the toughest projects around the globe.

A professional parts and service package

Geoff Caves - MD of AGG-PRO, commented, "The McCloskey J45 supplied to Oakfield is ideal for their requirements. We have every confidence that it will provide excellent productivity and reliability that will be comprehensively backed by our professional parts and service package."

AGG-PRO has an accumulation of over thirty years of experience in the construction industry. This experience has been gained from design, manufacture, sales and servicing of all types of construction equipment, specializing in crushing and screening equipment.

Employing all their own fully trained service staff within an 18,000 sq. ft. workshop facility complete with all the necessary equipment to service, or if necessary manufacture new parts at their Tamworth site, AGG-PRO maintain full control of their staff and facilities allowing the company to operate at maximum efficiency, offering a total after sales service package.

Gary commented, "We have always been very happy with the backup provided by AGG-PRO. This is our fourth regular servicing which keeps our downtime to a minimum. They have looked after us for some time and we







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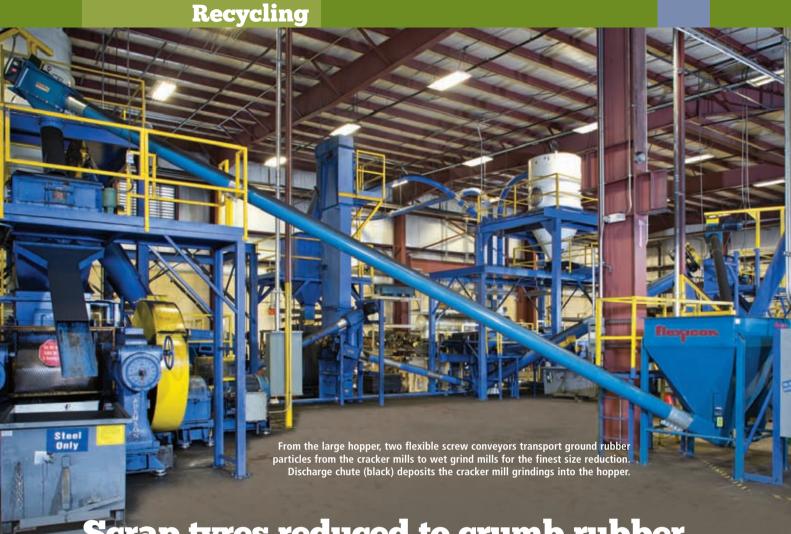
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Scrap tyres reduced to crumb rubber with help of Bulk Bag Dischargers

According to the U.S. Environmental Protection Agency, approximately 290 million scrap tyres are generated in the United States each year. As recently as 1990, most of these scrap tyres took up space in landfills or were dumped illegally. Today, many of them are recycled by companies such as Edge Rubber into various grades of ground rubber, also known as fine mesh crumb rubber.

Markets now exist for 233 million (80%) of all scrap tyres. Some 130 million (56%) of these scrap tyres are burned as fuel. Another 56 million (24%) are used in civil engineering projects such as artificial reefs, while 30 million (13%) are recycled into ground rubber. Another 16.5 million (7%) scrap tyres are retreaded.



At the discharge end of the flexible screw conveyor, forward of the electric motor, ground particles gravity feed through a transition adapter and downspouting into the micro mill.

CL1

Bulk bag discharger and flexible screw conveyor feed rough ground particles and rubber buffings to cracker mill. The bulk bag is loaded into the discharger frame by electric hoist and trolley suspended from a cantilevered I-beam. The wide frame accommodates open-bottom design bags.

Micro milled particles are packaged in pre-measured batch inclusion bags to be placed directly into the customer's process.



Recycling

Of the 30 million scrap tyres in the United States recycled into ground rubber, some 6 million (20%) find their way to the Edge Rubber plant in Chambersburg, Pennsylvania, the oldest and most successful facility producing fine mesh crumb rubber in the United States. One of the most efficient scrap rubber plants in the country, much of its efficiency is attributable to its bulk raw material handling system utilising six Flexicon bulk bag dischargers.

"On receiving the scrap tyres, we first shred them into approximately 1.3 cm particles, which are gravity fed into 907 kg bulk bags," says Sam Kauffman, Vice President and Chief Operating Officer of Edge Rubber. "These rough ground particles make up 80% of the raw material that we process into fine mesh crumb rubber."

The other 20% arrives in small bags from tire retreaders that grind a portion of the tread from used tyres prior to applying new tread to the carcasses, generating "buffings" that measure approximately 0.5 cm.

Because Edge Rubber has eliminated manual dumping of small bags from its production process, it first transfers the contents of small bags into bulk bags which are stored, or discharged to feed ground rubber particles, along with rough shredded particles, to a cracker milling process to further reduce particle size.

Moving the rubber particles from the bulk bags to the cracker mills are six automated Bulk-Out® BFC Bulk Bag discharger systems with integral flexible screw conveyors from Flexicon. An operator loads a bulk bag onto the discharger frame by electric hoist and trolley on a cantilevered I-beam; the discharger unloads the particles into a 0.56 cu m capacity floor hopper from which a 4.57 m long flexible screw conveyor transports them into one of six cracker mills. Kauffman explains, "Four of these discharger systems are identical, one has a larger diameter flexible screw conveyor for faster feeding capacity, and one is a double discharge unit with two flexible screw conveyors that feed material to two cracker mills."

Once the bag is in place, the operator pulls the tied end through an iris valve, which prevents material flow while the bulk bag is being untied and allows controlled discharge of the material into the hopper once the bag has been opened.

Due to the nature of the rubber particles, material flow from the bag can be inconsistent. In order to ensure continuous and efficient operation, Flow Flexer™ bag activation devices positioned on the frame continually compress and release opposite sides of the bulk bag to promote flow through the bag spout into the floor hopper.

The rubber particles flow from the discharge port of the floor hopper and charging adapter into the 4.57 m long Model 1450 flexible screw conveyor, designed to handle difficult materials and consisting of a flexible steel screw rotating inside a 11.4 cm diameter carbon steel outer tube. The screw is driven by an electric motor located at the discharge end of the conveyor, which feeds the rubber particles through a transition adapter into the cracker mill.

High and low level sensors in the floor hopper signal a PLC to activate the conveyor on reaching high level, and turn off the conveyor on reaching low level.

Bulk bag dischargers improve process flow

"Before we acquired the bulk bag dischargers, we manually emptied the small bags of material from tyre retreaders into the cracker mills. If our tyre shredder was down for maintenance or repair, the volume of retread buffings we were feeding the cracker mills was not enough to maintain full production speed, which slowed the entire ambient grinding process. Manually emptying the bags was also a very slow operation," Mr. Kauffman says.

"Now the bulk bag dischargers and flexible screw conveyors feed all raw material into the cracker mills in a continuous, automatic flow," he says. Throughput increases, inventory decreases.

Recycling



Finished powder ships to customers.



Ambient grinding produces high quality powder

A typical tyre shredded by Edge Rubber contains, by weight, approximately 70% recoverable rubber, 15% steel, 3% fibre and 12% extraneous material such as inert fillers. On average, one passenger tyre yields 4.5 to 5.4 kg of crumb rubber.

The rough shredded particles and retread buffings are first ground in the cracker mills (ambient grinding) - the first of two size reduction processes that produce nine particle sizes ranging from 10 mesh (2.00 mm) to as fine as 200 mesh (0.074 mm). The cracker mills produce particles from 10 mesh (2.00 mm) to 30 mesh (0.60 mm).

A cracker mill tears apart scrap rubber by passing it between rotating serrated steel drums, reducing it to various sizes by adjusting the gap between the grinding rolls. The resulting long and narrow shaped particles have a large surface area and are suitable for applications including automotive, asphalt, and moulded goods such as rubber mats and solid rubber wheels for carts and lawn mowers.

Crumb rubber particles discharged from the cracker mills are classified by sifting screens. Oversize particles are reintroduced to the cracker mills while the rest convey to the packaging line or to the next process, micro milling, for reduction to the finest powders. Magnets remove wire and other metal contaminants. Fabric is removed by aspiration and screening.

Micro milling produces the smallest, cleanest particles

Wet grinding, or micro milling, produces cleaner, finer mesh particles. "While it produces particles as coarse as 40 mesh (0.40 mm), the majority of the particles are 60 mesh (0.25 mm) and finer. A percentage of the overall throughput, in fact, is finer than 200 mesh (0.074 mm)," says Mr. Kauffman.

In wet grinding, the crumb rubber particles are mixed with water to create a slurry, and proceed through micro mills. When the desired size is achieved, the water is evaporated from the slurry and the particles are dried and classified. An advantage of wet grinding is the cleanliness and consistency of the fine crumb rubber produced, as the process "washes" the crumb rubber to remove the last traces of fibre.

These particles have a unique morphology, or surface structure, and are often sold as additives to improve the performance of injection moulded and extruded plastics. Although most wet milling processes produce particles with a smooth surface, Edge Rubber's proprietary technique yields particles with a rough surface and unique shape for maximum surface area. They offer superior performance for applications requiring strong bonding or high tensile strength in industries such as automotive, sealants, specialty coatings and custom compounding.

Most of Edge Rubber's wet milled particles are packaged in pre-measured batch-inclusion bags that are placed directly into the customer's moulding process and then disintegrate by melting at a low temperature. The rest of the wet milled particles, along with the larger particles produced by the cracker mills, are shipped in various size bags to customers in the United States and internationally.

'Thanks in large part to our bulk bag discharging equipment, we are one of the most efficient scrap rubber recycling plants in the United States, concludes Mr. Kauffman.



Crumb rubber particles that have been ground in the cracker mills are packaged for shipment to customers or conveyed to the micro milling process for reduction to the finest powders.



Edge Rubber's micro milled, cleanest and finest particles have a unique shape for maximum surface area, yielding performance advantages in applications requiring strong bonding or high tensile strength.



Retread buffings from tyre retreaders comprise 20% of Edge Rubber's raw material.



Rough ground particles from shredded scrap tyres comprise 80% of Edge Rubber's raw material.



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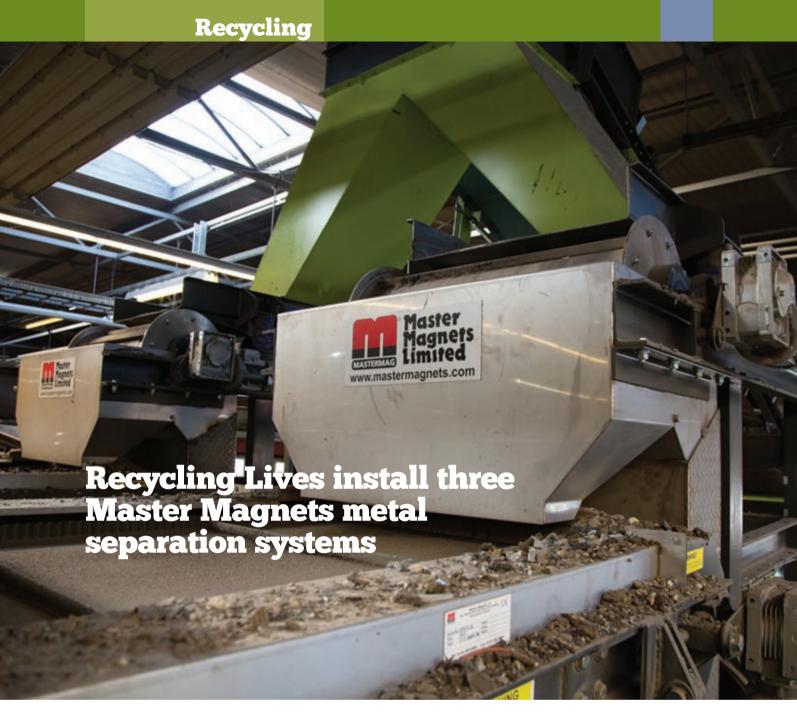
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For the expansion of their Preston recycling operation, Recycling Lives purchased and installed three complete metal separation systems from Master Magnets, based in Redditch, Birmingham. Each system included a Vibratory Feeders, a Magnetic Drum and an **Eddy Current Separator. The equipment is part** of a process to recover ferrous and non-ferrous metals from shredded car bodies.

Recycling Lives is one of the UK's premier recycling companies, having won the Queen's Award for Sustainable Development and they have over forty years' experience in the recycling and waste management industry. They specialise in the recycling of scrap cars, scrap metal, WEEE, plastic, household/commercial waste, bulky waste and plastic materials.

Master Magnets is one of Europe's premier designers and suppliers of magnetic separation equipment with over thirtyfive years' experience in providing solutions for separating and recovering metals and magnetic susceptible materials. They specialise in metal separation solutions for the recycling industry and have supplied equipment globally.

Recycling Lives expanded their operation in Preston to handle the ever-increasing input of recyclable materials. In early 2013, they were working with Atherton Material Handling Ltd, based in Retford, Nottinghamshire, planning a new plant layout and the process flow, including the conveyors, for shredded car bodies. One key aspect of the plant was magnetic separation and Atherton proposed that Recycling Lives contact Master Magnets. Recycling Lives was aready in discussion with another UK supplier and a company from Germany, but after several discussions and a complete review of the application with the Master Magnets sales team, including Andy Rea, Sales Engineer, and Phil Tree, Sales Manager, Recycling Lives ordered three Master Magnets metal separation systems.

Each metal separation system has a primary Vibratory Feeder, with out-of-balance motors, feeding the material onto a high strength, permanent, Rare Earth Magnetic Drum to remove the ferrous and weakly magnetic materials. The remaining evenly spread non-magnetic fraction then falls onto the conveyor of an Eddy Current Separator where the non-ferrous metal is ejected and recovered from non-metallic material. >

Recycling



Two of the Metal Separation Systems are installed on the line handling the -30mm fraction presently processing approximately 10 tonnes per hour. Both have Magnetic Drums and Eddy Current Separators that are 1m wide. The high strength Rare Earth Magnetic Drum (model 14PD) has a diameter of 350mm and uses an alternating pole configuration to produce the cleanest magnetic metal fraction. The metal is attracted to the magnetic field and, as it moves along the outside of the rotating shell towards being discharged underneath the Magnetic Drum, it flips between the different magnetic poles allowing entrapped material to be released, reducing contamination of the magnetics.

Both the Eddy Current Separators processing the -30mm fraction have eccentric rotors to maximise recovery of fine non-ferrous metal. Recycling Lives estimate that the material being fed to the metal separation systems has a metal content of around 25%, recovering approximately 96-97%.

An Eddy Current Separator consists of a short belt conveyor that has its drive located at the return end and a high speed magnetic rotor system installed at the discharge end. The magnetic rotor, which is positioned within a separately rotating non-metallic drum, revolves at around 3000 revolutions per minute during operation whilst the outer drum cover rotates at the speed of the Eddy Currents' belt conveyor. As the rotor spins at these high speeds, an electric current is induced into conducting metals. The induced electric current produces a magnetic field, which opposes the field created by the rotor, repelling the conducting metals over a prepositioned splitter plate. The remaining materials such as plastics, glass and other dry recyclables will simply free fall over the rotor, separating them from the repelled metals.

The third Metal Separation System handles the material fraction 30-90mm and is also handling approximately 10



tonnes per hour of infeed. With the same Vibratory Feeder, Magnetic Drum and Eddy Current Separator configuration, the feed widths are all 1m. The Eddy Current Separator has a concentric rotor design for this specific application and recoveries of metals are again at around 97% of the infeed.

Gary Halpin of Recycling Lives explained the reason for choosing Master Magnets. "We preferred to source the equipment from a UK supplier as we wanted local service support. When we reviewed all the options, we found that the Master Magnets equipment was every bit as good as the other suppliers. Their support and response has been great and the equipment is working really well."



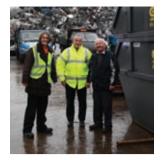
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Investment in Eriez equipment pays off in months!

GLJ Recycling Ltd (GLJ) are specialists in metal management and are based in Cwmcarn, Gwent. The current business was established in 2007 by Gareth Jones whose family has been in the Recycling Industry for three generations. GLJ are an environmentally conscious company currently operating two sites, with the second at Crumlin near Newport, Gwent.

The busy yard at Cwmcarn covers 4.5 acres and is fully licensed to handle all scrap metals and the depollution of cars. With an on-site container loader and shear the company offer a full export service. Until recently the incoming metal feed from local factories and waste collectors was purchased and then exported.



A decision to recycle and extract other commodities was then pursued and a decision to build a plant was approved that would in effect split ferrous from non-ferrous metal. This will also lead to a second stage of extending the process line to extract even further items in the future.

Having designed a plant and purchased conveyors GLJ gave Eriez Magnetics an order for the equipment which included an OBM Vibratory Feeder, a Rare Earth Scrap Drum, magnets and an Eddy Current Separator (ECS). Working alongside GLJ, Eriez then installed the equipment and commissioned the plant in February 2014.

The process.

All metal is graded and sorted and then processed through the on-site shredder and then fed into the new plant onto a shaker which then feeds the remaining material up a short inclined conveyor into the OBM vibratory feeder which separates it again. The remaining material is then fed down underneath the scrap drum. This drum revolves in a

clockwise direction with all the large ferrous material sticking to the drum which is then subsequently thrown off at the top of the rotation and sent up the line to the picking station. The remainder then drops down onto another conveyor beneath the scrap drum, where it is conveyed under an overband magnet to remove the last small elements of ferrous before it reaches the ECS. (It is essential to remove as much ferrous material as possible before the ECS). The key to the whole operation, the ECS separates all the non-ferrous material from the rest of the rubbish. The non-ferrous material drops down onto the bed of the ECS and passes over a magnetic rotor operating at 3000 rpm. This equipment incorporates a splitter plate which throws all the non- ferrous to the back which is then dropped into a skip with all the remaining waste dropping the other side into a separate skip.

Lyndon Jones, CEO, commented, "Due to the desire to process the feed quickly we originally assembled the plant at ground level, however we realised it would function better on a platform so we implemented the change and raised the whole plant onto brick bases. It's been a total success, Eriez have worked with us closely and the equipment is top class and amazingly the extra revenue from the process has paid for the plant in approximately six months!"

Recycling

The Eriez Rev X-E Eddy Current Separator.

The Eriez Rev X Eddy Current Separator provides a unique separation solution for the dynamically changing Recycling Industry at a level of investment that keeps the whole project viable. With 6 models available all magnetically designed to provide enhanced separation of non-ferrous metals with each version having a different magnetic configuration to achieve maximum separation.



to suit specific separation objectives the Eriez Rev-X is designed for ease of installation into new and existing recycling plants. It is simple to operate and incorporates a flexible design which is easily adjusted to maximise separation performance. A robust build coupled with low energy consumption and a wide range of feed widths from 300 to 2000mm and different type of nose and splitter configurations complete an impressive specification.





Peter Craven

Gully and road waste recycling helps meet aggregate requirements

The quarrying industry has been widely reported as having failed to replenish new aggregate production for many years; although a marked recovery in volume in sand, gravel and crushed rock has been seen over the past 18-months. Here, Peter Craven from CDEnviro, world leaders in recycling and washing of waste materials, explains how road sweepings and gully waste can be recycled with minimal capital expenditure, thereby diverting it away from landfill; generating another potentially lucrative revenue source plus help UK Plc better meet its waste material recycling targets.

Over two million tonnes of rock salt and grit are destined to be spread onto the UK's road network alone over the coming months, at a cost of more than £150 million. The resulting road sweepings and gully waste may not initially look like a viable source of recyclable material but with landfill currently costing £80 per tonne in tax alone and with ever more stringent recycling targets being imposed on EU member states, all the constituent parts have value, making it a prime 'resource' to focus upon.

The saline constituent of what's spread on the roads is ultimately washed out but the grit and aggregate materials are reclaimable. Around half of the overall weight of gully and road waste, when collected, is typically water. When washed and dewatered the sand and grit element accounts for around 50% of the overall volume. Larger aggregates comprise a further 40%, with the remaining 10% being organic and other lightweight waste. This organic content can fluctuate significantly due to seasonal influences. During the spring and summer pollen and grass cuttings are particularly evident while the autumn sees large volumes of leaves being included.



Unfortunately resistances to recycling and the preference to send road sweepings and gully waste in the UK to landfill may, until recently, have been overly influenced by the Environment Agency's policy on street cleansing and leaf

collections. This reports organics cannot be used to produce compost because of contaminants. With high levels of hydrocarbons found in the organic material, road sweepings and gully waste are not listed in the Compost Quality Protocol. The result is the feedstock is downgraded to Compost-Like Output which means the material remain as a waste product.

The revised Waste Framework Directive (rWFD) already has stringent recycling targets to be achieved by the end of this decade but new proposals from the European Commission, unveiled in July 2014, if adopted, will set the bar even higher. By 2030 we will have to recycle 70% of all household waste and there would be a total ban on sending waste to landfill that could have been recycled.

So, under pressure to increase recycling in more innovative areas, the Environment Agency is now waking up to the fact that road sweepings and gully waste could form a good stream of valuable material. Many local authorities are also seeing the benefits recycling deliver over landfill and are actively looking to implement programmes that achieve this

With advances in screening technology, significantly cleaner material is now being produced. Impurities can be removed and organics composted for use on the land, creating another valuable revenue stream, rather than sending it to landfill or burning it as a fuel source in 'waste-to-energy' plants.

How big is this recycling opportunity? How much waste material could be returned each year? - Actually, nobody is really sure as there appears to be little joined up thinking! No single agency is in control of all aspects of collection and therefore statistics are sketchy at best. Conservative estimates suggest between 650,000 and 800,000 tonnes per year are recovered and could be recycled, creating a welcome resource

In addition to reclaiming the grit for reuse on the roads or for other applications, larger aggregates can be recovered for either pipe bedding, road construction or used for manufacturing concrete. The finer material can be used as a soil substitute for reclamation, restoration and land improvement. Recovered road sweepings and gully waste not only provides a sustainable long-term solution but also help organisations increase their recycling ratios, while offering significant economical savings.

In 2012, Warwickshire County Council set up a flagship project in the West Midlands. By embracing the guidance and available technology they encouraged a number of local authorities to collaborate and create a sustainable solution to recycle road grit and gully waste. Over 300,000 tonnes of waste material is now being diverted from landfill over a seven year period, delivering savings of £10 million; and boosting the recycling rates of the participating authorities by around 3%.

Recycling



TEREX Environmental Equipment launches two new products, the TDS 820 Slow Speed Shredder and the TTS 620 Trommel Screen

As part of an aggressive and dynamic product development programme, Terex® Environmental Equipment is launching two new products in early 2015; the TDS 820 slow speed shredder and the TTS 620 trommel screen compliment the expanding mobile shredding and screening range.

TEE Global Business Line Director Tony Devlin said,
"We are excited to add these two new machines
to our product portfolio. We have listened to our
customers and both products are full of new
features. The TDS 820 is versatile slow speed
shredder with six programmes to suit the
customer application. TTS 620 trommel screen will
continue to push the boundaries in the mobile trommel
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. We have every
confidence that this machines will be a success."



TDS 820 - Slow Speed Shredder

The TDS 820 is a versatile slow speed machine for shredding all types of material utilizing the same shredding tool. There are three standard programmes pre-installed and then three further programmes that can be configured by the customer to suit the application.

Key features include the hydrostatic drive allowing better protection against contamination and enables the shafts to reversed easily. The double shaft shredder has two 2000 mm long counter rotating shafts which allows more aggressive intake, high throughput with the desired particle size. Throughput of up to 60tph is achievable dependent on the application and shredder configuration. The independent gearboxes enable each shaft to be run independently to reduce wrappage and improve the shredding of material. Another feature is the weld teeth that help reduce maintenance and costs.

Additional features include the tipper hopper which increases the feed area. Hopper extensions provide increased capacity in bulky applications.

The TDS 820 is powered by the following engines dependent on geographic area and emission regulations; Scania DC13 330kw (440HP) Tier 4 final for the US and EU, Scania DC13 371kw (497HP) constant speed for the EU and the Scania DC13 331kw (440HP) Tier 2 for RoW.

The TDS 820 is offered as both a tracked and wheeled unit. Both these types of configuration allow the machine to be set up quickly onsite. The wheeled version is easily maneouverable; the tracked version offers a great solution for softer ground or difficult terrain, although is equally proficient working in any environment.



Recycling



TTS 620 - Mobile Trommel Screen

The NEW TTS 620 is the ultimate in modern Trommel design, offering operators unrivaled application flexibility, production rates and serviceability. A highly efficient engine and hydraulic drive system combined with advanced material processing control system offer maximum production combined with minimum costs. It is ideally suited for screening compost, biomass, soil, gravel & waste.

An intuitive push button control panel allows the operator to easily configure the machine to suit the required application while the intelligent feeder control system continually adjusts the

feeder speed to optimize screening rates. Special consideration has been given to minimize change out time for the screening drum. The process, which takes a matter of minutes, places the TTS 620 as a market leader. The machine has also been designed to accept a number of other manufactures screening drums allowing customers to smoothly integrate the TTS 620 into established fleets.

Unprecedented levels of service access catapults the TTS620 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. The swing out engine cradle gives operators unrestricted ground level access to all service components.

Hinged doors on both sides of the trommel 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. Both Tier III and Tier IV options are available with the Tier III being a constant speed configuration making it suitable for use within Europe.

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



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Make 2015 your year to Recycle



Reduce Waste Disposal Costs. Maximise Material Recovery & Generate Extra Revenue

With further changes to Landfill Tax due in April this year, it is important to make 2015 the year to recycle, for those in the waste management industry, who have not yet introduced changes to their processes.

The Flex X Tract and Max X Tract Density Separators, which won a CIWM award in 2013 for environmental excellence, are designed to separate materials less than 100mm at a processing rate of 100 tonnes per hour to give you higher value materials, whilst reducing the amount of material going to costly landfill. Valuable materials can be separated from waste such as metals, wood, plastics, paper, bricks, stone and organics.

Over the last few years, Worsley Plant, who supply the Density Separators throughout the UK, has helped key customers in the recycling and waste management industries to reduce their waste disposal costs while maximizing material recovery, generating some very positive results for them.

McCarthy Marland, a Waste Transfer Station in Bristol, have enjoyed remarkable increases in how much recyclable material they now recover from waste. It was their heavy waste stockpile (containing soil, stone and steel) that they wanted to tackle as this is where they could see the most value over the long term. "We knew what we were trying to achieve" explains Alex Marland "and we looked at several technologies during the research process. Our key criteria were to find a technology that was well built, has capacity for us to grow into, produces quality products and does not require manual

The combination of the Max X Tract and Flex X Tract in series achieves the above criteria and is proving to deliver considerable benefits achieved from the plant's quality outputs and minimal manpower requirement. We load the hopper every 30 minutes and leave it to process the material" says Alex "the only manual interaction is when we clean it."

Wheeldon Brothers run four waste and recycling transfer stations in Greater Manchester processing over 120,000 tonnes of construction and demolition (C&D) and commercial and industrial (C&I) waste each year. Each day around 120 tonnes of trommel fines were sent to landfill and much of this was above 8mm and would have incurred the standard rate of landfill tax (then £64 per tonne). Now only 6% of their materials incur the standard rate and over 60% can be recovered and sold on. Within 3 months they had covered the cost of the installation.

James Wheeldon, said: "Without the Max X Tract we don't know where we'd be. It's helped our business survive and grow. Having the Max X Tract has allowed us to extract a significant proportion of material, much of which we can sell rather than paying to get rid of, which is key when waste disposal costs are rising." >

MRF'S

JWS, the North West's leading provider of recycling and waste management services, saw the Max X Tract as a 'one stop solution' to allow them to separate out materials of value to generate revenue for the company, whilst at the same time reducing the volume that needed to be taken to landfill. Using the MAX X TRACT in their waste processes, JWS can now achieve 90% landfill diversion.

Tim Andrews of JWS, said: "The MAX X TRACT was simple and compact and has allowed us to extract maximum value from our waste materials. Not only have we been able reduce our waste disposal costs while maximizing revenue, but we have also been able to help our customers achieve their environmental targets and responsibilities."

Worsley Plant supplies the most comprehensive range of attachment based, crushers and separators, as well as density separation equipment in the waste and recycling industry. All their equipment is available for sale or hire across the UK, and demos can be arranged.





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Raymond Brown Aggregates latest IBA processing plant operation for Viridor is a total success



The HUB was recently invited to visit the latest IBA processing facility by Raymond Brown Aggregates....

Having been successfully selected by Viridor Oxfordshire Ltd to recover and process bottom ash from its new Energy from Waste facility (EfW) in Ardley, Oxfordshire, Raymond Brown Aggregates (RBA) has invested over £2 million in the overall project, which includes a bespoke design IBA (Incinerator Bottom Ash) processing plant. The contract with Viridor Oxfordshire Ltd (VOL) will run for 15 years, with RBA processing approximately 75,000 tonnes of IBA annually.

L to R: Mark Isaac, Managing Director, Andy Sykes, Area Manager and Lee Thompson, Operations Director.

The new plant was constructed and installed under contract by DUO Manufacturing (Division of DUO plc) over a period of three months, with testing and commissioning successfully completed in September 2014. The first batch of Oxfordshire IBA has now been processed and marketed with excellent results and product quality.

Several challenges had to be overcome, as the IBA processing building at Ardley was already designed and approved under the overall site planning permission. This meant RBA and DUO had to work closely to ensure that the available area was maximised and utilised in the best possible way to ensure a practical and safe layout.

The EfW receives a constant flow of Oxfordshire household waste alongside a small amount of commercial waste and burns, approximately 300,000 tonnes of waste annually which provides a residue of around 23% - 25% IBA. The new processing plant is rated for 100,000 tonnes per annum.

This is the second IBA processing facility that is operated by RBA, with the first located in Hampshire. Technical advances and experience have allowed the recovery of <5mm non ferrous metals to be included in the new plant design.

Lee Thompson - Operations Director RBA, commented, "We are delighted with the plant, it's our own design, which is based on our experience, and significant research and development. We went to DUO and asked if they could meet our processing design requirements. Their positive response and successful IBA plant upgrade carried out for RBA in 2011 gave us the confidence that they had the expertise to deliver. There were several significant hurdles to overcome; the project teams for both RBA and Duo deserve huge credit for achieving very tough deadlines.

The process operation.

The IBA is discharged from the EfW into a holding bay. This is then picked up by loading shovel and taken outside and put into individual storage areas. At this point the material is still warm, with a pH value of around 13 (alkaline). The material then remains in storage and goes through a 6-12 week ageing process. During this process the IBA stabilises and the pH reduces prior to processing.

This 'aged' material is then is then taken to the plant by loading shovel and fed into the main feed hopper. The material is then delivered to the main trommel screen by conveyor belt. The trommel has round apertures of 65mm, splitting the feed into +65mm and -65mm. The +65mm material is discharged at the end of the trommel and collected by a conveyor belt and sent for hand sorting. The sorting involves recovering all metals for recycling, the residue is generally masonry, and ceramics which are sent for crushing and reintroduced to the IBAA. (incinerator Bottom Ash Aggregate)

The -65mm material drops through the trommel and is then delivered by conveyor belt to the Binder 'flip flow' screen, passing under a high powered magnet along the way to recover the first cut of ferrous metal. Here the Binder machine is the true nucleus of the operation, separating the material into three fractions, a -5mm fraction, a 5mm-16mm fraction, and a 16mm-65mm fraction. The three way separation ensures a more single size fraction that allows optimum presentation over the eddy





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Latest modular conveyor system offers simplified design and installation and near-silent operation



Designed to meet the demands of modern production, the new modular system is fully adaptable and guick and easy to install to better help manufacturers accommodate the need for smaller product batches, more frequent product changes, and reduce time to market.

Utilising improved sliding characteristics and low friction materials, the new conveyor system is the quietest on the market. In addition, fewer joints and less rolling friction in the curves minimises wear, reduces energy consumption, increases efficiency and reduces the potential for downtime.

To simplify the planning and specification of production lines, Bosch Rexroth provides MTpro planning software with Layout Designer. This allows machine builders and end-users to easily design complex multi-conveyor and workstation systems with clear component specifications in a cross-platform CAD format. MTpro provides load calculation reports of the designed conveyors and also provides anthropometric information for ergonomic consideration where operators interact with workplace solutions.

Speaking about the latest addition to the VarioFlow range Jonathan Wright, Product Manager for Conveyor Technologies at Bosch Rexroth said: "With VarioFlow Plus we're using latest production-line technologies and Bosch Rexroth patented solutions to create a system that's easy to install and fully adaptable for future modifications.

By ensuring that it is also the quietest conveyor on the market we're aiming to improve the production environment, as well as helping manufacturers meet increasingly stringent noise level regulations.

The VarioFlow Plus modular conveyor system can be fully adapted to meet manufacturers changing needs

The Rexroth VarioFlow Plus chain conveyor consists of components that can be used universally for all system widths, including the new track width of 120 mm. The stable chain permits tensile forces of up to 1,250 Newtons and the near-closed chain surface allows even the smallest of parts to be transported safely and reliably.

The system offers individual conveyor layouts and comes in six sizes and two material options: a basic aluminium version and an FDA compliant stainless steel version for sectors that require high hygiene demands, such as food processing.

Bosch Rexroth also offers a work-piece pallet system for the Varioflow Plus, enabling the system to be configured for transporting components in a product assembly environment. Various traffic control elements allow for the pallets to be held accurately at build stations and directed to and from individual conveyor tracks.





Metso solves pegging issues in **Ghanaian** gold mine

Gold Fields Ghana's Tarkwa gold mine faced a challenge: chronic pegging of screening media was causing daily downtime, inefficiency and wear. They solved it by installing Metso's modular, rubber LS screening media, which is non-pegging and offers a long wear life. The switch led to increased uptime of 90 hours, corresponding to 108,000 tons more material being processed annually, as well as a reduction in screen replacement costs and a safer working environment.

One of Ghana's largest gold mines

The Tarkwa gold mine, located in the Western Region of Ghana, is owned and operated by Gold Fields Ghana Limited. Tarkwa is a cen¬tre of gold and manganese mining, and the open-pit mine is one of the largest gold mines in southern Ghana, with four pits currently in operation. Roughly 100 million tonnes is excavated and processed each year to yield around 24 tonnes of gold. The processing involves an extensive system of conveyors, and comminution equipment to ensure the right product is produced at the right capacity.

Heap leach, tertiary screens

The Tarkwa mine currently has two processing plants: a heap leach facility and a carbon-in-leach (CIL) facility. The Heap Leach facility is a 3-stage Crushing circuit with a 1200 tonne/hour capacity. The Tertiary Screen is a two-deck screen, which utilises Rubber and Polyurethane on the top and bottom decks respectively. These media were previously sourced from a competing supplier.

Chronic pegging issues

Problems arose when the near-mesh rocks clogged the screening media openings, impeding the passage of the undersize material. This led to higher recirculation load. Mine operators had to stop the line every day for about fifteen minutes to knock the trapped material out from the screening media. Moreover, the tertiary bins became over-filled due to the bottleneck downstream. Gold Fields asked its supplier for screening media that would not peg, but the solution they came up with proved inadequate. The new media were shaped to prevent pegging but they wore out and broke rapidly during operation, allowing large rocks to pass through and creating further problems downstream.

Breakthrough on several fronts

Gold Fields evaluated several suppliers. Metso came in first for the mine's primary selection criteria. In January 2011, Trellex LS modular, rubber screening media (which are antipegging) from Metso were installed. They lasted ten months versus an estimated three months for the previous supplier's screens, and did not collapse under heavy loads.

Bulk Handling



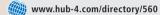
With Metso's screening media in place, the mine has eliminated the need to stop production on a daily basis to liberate the clogged screens. According to the most recent reports, annual operational downtime at the mine has been reduced by 90 hours, meaning that an extra 108,000 tonnes of ore can be processed annually. Gold Fields is now implementing them in other parts of the mine, including the CIL facility.

Higher efficiency and productivity

The most significant benefits come from the elimination of pegging: now, there is no daily downtime for knocking screens. The fact that material no longer has to be removed from pegged screening media also makes the mine a safer, cleaner place to work. Metso's media also lasts longer, further enhancing efficiency, safety, and profits - and also reducing waste, which is an environmental benefit.

Measurable savings

Annual cost savings from the new Metso screening media are at least USD 315,000, and possibly greater. Plus, the benefit to managers in removing a chronic problem and reducing headaches is priceless. Says Mr. Louis Baanuo, Ag Unit Met Manager, NHL at Tarkwa mine, "The installation of the Metso panels has brought great relief: our operational downtimes have been drastically reduced, increasing the plant's throughput." Samuel Selassie Leckey, Sales Engineer, Metso Mining and Construction Technology adds "Once again, Metso's solution has proven to be a genuine value-provider and not just a 'me too' product!"



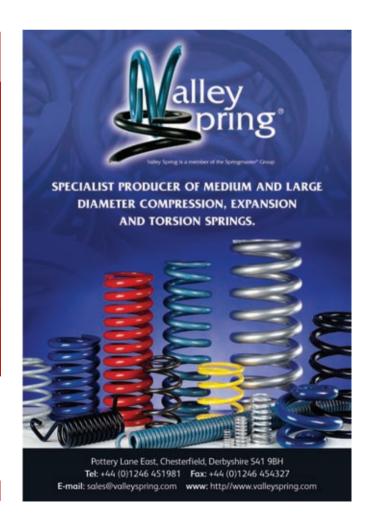




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Home of the SuperDrive™





Solids handling specialist, Ajax Equipment, has supplied renewable energy consultancy and technology developer, Renewable Energy Technology, with a screw based, handling system for ash and char produced as byproducts of the NovaGen gasification process. As well as promoting reliable flow the new system will allow the waste fly ash and char ash to be collected and reused in other applications.

The gasification process converts wood into a mixture of carbon monoxide, carbon dioxide and hydrogen, known as syngas, a source of renewable energy. In order to maintain the separate processing of ash and char, Ajax has provided four hopper screw feeders, a collecting screw conveyor and screw elevator for a new fly ash processing system and four screw feeders for the existing char ash handling system.

Fly ash is collected from filters featuring improved hoppers and integral screw feeders from Ajax. The smooth stainless steel hoppers transfer ash from the filters to a collecting

screw feeder all of which are gas tight. The filter screw feeders feature a steep walled shape with diverging end walls and feed ash into a larger diameter screw with progressive extraction geometry better suited to the hopper's long outlet slots, ensuring reliable flow. The smaller equipment previously used included a hopper shape too sensitive to variations in process conditions and unsuited to the ash's arching capability resulting in unreliable flow. A similar approach was adopted on the main char feed screws direct from the gasifiers.

Commenting on the project Renewable Energy Technology technical director Peter Bellis said "From our experience on other projects screw based technology has proved to be the safest and most reliable way of transporting the ash and char produced from gasification. Having worked with Ajax in the past on transporting these types of ash, we knew they would produce the high quality of equipment Renewable Energy Technology requires".





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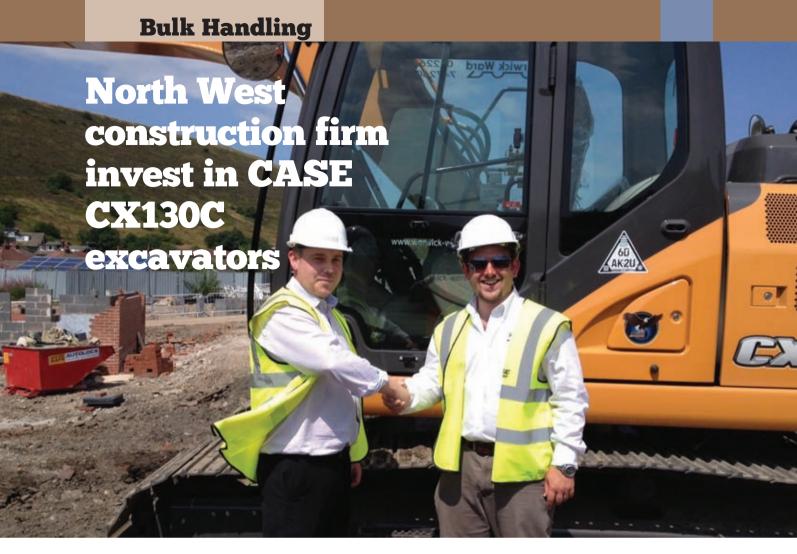
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Bora Construction based in Macclesfield, Cheshire employ personnel from Staffordshire, Cheshire, Merseyside, Greater Manchester, Lancashire, Yorkshire and Cumbria. The company was created in 2009 to provide a professional civil engineering contractor service to the construction industry.

Matthew O'Gara (Director) believes that Bora Construction's successful track record, achieved since the formation of the company, is based on commitment to clients; delivering quality construction on time, safely and within budget. "Here at Bora Construction, we pride ourselves on a high level of expertise and experience. All directors, management staff and operational staff are qualified specifically to their role within the company." Bora Construction is now firmly established in the North West and has enjoyed buoyant growth within all sectors. To meet the demands of this growth, the company has decided to expand their mobile plant machinery fleet and have identified the 13 tonne excavator as the first of many new machines to be added to their fleet. Matthew O'Gara said "The 13-tonne excavator is an essential tool for our company. We have at least one on most of our sites"

Bora went on to rigorously test various excavators from many different manufacturers, including Case, CAT, Hitachi, JCB and Volvo. After a long period of testing and negotiations with Warwick Ward (CASE Uk main dealer) they decided that the CASE CX series excavators offered the best solution that being value for money and performance. Director of Bora Construction Matthew O'Gara states "The Case CX130C has very smooth controls and excels when levelling materials or excavating to a fine tolerance and in addition the power of the CX130C surprised us demonstrating exceptional performance during heavier workloads. The smoothness of

operation during the delivery of power coupled with excellent fuel consumption and great build quality is why we consider the Case CX130C the best value package on the market. "

Robert Hughes of Warwick Ward was given the task of demonstrating the capabilities of the CX130C and explaining why the machine was such a popular choice amongst 13tonne operators as well as the buyers. "When Matthew approached us his requirement was for an excavator that could stand up to Bora Constructions heavy work schedule comfortably, as down time costs money, and perform with both precision and power in an array of different applications with low emissions and fuel consumption also being critical. The CX range allowed him to achieve this, with its exceptional Japanese build quality and Case Intelligent Hydraulic System. The CX range gives industry leading performance whilst also producing low emission and low fuel consumption via the Tier 4i Isuzu Engine, coupled with the Advanced Energy Management system, to make sure no unnecessary energy is wasted.

Another contributing factor in the decision to buy a Case CX130C was the confidence that Matthew had in Warwick Ward (machinery) Ltd, a company that has been in business for over 40 years. "We pride ourselves on a high level of expertise and also expect this from our suppliers. Warwick Ward have shown themselves to be of this high standard and from the very beginning of the negotiations to the delivery of the CX130C, they have demonstrated a high level of product knowledge and experience," says Matthew. "We also need to work with a company that can offer superior backup and we feel that Warwick Ward can achieve this, we look forward to working closely with them for years to come."

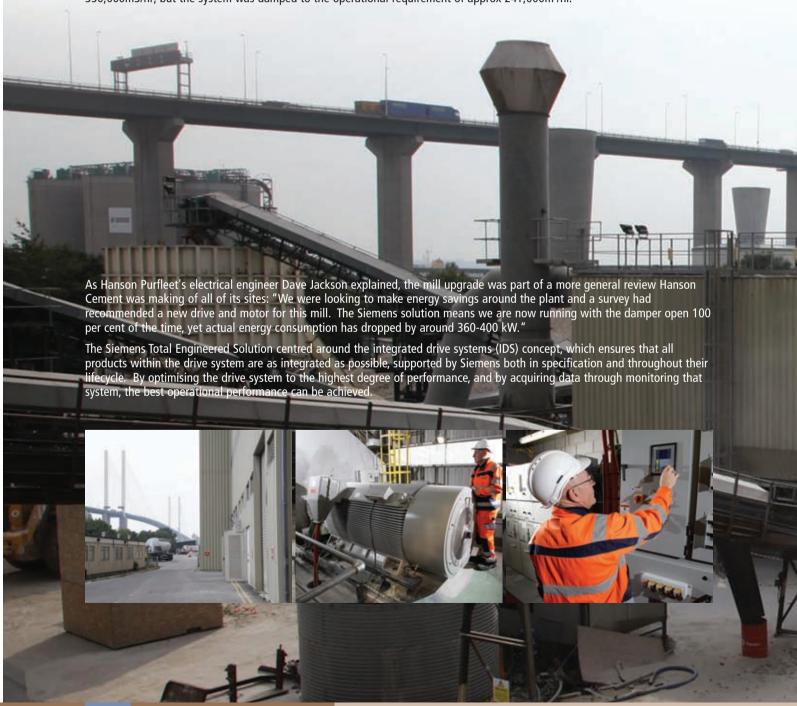


Siemens Fan Upgrade at Hanson Purfleet Saves Energy and Reduces Carbon Footprint

- Hanson Cement projected to save in excess of £175,000 per annum at Purfleet by using Siemens integrated drive systems
- · Bonus additional energy savings after follow-up site review
- · CO2 emissions reduced by 1,487 tonnes

A fan upgrade by Siemens at Hanson Cement's highly productive Purfleet plant has resulted in energy savings of more than 36 per cent being made, with payback on the investment anticipated to be well under two years.

Hanson Cement's Purfleet Works is situated next to the River Thames in Essex and is capable of producing around one million tonnes a year of Regen - a cement replacement in ready-mixed and pre-cast concrete which is manufactured from ground granulated blast-furnace slag. The works consist of two closed circuit ball mills and a Loesche vertical grinding mill. It was Mill 3 that Hanson required an upgrade to, as the existing mill fan was fixed-speed, using a 1 MW 11kV slip-ring machine running at around 980 kW. The airflow was continuously at full speed and was controlled by a damper. The fan design airflow was 350,000m3/hr; but the system was damped to the operational requirement of approx 241,000m³/hr.



Bulk Handling

For mill 3, this meant replacing the fixed speed fan with a 1000 kW Sinamics Perfect Harmony 11000/4160 V medium voltage (MV) converter, installed and commissioned to link with existing Siemens process control systems at the plant. A new Siemens MV 1000 kW, 4160 V, 6-pole motor was also installed along with new motor cable and a modified motor base (the bed plate was raised by 60mm). Siemens was able to provide the full turn-key solution.

Perfect Harmony

Every element of the Sinamics Perfect Harmony cell-based drive range is engineered to maximise productivity and protect a customer's process in a way that other drives are unable to do. Its modularity allows for a scaleable solution achieving near-100 per cent reliability and 99 per cent availability, two key factors for a busy plant like Purfleet.

Benefits of the upgrade included:

- greater productivity through optimised speed and process performance
- · improved flexibility, with faster run-up/run-down times
- standardisation, reduced size and line attendance
- increased amount of pre-emptive maintenance information
- a significantly reduced total cost of ownership over the product's lifecycle.

As Dave Jackson continued: "It took about a month before we could clearly identify all the changes in running costs, but we were very pleased with the whole system, and more savings were made than originally anticipated. A follow-up visit by Siemens led to even further savings being made using the new drive system and the entire project was completed on time and within budget."

The annual savings to Hanson from the upgrade have been estimated at £175,000-£200,000.

Siemens minerals account development manager Garv Chapman said: "This upgrade proves that using the appropriate software and with the Siemens knowledge of integrated processes and applications, significant savings can be made as well as enhancing the overall lifecycle of the plant."

Being able to address a reduction in energy usage and increase plant availability have become key targets for industrial companies. Hanson Cement has been able to reduce its carbon footprint at Purfleet by 1,487 tonnes since the new system was installed eight months ago and is continuing to make further savings.

Hanson's national operations manager for Regen Steve Hall concluded: "The project was a great success, with the new drive and motor enabling us to reduce drive speed and lower power consumption by approximately 37 per cent. We are continuing to save about 4.5 wh/t on our total process with this one fan drive, and these energy savings represent a rapid return on investment for us."

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SpecDrum Engineering Invest for the future

Leading conveyor pulley supplier SpecDrum Engineering, have placed a heavy focus on targeting and developing new export markets within the global materials handling sector.

SpecDrum Engineering's headquarters are in Dungannon, an internationally recognised hub of engineering excellence, with manufacturing concentrating on the crushing, screening and materials handling industry. SpecDrum Engineering has recently undergone a complete revision of their corporate identity as part of their assertive European and Global Strategic Growth Plan.



As one of the global leaders in the manufacture and supply of conveyor pulleys SpecDrum Engineering produce over 50,000 pulleys annually and export globally from their primary facility in Dungannon.

In order to facilitate an increase in production as a result of the Strategic Growth Plan, SpecDrum Engineering has made several significant capital investments across all areas of the company. These changes have included the appointment of new personnel in both the office and shop floor environment, additions to the vehicle fleet and the purchase & physical development of a new site located opposite their headquarters, which is primarily being used as a logistics base allowing for efficient global distribution.

More recently SpecDrum Engineering has undertaken a major capital investment in the purchase of a state of the art DOOSAN PUMA 400LM CNC. The PUMA 400 series turning centres are without a doubt the most powerful machines in their class. High metal removal rates, along with rapid positioning and fast bi-directional turret indexing, guarantee unmatched cycle times when real cutting is essential.

Managing Director, Mr Dermot McCabe commented, "The PUMA 400LM will underpin and strengthen the existing schedule of machinery currently in our factory. We have been successful in accruing new customers in new markets across Europe as part of our Sales and Growth Strategy. With this investment in cutting edge technology it allows us greater flexibility, increases our capabilities in our manufacturing process, and further strengthens our status in being able to consistently produce high quality conveyor pulleys for all our customers."

"As part of our continued investment in our facilities and employees, we recognise that in order to not only meet existing

demand we need to futureproof ourselves as we look ahead., It is imperative that we do not stand still but continue to make significant capital investments to ensure we remain one of the global leaders in the manufacture and supply of conveyor pulleys."

"The company as a whole is excited about the prospects of 2015 and the years following. We are confident that we can meet the increasing demands of our customer base, with our employee development programme and by investing in our manufacturing capabilities."

SpecDrum Engineering manufactures a diverse range of drive, tail, wing and spiral pulleys across many sectors including the crushing, screening, washing, recycling, aviation and general materials handling industries and exporting globally from their headquarters in Dungannon. For more information log onto www.specdrum.com and follow us on LinkedIn and Facebook (search SpecDrum Engineering).



Safety in Handling Heavy Tools from 6.3 - 32 **Tonnes**

RUD Chains Ltd is a leading manufacturer of high quality round steel chains and components for applications in mechanical engineering, hoisting, conveying and drive systems. With over 140 years of expertise to draw upon, you can be confident in the standard of **RUD** products.

The RUD Tool - Mover is a manipulation device for the safe turning and tilting of heavy and awkward plant items and injection moulding tools. Handling and turning of heavy tools can be a dangerous job without the right equipment causing risk to the operators and damage to the costly tools if they are not turned effectively.

The Tool-Mover offers many optimal safety features. It turns the load at the centre of gravity which means that the load is turned very smoothly and securely. The Tool-Mover is equipped with a frequency controlled drive which ensures an even and smooth drive from start to finish, and it can be stopped in any position securely even if power to the unit is

It does not need to be bolted to the floor; it can be moved to the appropriate location in the facility by a crane or forklift / pallet truck. It offers a handling weight range starting from 6.3 tonnes, to 10t, 16t, 20t to our largest 32tonnes.

Improve efficiency and safety when handling your plant and moulding tools with the RUD Tool-Mover. The safety of your operator is vital and the equipment being handled expensive: The Tool-Mover offers security to your operators and your tools.

As a leading manufacturer of over 500 lifting and lashing applications, RUD Chain's lifting applications are also well known across many industries for handling. The PowerPoint Star in particular, is an extremely robust lifting point which has the ability to pivot in any direction, allowing the lifting and turning of goods to run smoothly, a must for safety in handling.

RUD offer standard and bespoke solutions to meet a wide range of project aims and working environments. Safety is paramount to RUD; ensure safety in handling with the appropriate equipment.







Integrated design concept for drive solutions on bulk material handling equipment delivers substantial improvement in efficiency

When it comes to bulk materials handling, geared motors are used to power a wide variety of handling equipment from pumps to conveyors and bucket elevators. Different materials and operating conditions mean that each application can pose an individual challenge requiring expertise and a wide range of solutions in order to guarantee both product flexibility and universal reliability, real-world gains in efficiency however can only be achieved through an integrated design approach.

Bauer Gear Motor is working hard to satisfy industry demands with an expanding range of quality drive solutions available in a variety of configurations, including the ability to integrate the drive into the machine design, all of which can be arranged to meet specific client requirements and make substantial improvements in efficiency.

OEMs require rugged-duty geared motors for use on a variety of applications within their plants and Bauer is setting new standards for the future of design in the area of bulk materials handling equipment. The design process for a drive solution requires a flexible approach which can use the experience and engineering knowledge of industry experts and is also supported by a wide product range that can be developed into a bespoke package.

Conveyors and elevators are used across the mining, cement, asphalt and construction industries and can vary enormously in size from smaller mobile plants to vast fixed installations. For manufacturers of such equipment, it is essential that the drive package will deliver reliable service, but in addition it must cope with overloading as well as the harsh local environment. Energy efficiency however is also vital.

With increasing energy costs, efficiency is an important factor, with many manufacturers concentrating on the electric motor and speed control method to deliver savings, whereas the mechanical aspect of the drive can actually deliver the largest savings. Bauer is able to deliver these compound savings using a combination of modular products, in-house engineering and partnerships with system expertise. The greatest savings, can be made by optimising the mechanical efficiency of the drive system and it is this area that Bauer is leading the way with its new 'design concept'.

André Bubolz, Director of Industrial Drive Applications for Bauer, comments: "Within any drive system there are potential energy savings to be made, but we have found that improving the motor efficiency will only realise 10% of the maximum potential savings available, while changing to electronic speed control addresses a further 30%. Bauer has a range of standard efficiency class motors right through to super efficient IE4 class PM motors for maximum energy saving in continuous or heavy duty cycle applications.

"Addressing the motors and inverter drive however leaves a further 60% of the potential savings to be gained by improving the mechanical aspect of the drive. Bauer has the expertise to engineer the complete drive package, but it is the mechanical section which holds the key not just in terms of



Bauer is setting new standards for the future of design in the area of bulk materials handling equipment.

the flexibility and reliability of the design, but also in improved efficiency.

"Thanks to our constantly expanding standard range and our Special Serial Demand service, which offers totally bespoke designed gearboxes supplied as one-offs or in full volume production, we are able to offer a gear motor solution for almost any bulk materials handling application. >

Bulk Handling





Bauer has the expertise to engineer the complete drive package, but it is the mechanical section which holds the key not just in terms of the flexibility and reliability of the design, but also in improved efficiency.

"The launch of the Industrial Drive Application Service means we are able to extend this expertise to offer our design concept of a combined power transmission package that includes the motor, inverter drive, gearbox and coupling, providing flexibility, reliability and convenience of supply to our customers.

"It doesn't matter if it is a replacement situation or a series production item for an OEM manufacturer, the key is integration and optimisation between all the components. We have even built bespoke gearboxes that incorporate the motor, gear stages and couplings into one direct fit unit." (See images)

To augment the power transmission partnership role, Bauer Gear Motor is able to draw on the huge resources of the wider Altra Group - providing access to worldwide support and delivery of the world's largest range of industrial clutches, brakes and couplings. The combination of expertise and product range allows Bauer to provide a solution that

will not only drive, but protect and optimise the entire mechanical power transmission line.

By working closely with OEMs, Bauer engineers are able to offer the exact specification of drive train required for the application. From standard gearbox designs to those which are integrated into the machine, the design is suited specifically to the working environment and specifications of the client. Expert field engineers can assess the best solution for each individual application and offer advice on the suitability of an integrated design.

Bubolz continues: "Bulk handling equipment is often found outdoors, and in relatively inaccessible locations, so minimum maintenance and maximum reliability is essential. We exhaustively test all our modular components and engineer each product to meet the requirements of the application, with heavy duty bearings, advanced shaft seals and robust geared components, plus reinforced housings - where required.

"We also have the one of the world's largest selections of couplings designed for misalignment compensation and vibration isolation, plus a vast range of brakes and overload protection devices available for large conveyors carrying heavy materials."

Offering a complete package also simplifies the specification process for the customer, as they only need to speak to a single contact, while reducing costs and removing the headache of specifying components which will integrate with each other. Again, the one-stop-shop approach not only delivers customer convenience and flexibility, but also a more efficient way of doing business.

Ultimately, Bauer gear motors offers a high quality, wellengineered and above all reliable and efficient solution, with responsive engineering capabilities, prototyping and delivery times as well as an extensive global sales and service network which provides local contacts and support wherever in the world the final application is located.







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New Sieve Shakers from **Endecotts**

Endecotts are delighted to announce the launch of a new range of laboratory sieve shakers. The Octagon 200, Octagon 200CL, Minor 200 and the Air Sizer 200 have been especially designed to accommodate the exacting requirements of the modern laboratory. Ergonomically designed and with a fresh look, Endecotts sieving machines are ideal for your busy laboratory.

The new Octagon 200CL is for precise, reproducible and error-free sieving processes competes with the most advanced sieve shakers in the world.

Several unique features have been developed specifically for this sieve shaker, including the 'Closed Loop' amplitude control for ultimate reproducibility.

The Octagon 200CL is designed to work with Endecotts' SieveWare, the new software for easy evaluation and documentation of the sieving process.

The sieve shaker Octagon 200 is suitable for all sieving tasks in laboratories as well as onsite and provides optimum sieving action for fast and reproducible results.

It is robust, compact and sufficiently lightweight to be portable. Its electromagnetic drive combined with a 3D sieving motion ensures excellent separation efficiency in a short amount of time.

A digital display as well as a guick-release clamping system make operation very easy and straightforward.

The new Air Sizer 200 is ideal for sieving very fine dry particles, which require efficient dispersion and desagglomeration via air jet technology (e.g. electrostatic material).

It is also the perfect instrument to quickly provide a sieve cut of powdered materials.

The Minor 200 has been developed and manufactured to combine low cost with the benefits of a well-designed and engineered shaker. It incorporates many features usually found only on larger, more expensive models.

It is ideal for the use in laboratories and plants since it is compact and genuinely portable (weighing only 17kg). The sieve stack is held firmly in position by a clamping belt system. Removing it allows the whole unit to be stored in a space less than 200 mm high.

There are no rotating parts in the Minor 200 consequently it is quiet in operation and maintenance free.

For more information please contact Endecotts Limited Email sales@endecotts.com Phone +44 (0)20 8542 8121



Sideflex: Innovative Sidewall tyre protection for earthmoving machines



Sideflex provides a costeffective solution to the problem of sidewall damage to expensive and valuable dumptruck tyres, for construction and mining equipment in particular earthmoving machines.

Anyone in the industry knows the continuous vulnerability truck tyres face to sidewall damage from haul road rock debris and accidental impact. Tyre protection chains would not be a compatible option; slowing the trucks down, raising fuel consumption, damage to tyres through blowout and delays in

production time, a solution was needed.

Sideflex is an easy to fit, lightweight shield which simply deflects rock and debris from the tyre wall. The device fits firmly within the wheel hub and almost brushes the ground preventing rock and debris from penetrating the tyre wall. Protective arms radiate from a central retaining ring and form a shield covering the sidewall.

Conveyor & Drive Systems for Bulk Materials Handling

RUD are a leading manufacturer and supplier of chain systems and components to the bulk materials industry supplying; complete bucket elevators and spare parts, complete conveyor systems and drive systems for bulk materials handling.

BULKOS provides conveyors and systems for a wide range of bulk material applications. The transportation of bulk materials is a major challenge, to ensure the availability of building materials when they are needed. RUD supply a selection of conveyor and conveying systems for the bulk materials industry which include: scraper conveyors; drag chain conveyors, screw conveyors and apron feeders

BULKOS drive systems offers innovative solutions for complex drive and transmission tasks. RUD robust round steel chains are used as traction mechanisms for a variety of drive systems

for; lifting, moving, telescoping and sliding in bulk materials handling applications.

BULKOS drive systems are typically used in some of the following applications; lifting of industrial doors, moving of sliding doors and adjusting of cranes to name a few.



Bulk Weighing



Weightron become first UK weighbridge manufacturer to meet new assessment criteria for structural steel work in accordance with EN 1090

Following the formal assessment and certification by the Notified Body - Centre for Assessment Ltd*, Weightron Bilanciai Ltd are now authorised to issue declarations of performance certificates (CE Marking) with its structural steel work in line with the EN 1090 harmonised standard. The certification (Ref 14/3498) covers the company's wide range of weighbridges and ancillary items, including ramps and instrumentation support structures.

From the 1st July 2014 it has become a legal requirement within the UK that all structural steel work being despatched from production facilities for use within civil works must be CE Marked. This CE requirement is based on the European Construction Product Regulation (CPR).

Weightron's Sales Director Emlyn Roberts is clear on the importance of this latest certification: "We believe we are the first UK weighbridge manufacturer to achieve this certification. This under-pins the quality of our weighbridge products, providing the reassurance to the market of our fabrication and welding expertise, together with our production control capabilities. The CE Marking of structural

steel for civil engineering works is regulated by Trading Standards. Engineering contractors and insurance companies underwriting works will expect that structural steel arriving at site is CE Marked with the supporting declarations of performance certificate."

Weightron design, build and install a complete range of pit and surface mount weighbridges, instrumentation and software. Their products are used across a wide range of industries including energy from waste, waste recycling, chemical, petrochemical, plastics, engineering, quarrying and agriculture. The company specialises in complete weighbridge systems that integrate directly with established software systems including SAP, Sage and Microsoft Navision. Peripheral equipment includes driver-operated terminals, ANPR cameras, barriers, traffic lights, RFID card readers and radiation detection systems.

*Centre for Assessment Ltd are themselves Accredited by UKAS and also registered as a Notified Body by the European Commission



Shering supply a total weighing operation for the state-of-the-art East London Biogas plant in Dagenham

Now part of the Precia-Molen group, Shering Weighing are an innovator and market leading weighbridge manufacturer with many successful installations within the AD and Recycling Industries. With a worldwide reputation for an established and widely recognised weighbridge design it was an easy choice for East London Biogas to select Shering to install the weighbridges, traffic management equipment and interfacing software for the new state-of-the-art £21m renewable energy and organic waste facility at Dagenham.

The East London Biogas plant is Central London's first anaerobic digestion plant, and was officially opened in early 2014 by Business Secretary Vince Cable. The AD plant generates approximately 1.5MW of renewable electricity, which is enough to provide power to approximately 2,000 homes. Along with East London Biogas's co-located invessel composting (IVC) unit, the facility produces a range of quality digestate and compost materials which are used in agriculture, horticulture, land remediation and landscaping.

The facility will divert a total of 49,000 tonnes per annum of waste from landfill and, over its 25 year lifetime reduce CO2 emissions by 185,000 tonnes.

The installation

Due to the life expectancy of the site, the weighbridges selected needed to be both long lasting and reliable so that any potential downtime was avoided; Shering weighbridges fitted this bill. Made to such a high standard Shering weighbridges are designed to be as reliable and long lasting as possible, with only the highest quality components being utilised throughout. This focus on quality and reliability affords Shering the confidence to offer the longest warranties of any weighbridge manufacturer allowing East London Biogas to focus on its business and not worry about the long term costs of maintenance.

For the project Shering supplied a 16.5 x 3m 'Gold' Tiger Pit Weighbridge with Command 9000 Software including an additional management licence and driver operated module.

A Management Module 2 and also a Module for invoicing was also installed including a laser printer, a parallel printer and a PC.

Site operation

The site operates a five day week from 7.00am until 5.00pm and receives up to 20 daily deliveries of food waste from local authorities and commercial premises within the London area. As the site produces compost and digested material from the waste this is collected by a further 25 tankers and trucks each day.

Every truck passes over the fully automated weighbridge. Traffic management is controlled by two barriers each with a terminal for incoming and exiting vehicles.

Strictly controlled by the Environment Agency it is essential that 'duty of care' paperwork is provided for every incoming and exiting truck to the site. Full traceability is necessary for every movement - identifying the load and the haulier. This process requires some interaction with the drivers. Each (registered) driver has a fob to swipe which is presented to the terminal, which in turn recognises the vehicle by registration number plate and correct material type. The vehicle is then weighed for the gross weight which then allows the truck on site. The barrier lifts up and the driver communicates directly by radio to the 'tipping' shed where one of the operators opens the shutter doors to allow access. The driver then tips his load and the paperwork is checked; the vehicle is then washed. On return to the weighbridge the fob is swiped again and the transaction is completed by recording the nett weight of the vehicle and confirmation of the correct load information.

This procedure for 'off takers' is almost identical with the empty truck or tanker being weighed for gross weight and then proceeding to the collection point where the loading is facilitated. Once completed the truck returns to the weighbridge to register the nett weight and load information to complete the transaction.

If an unregistered truck enters the site the driver has to call the administration office using the radio, the vehicle is then weighed and proceeds to the office for further instruction.

Adam Szilagyi - Site Manager, commented, "The weighbridge installation was part of the overall site build and completed successfully within the stipulated time frame by the Shering engineers. Overall it's a reliable weighbridge and the driver operated module and software ensure we maintain documentation of all site traffic."





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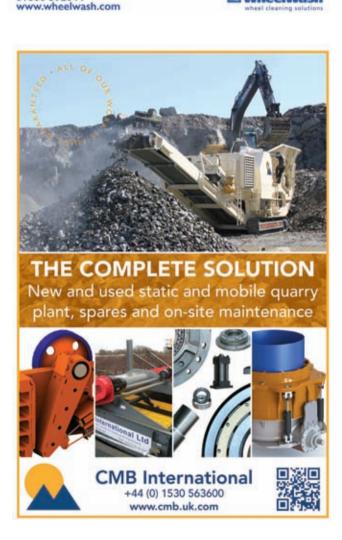
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If you need any help please call us on 020 3637 0385 or email: sales@hub-4.com

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