GROUP

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Terex Finlay introduce new TF-75L low level feeder at Bauma, 2019

Terex Finlay have progressively and systematically developed a comprehensive range of robust, reliable and efficient bulk material handling and stockpiling solutions.

Today the range comprises tracked mobile conveyors, highand low-level feeders. In the coming months the TF-75R radial stockpiler will join the range following an exhaustive and robust testing phase in diverse a range of product applications in locations throughout Europe.





The TC-65 and TC-80 tracked conveyors where the first machines to be launched in the range during 2017. The uptake by the dealer network and acceptance by the marketplace of these machines has been exceptional. The models have been engineered with superior designs intelligent design of these machines enables them to be folded into a transport envelope that allows these machines to be transported inside a 40ft container and shipped cost effectively globally or transported easily from site to site on a low bed trailer. >

Featured story



At Bauma 2019, Terex Finlay will showcase the latest new conveying product in the form of the TF-75L low lever feeder. This new addition to the portfolio has been designed to maximize productivity, enhance efficiency and reduce on site operational costs in a wide range of applications and feed



material types. The large 7m³ (9.2yds³) hopper with a feed in height of 1900mm and width of 3500mm enables low level feeding directly from excavators, grab cranes, and wheel loaders. For onsite safety and quick set, the hopper is fitted as standard with hydraulically folding sides. Depending on the application a number of grid and hopper extension options for particularly abrasive materials a steel apron feeder option is also available. Tracked mobility and the ability to feed material from all three sides enables the TF-75L to be easily incorporated into open and closed-circuit static and mobile crushing and screening circuits.



Featured story



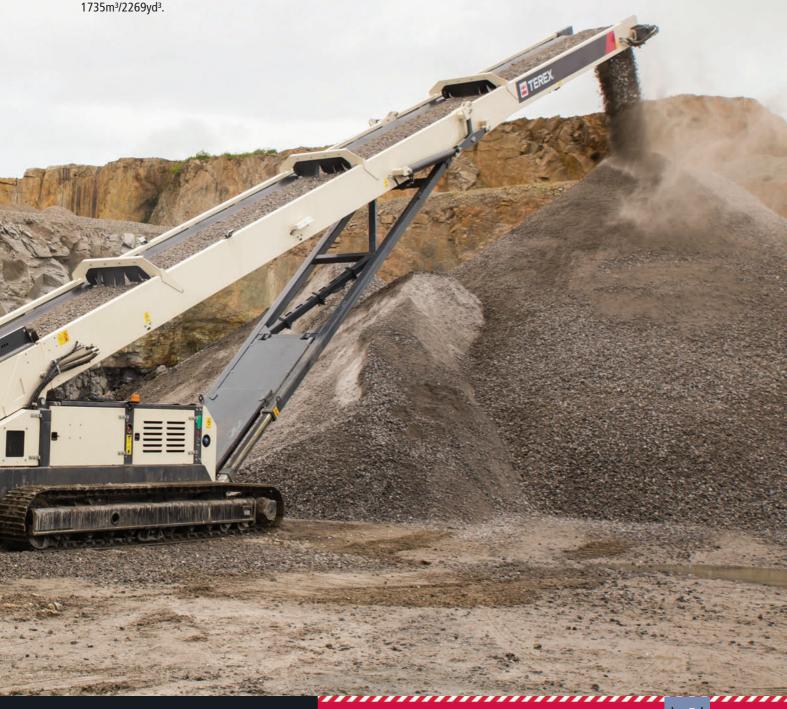
The 1200mm/48" wide variable speed main conveyor has the capability to handle up to +600 mtph of materials depending on the feed material and working angle of the machine. The impressive 9.8m / 32' 2" maximum discharge height provides a maximum conical shaped material stockpile capacity of

With an average fuel consumption of approximately 8.5 l/hr the TF-75L reduces the need for doubling handling of materials and also the requirement to operate secondary equipment such as loaders on site.

By replacing these supplementary pieces of equipment with a TH-75L low level feeder, operators will immediately benefit from reduced operational, maintenance and labour costs and lower the overall cost per tonne. We estimate that these savings can be up to 80%, a significant immediate saving for operators who can either redeploy their loader or simply avoid the investment altogether.

As with all Terex Finlay crushers, screeners and conveying equipment, the TF-75L low level feeder has been designed for ease of movement between job sites, ease of redeployment on site and rapid set up and tear down times so that the machine can be to put work in less than 15 minutes from transport mode.

For further details on the Terex Finlay product portfolio and services please visit our website www.terexfinlay.com











EFFICIENT HIGH ACHIEVERS IN TWO VERSIONS. Whether you opt for the MC 110 EVO Z with its independent double-deck prescreen, or the R-version with its vibrating feeders and integrated slotted grate – the crushing unit with its elevated crushing jaw ensures optimal material feed and an impressively high crushing capacity of up to 330 t/h for both systems. Combined with their innovative and cost-effective diesel-directdrive concept and exceptional transportability, powerful performance is guaranteed. The MOBICAT MC 110 EVO.

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Welcome to issue 57

Finally, summer has arrived but a little too late for the Plantworx exhibition which once again was plagued by inclement weather. As soon as the show starts the heavens open up and everyone is drenched with the same issues as last time. Other than move the show indoors I don't know what you do. It is typical British weather which goes with being an island - you just need a little luck!

The last few weeks has seen the team travelling around the UK – from Merthyr Tydfil to Glasgow, to view large and small waste operations, including bulk handling of aggregates on the Thames to new innovations in the North East. Even a JCB factory visit to see the launch of the new rotating telehandler which is included in this issue.

Looking forward to September we will be reporting on asphalt and bitumen and a factory visit to Liebherr, it's just non-stop!

Have a great summer...

John Edwards

Editor



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JCB, the world's number one telehandler manufacturer, is extending its portfolio, with the launch of a totally new Hydraload rotating telescopic handler. Recognising the growth in popularity of rotating machines with heavier lift capacities across Europe, the company will initially launch the Hydraload 555-210R, offering a maximum lift capacity of 5.5 tonnes and a maximum working height of 20.5m.

Features will include:

- Highly versatile rotating telescopic handler offering 20.5m lift height
- Maximum lift capacity of 5.5 tonnes
- Rapid set-up time boosting productivity
- All-round visibility improving site safety
- Wide range of options including winches and aerial work platforms

With more than 40 years of expertise in the telescopic handler design and manufacture, JCB has designed the Hydraload rotating machine to meet the needs of specialist lifting contractors and the rental market. Utilising a robust boom construction and a familiar driveline, JCB has focussed on reliability, versatility, productivity, ease of use and safety, as a means of delivering improved uptime and increased customer profitability.

To ensure that set-up time is minimised, the outriggers have Auto one-touch deployment, stowage and levelling. Competitive lift end cycle times and high auxiliary flow rates for efficient winch work, boost productivity further. With a lower chassis engine layout, the machine offers excellent

access and class-leading serviceability. A low, clean boom design gives excellent all-round visibility, augmented by comprehensive work light options and camera kits, including a boom head camera for precise placement at height.

The machines are powered by JCB's proven highly efficient Ecomax engines, offering a high degree of parts and service commonality with other Loadall models. The JCB LiveLink telematics system is fitted as standard and will incorporate features that enable operators to fully exploit the performance of this versatile machine.

With a maximum lift capacity of 5.5 tonnes, the machine offers excellent highly competitive load charts. Easily selectable lift end speed profiles and lift envelope limits help the operator to optimise the machine for specific tasks. A range of specially developed JCB attachments using RFID technology can be identified by the machine, to automatically offer the correct load chart for safe operation.

At launch, the company will offer pallet forks, a 5.5 tonne carriage winch, a 2 tonne x 2m jib winch, a reduced height jib, 5.5 tonne hook, light duty buckets and a range of forkmounted accessories, such as waste skips and concrete placing skips. Remote lift end operation and access platforms will also be offered.

The Hydraload 555-210R will meet the changing requirements of contractors across the world, as a greater use of off-site pre-fabrication calls for heavier lift capacities and increased on-site versatility. Rotating telescopic handlers have become a genuine cost-effective replacement for smaller mobile cranes, offering rapid set-up and the ability to carry out technical lifting operations.

The JCB Hydraload will initially be introduced in Europe.



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Brownfield redevelopment is a hot topic in the UK

Brownfield redevelopment is a hot topic in the UK at the moment. The construction industry is thriving, and will no doubt be further stimulated by the demands of our housing crisis over the next 10 years. Therefore, the reuse of previously developed land will be crucial in order to preserve our environment and avoid the unnecessary disturbance of our ever-decreasing greenfield land.

With the development of Brownfield sites, often comes the problem of contaminated soil, which must be remediated before the land can be approved for building work to commence.

This contamination is most often the result of demolition but can also be down to any number of industrial processes that may have been carried out by the previous land occupiers. Contamination within the soil can range from hydrocarbons, heavy metals and even asbestos, all of which can be removed by innovative soil treatment technology.

Dunton Environmental, one of the leading land remediation contractors in the UK, have several dedicated waste processing hubs in operation. Their Wolverhampton facility has been a huge success, having become the third highest processer of waste material in the UK, with over 40,000 tonnes being processed in just its first year. This is soil that would have otherwise been disposed of at landfill but has instead been reused within local restoration schemes.

One of the key contracts that contributed to the rapid growth of the Wolverhampton facility was from AR Demolition, for the treatment and disposal of 13,730 tonnes of asbestos contaminated soil.



With new waste facilities to be opened in both the north west and south east of England, Dunton are making strategic plans to solidify their position as the UKs number 1 land remediation and waste management contractor.

James Hill, Director of Dunton Technologies commented, "UK construction and demolition contractors are under increased pressure to reduce the amount of waste that they are sending to landfill. With landfill rates on the rise, it becomes more and more imperative to find safe and efficient alternatives for waste disposal.

"The tougher challenge is often the disposal of hazardous materials, but we pride ourselves on offering our clients peace of mind with our ability to handle all types of contaminated waste."





New appointment at CMS Cepcor®

CMS Cepcor® have appointed Russell Murray to the business in the role of Technical Sales Manager.

Russell, a South African national, joins the company with a wealth of crusher sales, service and spare parts experience gained over the last 25 years in the industry.

Originally starting at Nordberg in 1994 as an apprentice crusher fitter, Russell has also held positions for both Nordberg and Metso Minerals as Repair Co-Ordinator, Repair Production Planner, Repair Supervisor, Internal Sales Engineer, Area Sales Manager, Product Support Engineer and finally Crusher Repairs Manager over a 15-year period.

Since 2009, Russell has worked for a large quarry company as a Crusher Specialist (operating 145 crushers nationally) and subsequently as Sales & Service Manager for a leading South African aftermarket crusher repair and spare parts business.

Russell has re-located to the UK and will be based from the companies Coalville facility.

The number one modern cone crusher in the world!

Metso celebrates the milestone of 10,000 HP Series cone crushers sold...



Metso has reached the significant milestone of 10,000 Nordberg® HP cone crushers sold globally. The most popular modern cone crusher in the world, the HP Series celebrates its 30th anniversary this year. The 10,000th HP cone crusher unit was handed over to the French aggregates and asphalt producer and urban infrastructure development company Eurovia in a ceremony held today at Metso's Mâcon facility in France.

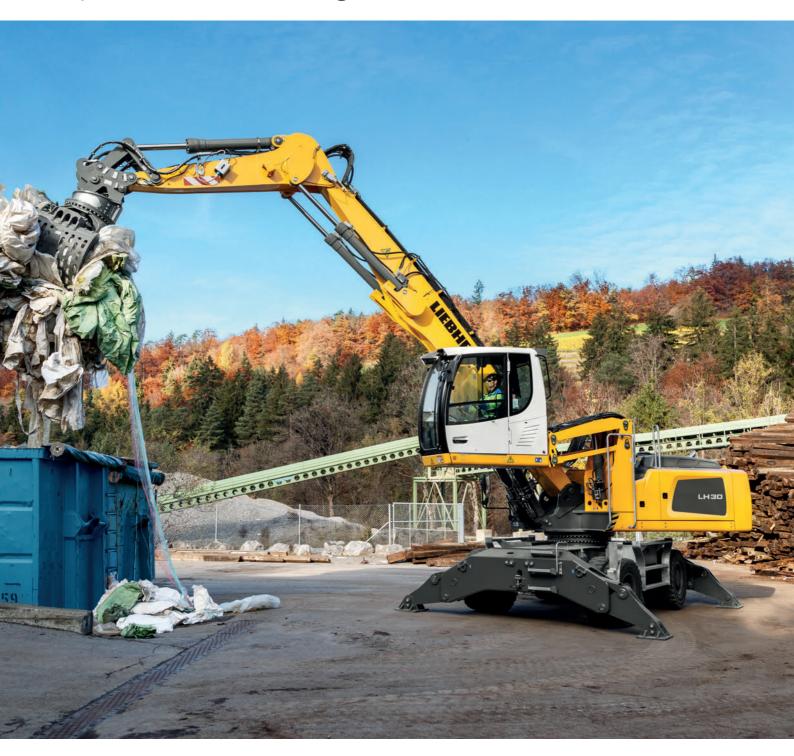
"The HP is undoubtedly one of Metso's most widely used innovations. It's a technology that has been evolving throughout the years to meet customers' changing needs, making their operations more successful through proven performance and reliable output. That's most likely why HP has become an industry standard for a variety of aggregates and mining applications", says Arto Halonen, Vice President, Aggregates Crushers at Metso.

The origin of the HP Series cone crusher can be tracked back to Milwaukee, USA in the early to mid-1980s. The technological breakthroughs by the Nordberg research program re-defined crushing performance and provided the basis for a new type of cone crusher introduced in 1989: the Nordberg® High-Performance cone crusher series, today simply known as the HP.

Today, HP cone crushers are engineered and manufactured in Metso's competence center in Mâcon, France, with manufacturing also in Brazil, China and India. A versatile crusher is ideal for wide range of fixed and mobile applications, varying from limestone to taconite and ballast production to manufactured sand.

Halonen, continued, "Know-how from developing the HP and from thousands and thousands of customer applications around the world has played an integral part in Metso research and development initiatives in crushing. This is an important milestone for Metso, and we want to thank our customers for their continued confidence in us during the first 30 years of the HP's journey and look forward to explore new development possibilities in the years to come."

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(W)

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Together we're unlocking

A New World of Resource





Superior Industries Introduces "Lifetime Warranty" on Patriot® Cone Crushers

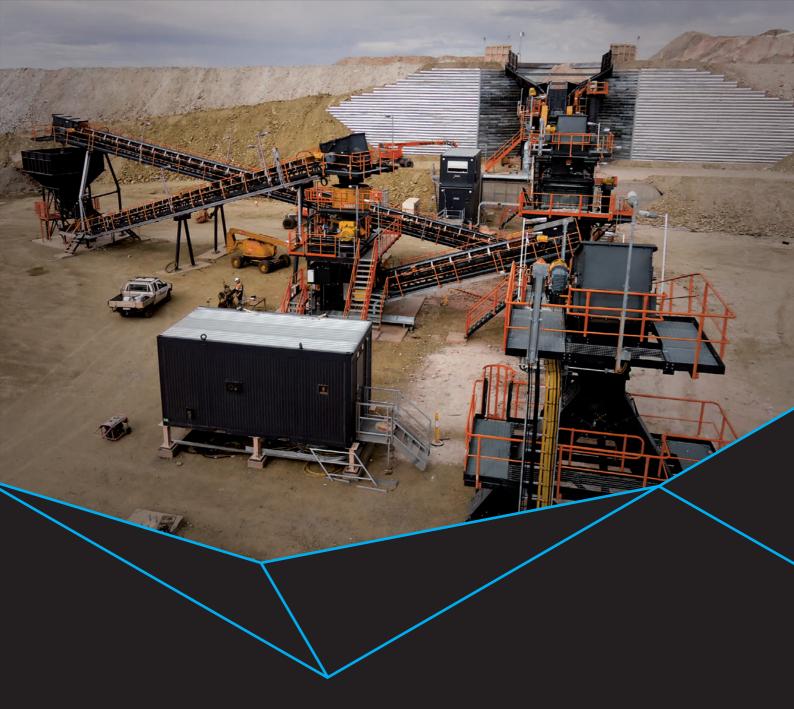
Superior Industries Inc., a U.S. based manufacturer and global supplier of bulk material processing and handling systems, announced that a limited lifetime warranty now comes standard with new Patriot Cone Crushers. One-of-a-kind in dry bulk crushing, the no cost extended warranty covers the cone's major components including the adjustment ring, bowl, eccentric, head, mainframe and main shaft.

"Our goal is to be our customers' most trusted partner by improving long-term reliability of their systems and applications," says John Garrison, a vice president with the manufacturer. "By extending a lifetime warranty, our

customers can concentrate on more important aspects of their operation, knowing we are there to support their crushing investment for a long, long time."

To receive lifetime warranty protection, Superior says owners and operators of new Patriot Cone Crushers must complete a presale application review, equip their cone with Vantage® Automation, operate within the cone's design limitations, use Superior parts and annually allow a paid inspection (or every 2,000 hours).

The company encourages clients to review the warranty documentation for terms and conditions including exclusions.



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Industry annual charity bike ride reaches £120,000 and counting



This month the Waste on Wheels 2019 cycle ride took place, with a team of 30 people from the waste management industry cycling 180 miles to raise money for The Alzheimer's Society. This is the fourth annual charity cycle ride and the team have collectively raised circa £7,000. Overall the annual event has raised over £120,000 and benefitted a wide range of charities over the years...

The team included representatives from City of London, Vehicle Weighing Solutions, Innovative Safety Systems, Biffa and CMS Supatrak, and the cyclists started out on Tuesday 11 June riding from Reading to Swindon. On day two they travelled from Swindon to Weston-super-Mare and day three involved a circular route from Weston-super-Mare to Bridgewater Bay. On Friday 14 June the team officially opened the 2019 National Refuse Championships in Weston-super-Mare.

Vincent Dignam, Business Performance & Transport Group Manager, City of London: "It was great to be involved in this bike ride for the fourth time and to raise money for a great charity, The Alzheimer's Society, which is close to my heart. As one of the original organisers of the annual charity bike ride it's great to see how it has evolved into a waste industry 'must do' event.

"Each year more and more people get involved; not just cycling but also sponsoring, supporting the teams and donating. Over the past five years of doing this the team have raised over a staggering £120,000 which is truly amazing. The

ride this year was tough due to the weather conditions and the many hills we had to climb but sheer camaraderie got everyone through. Here is to the next challenge and thanks to everyone who supported us!"

Trevor Evans, Operations Director at Vehicle Weighing Solutions trained for 9 weeks in preparation for the cycle.

Trevor commented: "It's been a great experience and a real challenge. I hadn't been on a bike for years and the Waste on Wheels event got me back in the saddle!"

Kate Lloyd, Marketing Director, VWS is one of the event organisers:" This is the 4th time I've been involved in the organisation of the charity cycle event and although it's a lot of hard work, the results are amazing. It's great to be part of a wonderful industry and team who come together for an important cause. Vehicle Weighing Solutions were happy to sponsor the event and offer as much support as we could to help make it a success."

Jason Airey, CMS Supatrak: "It's fantastic way to get all these partners in the waste industry together to raise money for a great cause. The camaraderie is great; everyone supports each other, and it builds friendships for life. We already planning our ride for 2020!"

David Maidman, Business Director, Biffa: "Despite the atrocious weather conditions it was a herculean effort all round, both in the saddle and in achieving a fantastic amount for the Alzheimer's Society."

Aggregate Industries and Staffordshire Wildlife Trust create 'nature reserve in the making'



A Staffordshire quarry formerly operated by Aggregate Industries has been restored to a wetland habitat in conjunction with the Staffordshire Wildlife Trust.

Tucklesholme quarry — located five miles south-west of Burton-upon-Trent — was purchased by the Staffordshire Wildlife Trust in 2013, and in 2018 Aggregate Industries ceased mineral extraction and restoration works began. It is the second opening of an Aggregate Industries quarry-turned-nature-reserve this year, following the opening of Ripon City Wetlands in May.

Tim Claxton, Regional Estates Manager at Aggregate Industries, said: "To have two quarry restorations in the space of weeks is incredibly rare, and is testament to our commitment to making sure our sites serve a purpose at the end of their lives.

"We worked closely with Staffordshire Wildlife Trust to create a tailored environment for a wide array of species. We're looking forward to seeing our former site becoming a new home for an abundance of wildlife."

The new array of habitats at Tucklesholme includes extensive reedbeds which attract birds like ringed plover, oystercatcher, and the reclusive bittern. The reeds also act as a filter for the water they are rooted in, improving water quality and boosting the food supply for fish and birds.

The project also deliberately limited the numbers of trees planted in order to allow species to thrive with a reduced threat from predators, while also creating an open nature reserve for visitors to enjoy. Channels have also been dug around the site to provide additional, seasonal wetlands whenever the nearby river rises.

Jeff Sim, Senior Conservation Manager at Staffordshire Wildlife Trust, said: "This year marks Staffordshire Wildlife Trust's 50th birthday and this is a great way to mark it. We are hopeful of Tucklesholme developing into one of our finest nature reserves and a place for a wide array of wildlife for many years to come.

"We have a real hope that Tucklesholme will one day be the breeding home of bitterns – who rely on habitats like reedbeds to breed and thrive."

Tucklesholme is part of a wider project to transform former quarries in the region to create a wetland network dubbed 'Transforming the Trent Valley' by Staffordshire Wildlife Trust.



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



Pronar - 30 years of an amazing journey

From its beginnings in the difficult economic reality of Poland in the 1980s, to the leading position as a recycling, agricultural and municipal machinery manufacturer, mass scale, global supplier of disc wheels, pneumatics & hydraulics and numerous other components needed in machinery production. This is Pronar - a company which has grown with unmatched pace and consistency over the last three decades



Foundation and agricultural roots:

Pronar was established in 1988 as a small local enterprise in Narew. Working in the rural and agriculture industries in the North Eastern part of the country it benefited a lot at the early stage of the free market era in Poland, after communism collapsed. The company quickly evolved from trading with agricultural products to supplying farmers with tractors and other agricultural machines. Within a few years of its foundation the company launched production of their own tractors and trailers sold under the Pronar brand.

Production rapidly expanded in the 90's and continued to grow into the next decade. Development went so well that soon Pronar started to manufacture a massive range of production components - not only to be used in their own machines but also to supply other equipment manufacturers.

The company's income was constantly reinvested in new factories, technologies, production lines and talented people which resulted in Pronar becoming the number one supplier of reliable tractors and trailers in Poland with sales expansion into the European markets.

Recycling

Having established themselves in the agriculture machinery industry, in 2000, Pronar started to develop new product lines such as municipal equipment for summer and winter road maintenance. They then followed with the design and introduction of the first machines for the recycling industry.

Pronar today:

All the decisions, the investments and innovation has led Pronar to the place where it is now. Today the company consist of over 2,200 employees based in 7 factories, with a total production floor area of 574,000 square metres which is the equivalent of 80 football pitches. It is the biggest

employer in the North East Poland.

Pronar has become the leading agricultural machinery manufacturer with over 5,500 trailers made annually. It is among the top selling brands in Poland (over 50% of market share), Germany

Norway, Finland, Czech Republic, Slovakia, Hungary, Slovenia, Romania and many other countries in Europe.

The company is also a well-known manufacturer and supplier of pneumatic and hydraulic components, trailers axles, steel side walls profiles with a well-developed international distribution. Thanks to innovative production techniques 60,000-wheel rims are produced every month and distributed to leading tractor manufacturers, construction and forestry vehicles brands globally. It makes Pronar the 3rd largest manufacturer of disc wheels in the world. The extensive range of winter and summer road maintenance machines are

available from Pronar globally and thousands of these machines can be seen across Europe from Scandinavia to the Balkan countries and from UK to Russia. >



Recycling









Response to the global waste issue:

In response to the global waste issue the company has developed a whole range of recycling equipment for various waste size reduction, screening and transportation. The existing product range consists of mobile trommel screens, slow speed shredders and mobile stackers, with several new designs in development.

Such progress in a small-time frame would not be possible if a Research and Development Centre had not been built. This centre now employs top specialists and scientists that are working on state-of-art equipment. Performing numerous tests every day and verification of components guarantees the quality of machines and materials. Pronar Research and Development Centre also provides services for well known tyres, cars and tractor brands.

With such a wide client range spread across many countries entails extensive travelling from the company's location in a remote part of Poland. This has been resolved with the construction by Pronar, of a small one mile long, all-weather airfield with a hardened surface landing strip next to the company headquarters in Narew. It is used daily by company planes to reduce travel time, but also to make the company's main office more accessible from all European cities.

Focus on recycling:

The current decade has brought the incredible growth potential of recycling equipment for the waste industry into the forefront for the company which has resulted in the design and development of an entire range of mobile trommels, two-shaft slow speed shredders and mobile stackers. Further designs including windrow turners, singleshaft slow speed shredders and high-speed shredders are also to be added to the company's portfolio.

Innovation helps a lot when it comes to manufacture of recycling machines with Pronar investing in a lot in new technologies which have included the installation of automatic welding robots to ensure a perfect weld. 3D laser and water cutting technologies also provide precision and ensure the unique proprieties of produced elements.

Pronar recycling machinery is distributed across the globe with a strong presence in all major markets such as United States, Australia, Germany, Poland, UK, Belgium, Holland, Scandinavia, Japan, Korea, China and Israel.

Each year Pronar takes part in the most important trade fairs around the world. Among them are IFAT (Munich, Germany), Bauma (Munich, Germany), IFAT Eurasia (Istambul, Turkey), Waste Expo (Las Vegas, USA), Pol-Eco System (Poznań, Polska) and Wasma (Moscow, Russia). At each of these Pronar attracts attention from the visitors.

The company constantly invests in dynamic development of their recycling product range. This has allowed it to expand their product portfolio for new models, offering innovative solutions to existing designs, ensuring value for money.

More information about Pronar and its recycling product range can be found at: https://pronar-recycling.com/en





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Tight for space solutions with Komplet from Red Knight 6 Ltd

Large sites, big equipment that's easy to feed, it's the ideal combination for recycling demolition waste, but what happens when you are working on a site that's tight for space where you need to process material and you can't swing the proverbial cat.

Sure, transporting the material for processing offsite is an option, but to keep costs down and drive real effectiveness you need a machine that is genuinely compact, but still powerful enough to process demolition waste and allow you to reuse it.

Italian manufacturer Komplet's business has been built around unrivalled, truly compact machines that are easy and cost effective to transport to pack the necessary punch to deliver the financial benefit back to your business. The mobile compact jaw crusher JC 704 is a perfect example. New for 2019 has an opening of 680 x 400mm with an output of up to 80 tonnes per hour.

With a CSS range of 20mm to 80mm and a total weight of 12 tonnes, the unit produces high quality recycled material that you can immediately reuse on site.

Need greater flexibility in your product? Then combine the K-JC 704 with the mobile screener, Kompatto 104 (see the image). Weighing just 7 tonnes, the 104 has an output potential of 250 tph ensuring it can meet the recycling needs you'd have on site.

Komplet has a range of new products for 2019, all exclusively available from UK & Ireland partner Red Knight 6 Ltd. The machines are all designed to give the flexibility needed on site whilst producing the material you want to get the job done.

For more information on the Komplet range machinery, visit the RK6 website www.redknight6.co.uk or contact the team on sales@redknight6.co.uk or 01293 862 619.

Tana delivers the shredding capabilities for GBN Services Ltd



The HUB team recently visited the Uxbridge site of **GBN Services Ltd who are** the leading skip hire, recycling and waste company for construction, commercial and household customers across London and the South East.

It's a huge operation involving 140 skip lorries operating from six sites which over the years has built a

strong reputation for reliable service and maintaining maximum recycling through sustainable solutions.

Across all their recycling centres, GBN Services achieves very high recycling levels, which combined with their RDF solution can help deliver 98% diversion from landfill for our customers.

Much of the waste the company process arrives at the recycling centres unsegregated. Where possible, GBN Services use a sorting process to derive valuable materials from their customers' waste that is ready to be reused. When this waste arrives at the recycling centres, it is firstly separated into major waste streams by grab machines. Waste is then further sorted using a wide range of recycling equipment including; trommels, air separation kinetic flow systems for soils and

When the waste material is sorted they can then maximise what can be separated for reuse and recycling. The remaining residue is baled and sent as refuse-derived fuel (RDF) to an energy generating plant. Bales are regularly checked to ensure they consistently achieve the exacting standards of the RDF market. At their facilities, the energy embodied in these waste materials is used to generate heat and power replacing the need for use of fossil fuels. This helps their clients reduce their environmental impact.

Their philosophy to invest in new technology as it becomes available enables them to segregate more and more materials and move waste up the hierarchy. For example, their recent investment in Tana shredders which have been supplied by Tana Recycling Machinery (UK) Ltd has given them confidence and more efficiency in this area of the business.

We sat down with the MD - Garry Hobson who told us about his operation and why he chose the Tana Shark 440DT eco.

"The two Tana machines are based at Edmonton and Leyton where the wood shredding is processed. Edmonton is the main site and all waste wood is fed there. It is a 3.7 acres site where we employ 50 out of the 270 staff in the group.



Recycling



'We were one of the first companies almost 20 years ago to start recycling wood and today we can convert waste wood into a valuable item by generating wood chips for use in fibre board production.'

The company took delivery of their first Tana Shark in January 2019 and they now have two machines with a third ordered for delivery in late June.

Garry, continued, "We have tried every make of shredder prior to Tana and we found that they all had their faults. We settled on Tana because it's the best machine for the job and the service we receive is first class.

"As well as shredding wood we can also use the Tana as a general waste machine, so its quite flexible in that respect. We are processing approximately 3,000 tonnes/month and have only experienced one minor warranty issue which was resolved immediately so we are very pleased. Great service, great parts availability and a quick response when we needed it, we love the Tana machines!'

GBN have invested in the Tana Shark 440DT eco which is a single-shaft, slow-speed tracked shredder which is driven by a Cummins QSX15 with a power rate of (SAE j1995) (kw) 433.

With a 3000mm rotor length operated at 28rpm the 920mm diameter shaft is equipped with 33 knives.

The machine supplied was specified with an overband magnet, a variable screen/basket and a heavy-duty rotor.

A remote-control system and a SmartSite ™ / ProTrack™ Daily report system, completed the specification.

Ever since 1971, Tana has been in the forefront of designing and manufacturing robust machinery for the purposes of solid waste management. With decades of experience on the needs and requirements of landfill and waste management operators, in the early 2000s Tana expanded its machine selection with the TANA Shark mobile shredders. The core design of the TANA Shark has remained the same throughout the years: a robust, single-shaft slow-speed shredder with enough torque to process even the toughest materials such as used tires or mattresses.

What separates TANA Shark from the competition is its versatility. The TANA Shark can process various different materials, allowing the user take full advantage of various waste streams. TANA Shark's changeable screens make producing an end-product in various particle sizes easy. The Shark can do both pre-shredding as well as produce a homogenous end-product – one Shark can replace even two machines!

Despite its robust construction the TANA Shark is also smart. Equipped with TANA's state-of-the-art information management system TANA ProTrack®, the user of TANA Shark will be able to monitor and optimize their process. Additionally, TANA ProTrack® allows service personnel to monitor the machine in real-time, delivering fast and accurate service when necessary.



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With the counties Hertfordshire, Bedfordshire and Essex. B.P. Mitchell has a fairly wide catchment area north of London. The various locations with associated transport fleets are also correspondingly large. In the recycling centre west of Hertford, rubble is prepared for the stationary washing plant by five MC 110 R EVO jaw crushers from Kleemann.

In minute intervals the red dump trucks reach and leave the recycling centre on the B195 to the north of London. Residual construction materials are prepared here for reuse which, in the densely built-up areas, would not always be possible. Most of the pre-crushed material, which has a conspicuously high share of red brick typically used in English buildings, is additionally processed in a washing plant. This increases the resale value of the material many times over. Prior to this, several Mobicat MC 110 R EVO jaw crushers crush the rubble down to a size of 0-40 mm, which, in part, is then prescreened with a Mobiscreen MS 15 Z.

Location: London, UK

Recycling material: rubble Feed size: variable Final grain size 0 - 40 mm

B.P. Mitchell Ltd. Company:

The decision in favour of jaw crushers was not made coincidentally. It would hardly be possible to carry out precisely the required various fractions with an impact crusher because it would easily reduce the relative soft brick material to dust. The Mobicat MC 110 R EVO thus offers convenient gap setting via a touch panel to permit fast adaptation of the application to the feed size required by the washing plant.

"We first looked at Kleemann crushers in 2013 [...]

- since then we haven't looked back and we now run a fleet of five Kleemann crushers"

Richard Salmons, Recycling centre foreman

What impressed B.P. Mitchell most of all about the Kleemann crushers was both the high production output as well as the low noise level and efficient consumption due to the innovative drive concept with crusher direct drive and electric drives of the other components. This provides enormous power reserves combined with ideal consumption values.



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ALLIGATOR SHEARS















Recycling



Recycling

"The site currently operates with one processing shear and as the site has developed with the introduction of new plant, in particular the Sennebogen scrap handlers it has been possible to reduce handling and loading time. This has enabled the business to purchase more product increasing its turnover and throughput which has instigated the purchase of a second large shear to cope with the increased tonnages. The new shear will take the sites processing ability to around 600 tonnes/day and should be operational later this year.



Vessel loading:

The berth at Barking is tidal which means a high tide is a necessity to facilitate vessel loading which occurs every two weeks. Due to this it was essential that that loading time is kept to a minimum to cope with the increased tonnages the site is handling

Originally with the 835 machines it would take 15 hours to load a vessel working at 250tph. With the two new 870E material handlers loading in excess of 400tph it now takes eight hours!

A huge benefit to the site and the way it operates on a daily basis.

Brian Albiston – UK Sales Manager, commented, "These new machines have really ramped up the material handling at Barking. With their capabilities they can go higher and have a 24-metre reach which facilitates more accurate loading. All of this is done more efficiently with the 'Max Industry' cab which can propel the operator vertically by 9 metres allowing a completely new perspective of the loading.

"The 870E also comes with Sennebogen green hybrid energy recovery system a combination of hydraulic cylinder on the boom and nitrogen accumulators with gas recovery during the work procedure and can save 30% of the energy required. Previously the older machines were fitted out with 1.2 metre grabs and with the 870E machines specified with 3 metre grabs this equates to a massive difference picking up nearly 5 tonnes every time."

Increased efficiency:

This increased efficiency has allowed the company to go into the market and buy more scrap.

Michael, added, "We processed 125,000 tonnes last year and with our new material handlers and a second shear I expect this to increase over time. We normally load four vessels a month at 3,500 tonnes a vessel which equates to approximately 12-14,000 tonnes by sea every month.

"Most of our recycled scrap is despatched to our deep-sea export site at Southampton where it is discharged awaiting further shipment to the end user in various destinations."

At the Southampton site there is another Sennebogen 870 employed and with further investment another two 835M machines have been ordered alongside another two for the group.

Daily business:

Barking is a busy site and as Michael acknowledged essential housekeeping and health and safety are the order of the day. With a constant flow of materials passing over the weighbridge, documented and then tipped in a specified area next to the shears. Here 250-400 tonnes per day is processed from various lengths of any dimension which is then processed into smaller handleable pieces and then stockpiled by the Sennebogen material handlers for the next ship.

With over 100 separate transactions per day its virtually nonstop and the big Sennebogen 870E material handlers take it all in their stride.

Confidence in your tools:

Michael summarised, "When we took over the site, we looked at what we had, and we looked at other machines in the marketplace. But when I looked at the original machines, the hours they had done, the ease of service and the tonnage they had handled, and the back-up from Hassell that had been provided there was no doubt in my mind that we had to look seriously at Sennebogen when we made more investment.

"When we did make the decision, it was obvious that when you looked at what you got for your money then Sennebogen was a clear winner.

Michael continued, "When we inherited the original 835 machines', they were 10-12 years old and had in excess of 15,000 hours on the clock and to this day are still giving us great service.

"We have a service package with the new 870Es and even prior to the investment in the two Sennebogen 870E Hybrids the original machines were being serviced by Hassells. There has always been first-class back-up from them, and it just made sense to continue with new machines backed by them."



The Sennebogen 870E Hybrid Material Handler:

Each weighing in at 105,000kg and powered by Cummins 12 (stage V) direct injection, turbo charged engines the two Sennebogen 870E Hybrid Material Handlers fitted with 3 litre orange-peel grabs are the product of decades of experience offering the most advanced computer simulation, the greatest degree of stability and longest service life. Mounted on a MP80 wheeled undercarriage the 870 has a compact boom of 13.5 metres and a grab stick of 12.3 metres. Large scale mounting points are incorporated alongside precision-crafted sealed low-maintenance special bushings, quick change couplings for connecting/removing/turning grabs and a whole host of options makes the 870E Hybrid a world beater.

Two very impressive machines keeping the Barking operation in safe hands for the future of a growing business.





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Wastemaster Loadalls; JCB 541-70 Loadalls; JCB JS20MH wheeled material handlers; and, a JCB JS145 14-tonne tracked excavator.

The JCB 560-80 Wastemaster Loadall is the highest capacity machine in the JCB Loadall range and boasts a massive 6,000kg of lifting capacity. Meanwhile, the 541-70 Loadall telehandler is a compact workhorse offering unrivalled operator comfort and ease of use. Both machines have been designed to meet the needs of rental companies and contractors alike.

In addition, the JCB JS20MH wheeled material handlers and the JS145 tracked excavator supplied are both equipped with a host of efficiency, performance, comfort and safety innovations that deliver countless everyday benefits including great visibility, low running costs and more uptime.

Arnold Plant Hire operates from two locations - in Stockport and Cannock – and the new equipment means that the company now owns in excess of 600 machines that it supplies on long- and short-term hire packages to clients operating across a number of diverse industry sectors. Some 90 per cent of the Arnold Plant fleet are JCBs.

Philip Oldham, managing director of Arnold Plant Hire, says: "With any JCB machine residual values are strong and the products are always in demand and therefore represent outstanding value."

He adds: "Arnold Plant Hire has been hiring JCB's Wastemaster machines to the waste and recycling industry for more than 10 years. We have always enjoyed a good relationship with JCB and value the excellent nationwide after-sales support that the company offers through its network of dealers.



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The Importance of Qualified and Competent Operators on a Waste Site



As with all waste sites operating under an Environmental Agency (EA) permit, there are 2 key factors to consider: Is your site run by a technically competent manager? Are the operatives on your site experienced to work on a waste site?

The answer must be yes! Each waste management site operates in its own way with its own permit however, they all run under the same rules and if not controlled effectively, accidents could occur.

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

This is where the newest qualification to our offering comes into action: the WAMITAB Level 2 Certificate for Sustainable Waste Management Operatives.

The Sustainable Waste Management qualification is ideal for people seeking entry into the waste and resource management industry or those working in the industry that require evidence of their competence.

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

Operators on site must have the knowledge to accept, validate, handle and load different types of waste whilst managing the equipment correctly to ensure maximum safety and efficiency. The level 2 qualification will ensure that this is communicated and delivered including units covering aspects such as working with others and health, safety and emergency procedures within the industry to equip learners with the knowledge required to work effectively within the role and be aware of key information associated to the industry.

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

Risk Assessments and Scheduled Maintenance

Employers on any waste site should install a preventative maintenance plan through informative risk assessments and scheduled planned maintenance. This will ensure that the equipment is safe to use and reduces the risk of a costly breakdown or a major accident occuring. Businesses should also have a procedure in place that allows workers to report any damages or faults so that a systematic log can be monitored, and the businesses then have evidence of any maintenance work carried out

Correct and Appropriate Training

Every employer has a legal duty to ensure their employees are adequately trained for the work activity they undertake. There are significant steps to take defined by the HSE that ensure employers know the process:



- Choose your training methods
- Ensure delivery takes place
- Evaluate that the training is effective
- · Put a system in place for refresher training

The training delivered must be applicable to the job that the employee is carrying out that sits alongside a qualification they may be completing along with a range of health and safety training such as Manual Handling, First Aid and Fire Training.

Levels of risk on Site

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

The waste risk tier table, which can be found on the WAMITAB website, will allow you to see what qualification is needed for the operational environmental of your site or business and allow you to have the right competence on site. One site may run with a number of operatives under the general Waste Management course whereas others may be dependent on specific training that is only applicable under the remit of their site. It is not correct to presume that a general waste qualification will be enough to cover the remits of your site.

Mentor and our waste business, Serac UK can provide a range of waste qualifications and we are keen to promote and support the correct safety elements in the waste sector through effective and accredited training and assessments.

For further information and support or for guidance on booking a qualification, get in touch with us today – 01246 386900.

CRJ Services Supply New Haas Wood **Recycling Plant to Mill Farm Recycling Ltd**

Mill Farm Recycling Ltd is a family run business with roots in the agricultural industry. In 2004 the company diversified and started a small, on farm, composting site, with the sole aim of producing compost as a fertiliser to use in their own organic farming system. In 2010, further diversification saw them enter the biomass industry, supplying their local power station with fuel.

Since then, Mill Farm Recycling have started supplying other biomass customers who have more specific fuel requirements. They now produce various grades of biomass fuel, depending on customer and seasonal demand.

Mill Farm Recycling required a new static wood recycling plant, capable of producing consistent wood chip products, at a high specification with flexibility to process other products. They already operated a pre-shredder, which shreds the raw feed stock down to be further processed through the plant. Therefore, the new plant had to take this pre-shredded material, shed it down to -55mm, remove all metallic content and then screen the material into various fractions.

The new static plant needed to be proven, robust, flexible and able to consistently process 35 tonnes per hour to meet the ever-changing demands of their clients. To future proof the plant, they also required the ability to easily change the gradings of the fractions, by exchanging the size of the hammermill basket, and screening decks.



Mill Farm Recycling, a long-standing customer of CRJ Services, made an approach for a solution to their new plant requirements. CRJ representatives met with Mill Farm Recycling to discuss in-depth, their challenges and requirements for the project, in order to best propose a tailormade solution.

As the exclusive UK dealer for HAAS Recycling, a German manufacturer of recycling machinery, CRJ collaborated with HAAS to design a solution for Mill Farm Recycling. Following several meetings between the three parties, visits to reference plants in Belfast and Germany, a plan was developed, and plant drawings and specifications agreed.





A purpose-built building was erected to house the new processing plant, protecting the equipment and end products from the elements. Mill Farm Recycling supplied a large exterior 30m3 hopper which received the pre-shred down material to be further processed by the HAAS plant thereafter.

The material leaves the hopper and travels under an inline magnet, which removes any larger pieces of metal from the stream. The remaining material is fed into the building where it enters a HAAS Star Screen, which separates the sub-fraction material from the oversize, allowing it to bypass the Hammermill. The oversized material then enters the HAAS HSV 1600 Hammermill, fitted with 50mm baskets, to be further shredded. The Hammermill is equipped with a ballistic chute, which automatically expels any foreign objects which cannot be shredded, thereby protecting the Hammermill.

All material is then fed onto a Wagner Eddy Current Separator which removes both ferrous and non-ferrous metals from the product stream. The removed ferrous and non-ferrous material is conveyed outside the

The clean wood material is then fed across a HAAS HPS 125 – 3 deck oscillating screen which splits the material into 4 fractions. The bottom deck screens out the fine material, the 2nd screen removes the lower mid-sized product, and the third screen layer removes the upper mid-sized material. Any oversize material is then circulated back to the beginning of the plant to be reprocessed.

The final products are then transported via chain conveyors over to the adjacent side of the building and dispensed into the product bays. These conveyors can be electrically controlled to determine which product bay to fill. There are two control panels, one in the control cabinet, and another in the processing building, allowing Mill Farm Recycling to view the plant when adjusting

The system comes equipped with a dust extraction system, fitted throughout the plant. This extracts dust at critical areas and has a dust filtration system which is situated outside of the building.

Six metre double-stacked **Eddy Current Separator** Module supplied to St. **Margarets Recycling for** complete metal recovery

Eriez Europe has provided a one-stop custom solution to St. Margarets Metal Recycling and Transfer Centre Ltd. to resolve a metal recovery problem within their scrapping process. Eriez designed and manufactured a dual-pass Eddy Current Separator (ECS) module that will allow for optimum separation of ferrous and non-ferrous metals.



St. Margarets is a large recycling centre with a metals division, specialising in the buying and selling of scrap metals, including high carbon steel, stainless steel, aluminium, brass, copper, lead and zinc. They approached Eriez with the requirement to separate ferrous and non-ferrous metals from automotive shredder residue (ASR) to increase the purity of their end product and command the highest possible resale value. Given Eriez' vast knowledge of metal separation and decades of experience in the recycling industry, a custom solution was recommended. The ECS supplied is one of the largest Eriez have ever supplied at six metres high with a vibratory feeder, magnetic drum separator and two 1.5 metres wide ECS.

The vibratory feeder ensures an even, the mono-layer spread of material to maximise efficiency and improve separation before it is fed into the permanent magnetic drum separator. Here the larger pieces of ferrous metals are recovered before the material passes through the conveyors on the ECS separating the valuable non-ferrous metals from the ASR. A dualpass process where the material passes through a second ECS optimises metal recovery, providing a clean, high-quality end-product.

The unit has been despatched to Dublin and is awaiting installation in St. Margarets Recycling Centre.

Bryan McDonnell of St. Margarets commented, "The Eddy Current Separator supplied by Eriez Europe will ensure a vast improvement to our recycling process, improving the product purity and resale value of the metals recovered.

Eriez has a proven track record of providing valuable metal separation solutions to the recycling industry. For further information, contact Eriez on +44(029 2086 8501 or email info-europe@eriez.com.







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Liebherr L 586 XPower® wheel loaders with adaptive working lighting for Dowideit Recycling GmbH

Liebherr L 586 XPower® wheel loaders are used for the recycling of building rubble

- Low fuel consumption was a deciding factor for
- Adaptive working lighting supports op during poor light conditions
- Dowideit Recycling GmbH alread

Dowideit Recycling GmbH will also rely on Liebherr wheel loaders in the future. From left to right in the photo, Marcus Morgner (LBV Berlin sales representative), Thomas Dowideit (Dowideit managing director) and Ulrich Klar (LBV Berlin branch manager).

Dowideit is impressed by the low fuel consumption and high reliability of the new L 586 XPower®.

A Liebherr L 586 XPower® wheel loader was recently put into operation at the Dowideit Recycling GmbH machine park in Wustermark. The company was impressed by the benefits of XPower wheel loaders, which combine fuel efficiency, high performance, durability and comfort. The adaptive lighting, an intelligent lighting control system for XPower wheel loaders, ensures even greater levels of safety on the company's premises. Positive experiences with an L 580 XPower® already in operation at the machine park also influenced the purchasing decision.

Dowideit uses the new L 586 XPower® for recycling building rubble, soil preparation and composting. The wheel loader weighs almost 34 t and has a considerable tip load of 23,500 kg. It is in operation for around ten hours a day and consumes an average of 14.8 litres of fuel per operating hour when loading.

Safety is of paramount importance at the Dowideit recycling centre. Poor light conditions in the operating area pose difficult challenges to wheel loader operators when working. This is particularly the case in winter when shift work begins at dawn and ends at dusk. To counter this problem, the new L 586 XPower® is equipped with adaptive working lighting. This consists of an intelligent lighting control system which Liebherr offers as an option.

The adaptive working lighting features an additional LED headlight which optimises the light conditions in the front section when the working attachment is raised. The result is an ideally illuminated operating area. Glare, reflections and shadows are reduced for the machine operator. The adaptive working lighting also features four dimmable working headlights on the upper edge of the cab (LED or halogen) and two standard driving headlights (LED or halogen), providing good light conditions and ensuring a high degree of safety.

"Thanks to the adaptive working lighting, the wheel loader operating area is completely illuminated. There is now a better



The adaptive working lighting is available to customers upon request for all medium and large Liebherr wheel loaders. The additional LED headlight on the front section improves light conditions when the working attachment is raised.



overview of shaded areas and other areas which are difficult to see during loading. This increases safety on our site and makes daily work easier for my machine operators", explains managing director Thomas Dowideit enthusiastically.

The company located in Wustermark, in the state of Brandenburg, is a reliable partner for the civil engineering, demolition, recycling and transport industries. They have also a company branch specialising in the sale of soil material to customers who use the processed materials for road construction and in horticultural and landscaping projects. The new Liebherr L 586 XPower® wheel loader plays a central role in the preparation process.

Goldstar invests in Sennebogen **Material Handlers supplied by the Molson Group**

Based at Floods Farm, near March, Goldstar Metal Traders are one of the fastest growing recycling companies in the UK.

Operating from three sites, March, Wereham and Kings Lynn, Goldstar are specialists in servicing factory premises, demolition sites and waste transfer facilities. They have currently 400 skips and containers in service, throughout the Midlands and East Anglia.

The company export metal to worldwide destinations which is shipped out at their transfer facility at Kings Lynn where they have the capability to load shipping containers for bulk



Although a relatively young company the team have over 50 years combined experience in the Waste and Recycling

Recently the company have made a £2.3 million investment in four Sennebogen 830E and three 835E Material Handlers, which have all been supplied by Molson Green who are part of the Molson Group.

The machines have been put to work at all three sites, with four located in March, two in Kings Lynn which have banana booms and forward extending cabs and one machine in Wereham. The investment follows the purchase of another Sennebogen Material Handler in 2017 from the Molson Group which was made following the dissatisfaction in spares availability in another manufacturer.

Neil Bowers – MD, commented, "We were previously operating another make of Material Handler but had issues with spare part supply and service which left our machine out of service for unacceptable lengths of time.

"We therefore switched our allegiance to Sennebogen and purchased our first two years ago off Molson Green, who have proved to us that their support and service back-up is very reliable, hence the further investment in seven more machines for our three sites which have also been supplied by Molson Green."

It's a very busy operation at March where the scrap metal is handled by three 830E and one 835E material handlers. All fitted with orange peel grabs they easily move over 300,000 tonnes/annum of recycled metals. Most of this material is then transported to the Kings Lynn operation where it is either loaded into the ship or sent by containers to destinations around the world.



Neil, continued, "We have big contracts with the whole of Network Rail, Mick George and Wye Valley. We also deal with almost all of the local skip companies and have a good relationship with all the merchants in the area.

"When we started, we had two lorries, one skip lorry and an artic. Today we have twelve trucks and employ 50 people who are all passionate about the business. We don't employ huge numbers but staff who bring something to the table and maintain efficiency by working smarter. It's very important that we have very efficient equipment and the confidence in the supplier and Molson have given us that!"

SENNEBOGEN 830E material handler:

Three of the machines at the March operation are the Sennebogen 830E wheeled material handlers – an extremely popular model in the scrap metal application thanks to its high capacity and 17m working range.

Sennebogen have been long established as a manufacturer of the highest quality material handlers and the 830E is certainly a flagship product within the range. Boasting a 220Hp Cummins QSB 6.7 engine, this Bavarian green giant has a host of features that make it easy to maintain, a pleasure to operate and cost effective to run.

Day to day maintenance can all be carried out safely at ground level thanks to centralised undercarriage greasing points, with the upper carriage serviced by a factory fitted auto lube system. A feature that has been made a standard option following customer feedback to the factory. Furthermore, these Sennebogen 830E's have been fitted with the manufacturers own Hydroclean system that provides additional protection against contamination in the hydraulic system, improving reliability and reducing down-time.

Operator comfort is a clear focus in this machine thanks to Sennebogen's high-rise maXcab, which has clearly designed with comfort and visibility in mind. The cab offers a large clean and clear space for the operator to control the machine without obstruction. The high-rise cab allows operators to reach a maximum viewing height of 5.6m while the joystick steering option allows an uninterrupted view of the working area as there is no steering wheel.



Recycling



Goldstar have chosen to have their 830E's fitted with the K14 ULM boom configuration which provided a total 17m reach to the arm pin. With an impressive 800l orange peel grab also fitted – the capacity and working range of these machines is perfectly suited to their March site.

Sennebogen 835E material handler:

In contrast the fourth machine at the March operation is an 835E wheeled material handler. Again, fitted with an orange peel grab its main duties are stockpiling and feeding the

As part of the new generation machines the E series is a new generation of fuel-saving, environmentally friendly machines for demanding continuous use in material handling. Green Efficiency is the buzz word, good for the environment and easy on the wallet. The machine concept of the E-series impresses with its diverse range of equipment, maximum comfort for the operator and optimised technology. The Green Efficiency models combine the established high performance with low consumption, optimal operating comfort and maximum safety aspects for both man and machine.

Certainly, working hard in scrap recycling first impressions are consistently positive. The machine gets the job done quicker and its elegant to drive.

The 830E offers a comprehensive package of safety features for the driver and other workers in the vicinity. High-tech cameras at the rear and sides keep the driver fully aware of his surroundings. LED headlights provide clear illumination in the dark, and the sliding door with step and handrail, featured as standard, ensure safe and accident-free access to the machine.

Goldstar have selected a B18 banana boom configuration on their 835E's that give a maximum working range of 18m to the arm pin. With all their 835E's also fitted with a 1000l orange peel grab, these machines have an impressive volume handling capability.

Goldstar run an additional two 835E's at their site in Kings Lynn that load ships. These units have been fitted with Sennebogen's E300 maXcab that is both high-res and forward extending to allow operators to have clear visibility into the ship being loaded. The cab rises to a maximum viewing height of 5.9m, with an additional 2.6m of forward extension to enable more efficient loading times and maximum capacity to be reached on each load.





Solid support for MRF's and recycling **businesses**

Solid tyres are the solution of choice for mobile materials handling machines working in MRF's and recycling plants and Glamorgan-based Tyre Boss is aiming to become the supplier of choice.

The company has set out to ease the headache of tyre specification and procurement via a powerful combination of knowledge, product, finance solutions and buy back deals. Wayne Collins, Sales Manager and co-owner of the business with Victoria Collins, cut his teeth in the tyre sector and has spent over 20 years specifying, selling and managing tyre conversion projects. ISO- certified Tyre Boss is a go-to supplier for OTR tyres and the sole distributor of TY Cushion solids.

Sourcing a set of solid tyres can be an expensive business, but there is no doubt that they will pay back the original investment over their lifetime. Long lasting, incredibly hard wearing and puncture free, they minimise machine downtime and require very little maintenance. In busy MRF's, when machines are working for long stretches, machine downtime due to punctures and pneumatic tyre problems - can be a huge hindrance. Fitting solid tyres ensures mobile plant is always ready for use without the inconvenience.

The Tyre Boss 'Buy Back' Scheme is popular with customers that take delivery of a new or used machine with new

pneumatic tyres. To facilitate an upgrade to TY Cushion solids, the team at Tyre Boss will buy back the original tyres and offset the cost against a set of new solids. These will be swapped on-site by the team at Tyre Boss who will then take the swap tyres with them to sell onto their established network of contacts in the OTR tyre sector. This saves the machine owner the task of finding a buyer, arranging pick up or collection or keeping the pneumatics in storage.

A recent investment in a new, combined larger warehouse and office premises has enabled the service from Tyre Boss to become even swifter. Able to stock additional tyres – in all the popular sizes – availability is now amongst the best in the business. The team is on-site, along with their tyre fitter, to respond quickly to all enquiries and expedite deliveries.

The company is always looking for ways to ensure they are the easiest tyre supplier to do business with. Why not give them a call to see how efficiently they can sort your next set of solid tyres?

Call 07484 303123, visit the website www.tyreboss.co.uk or email sales@tyreboss.co.uk.







Metso Waste Recycling expands its product line and is launching two new pre-shredders - the K-series. In terms of performance and price, the new models will offer attractive alternatives for sites with production requirements between 5 - 45 t/h.

The K-series has been created with the same uncompromising approach that has always been the hallmark of Metso Waste Recycling's machines. The goal is always to deliver the lowest cost per ton by superior performance, unbeatable uptime and easy maintenance. The new machines are targeted at production sites with waste treatment needs in the 5 - 45 t/h range. There are many such sites and the market - especially in Asia - is only expected to continue growing in the years to come.

The price performance ratio for the new shredders has been set at a competitive level in the market. This strategy aims to ensure that the shredders will consolidate Metso Waste Recycling's strong position in established markets, while also creating an inroad into adjacent markets.

"The new machines complements our range of shredders, so we can now cater for much wider capacity requirements. These are actually machines our clients have requested, so we are convinced that they will be well received. The favourable price performance ratio will also expedite sales to the Asian market, where there is huge demands for reliable, preshredders with a capacity range between 5 - 45 t/h."

Morten Kiil Rasmussen, Commercial Director, Metso Waste Recycling

Powerful features a guarantee for success

A low cost per ton is provided by high reliability, ease of operation and great flexibility in various waste types. The new shredders come with the same variety of knives developed over the last many years to match client's specific needs.

Meanwhile, the open-cutting-table design means that operators does not need to pre-sort the waste being loaded into the shredder. That in turn means less manpower and fewer breakdowns.

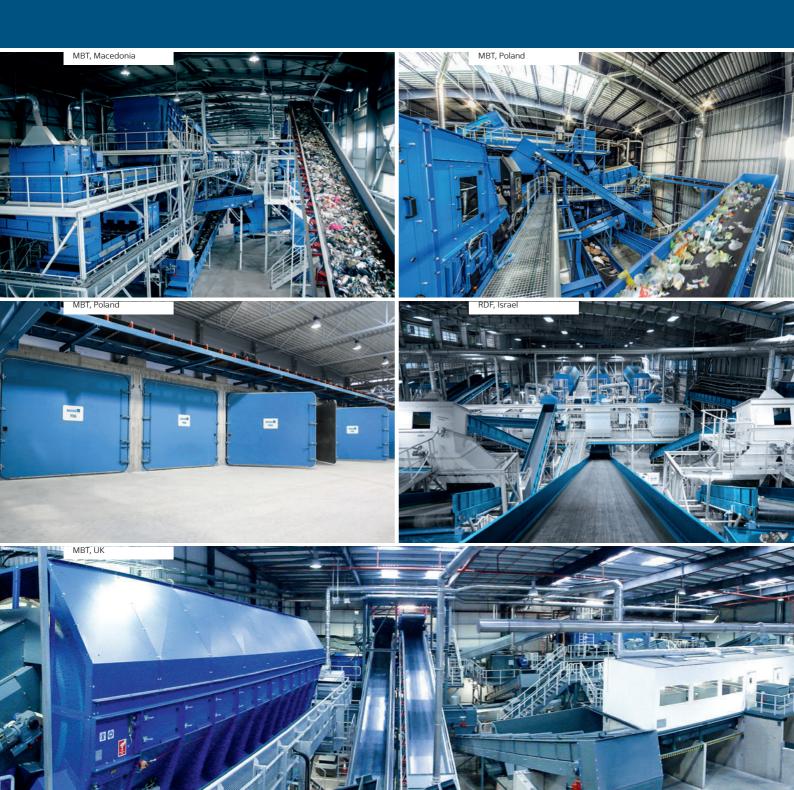
Selected benefits of the K-series of pre shredders...

- The unique shredding system (both synchronous and asynchronous) with two shafts provides superior performance no matter the waste, resulting in unbeatable uptime
- The proven knives geometry reduces the risk of wrapping on the shafts, resulting in less bridging and fewer cleaning stops to improve capacity
- The modularity ensure that only relevant components need to be maintained, ensuring a longer lifetime with less running costs
- Both shredders have robust and proven constructions that are easy to access, making maintenance fast and the service costs low

To top it all, Metso Waste Recycling has a global network of service specialists and local service partners, who are ready to provide assistance 24/7/365.

f-e.de





Eggersmann fields of competence in detail

Mechanical treatment and separation of

- Municipal solid waste (MSW)
- Commercial and industrial waste (C&I)
- Light packing waste
- Paper and cardboard separation Construction and demolition waste (C&D)
- Refused derived fuel separation (RDF)

Biological treatment of organic waste by

- Anaerobic treatment / biogas process engineering
- Aerobic treatment / in-vessel composting

Products

- Mobile recycling machines
- Stationary recycling machines Conveyor technology Steel structures

CRS NI Celebrate 10 years in Business

This month CRS NI are celebrating 10 years in business, this special milestone being the result of continuous innovation, dedication and hard work over the years.

Managing Director Sean Conlon has worked in the waste management & engineering industry for over 30 years and his passion for innovation drove him to open his own company in July 2009. From day one his strong belief in innovation driven by customer feedback has fuelled his success with CRS becoming one of the major players in the recycling industry.



With growth from two to over 30 people today, CRS NI have invested heavily in their team and now have some of the most talented in the industry allowing them to now progress the business into the future.



CRS NI have a very loyal customer base and include clients such as OCADO, DBS France, Lunnon Waste, SMITH Recycling, Green Box Recycling and GBN Services of London who have just had their 10th CRS NI plant installed. Garry Hobson, Managing Director of GBN Services commented "We chose to work with CRS as they are renowned for their high performing flip flow screen and also manufacture all their products in-house. They spent the time onsite getting to know us and our products, then designed a plant to suit. We installed the first CRS plant in Harlow in 2013 and were very happy with its performance and as a result we have recently installed our 10th plant, all are complete turnkey systems including Hoppers, Conveyors, Trommels, Picking Stations, Air Separation Units & Fines Recovery Systems."

MRF'S

Reflecting on their 10 year journey Sean Conlon commented "Although we have significant plans to grow and develop rapidly over the next few years we will never lose sight of our business ethos which is to look after all of our customers, getting to know them, understanding their business, planning an effective solution, and providing them with the highest quality of plant manufacture, build,

installation and service backup.

"I would like to thank all our loyal customers and distributors all over the world and look forward to a very optimistic future together."

This ethos has been instrumental in acquiring continuous repeat business over the last 10 years and has seen CRS NI distribute their



L-r: George of SAS Y-Care and Sean of CRS

full range of unrivalled Mobile & Static Waste Solution products worldwide to many new clients and it's important to point out that CRS NI have the capability to work with fledgling companies looking for small compact solutions right up to market leading companies requiring cutting edge turn-key solutions with the latest technology.



New Distributors in Europe

Over the last year CRS NI have established 2 new distributors, SASYcare in France & Powerstone in Poland. Powerstone are a leading distributor of materials handling equipment in Poland, SASYcare have just signed a contract for the 3rd bespoke waste processing plant and are also celebrating their 10th Anniversary this year. This is a recent installation in Lyon France by SASYcare to separate grade A & B wood. "We are extremely happy with the build quality and how the plant is running" said DBS France

144-

New Mobile Fines Recovery System

To celebrate their success over the last 10 years CRS NI are launching a new mobile fines recovery system that combines scalping, flip flow screening and air separation technologies in one mobile machine, an industry first concept which is totally new to the market. CRS NI will unveil this very soon!

To find out more please visit www.crsni.co.uk or call +44 (0) 28 8076 0496



What Our Customers Think - Lunnon Waste

We spoke with Michael and Dave Lunnon, owners of Lunnon Waste to find out more.

Q: Tell us a little about the business

A: Lunnon Group was founded by Dave Lunnon and later joined by son Michael and have been providing waste management services since 1972. Plant Hire and Bulk Earthmoving were a large division of the company until 1991 when the focus changed to concentrate on the waste management aspects of the company. In 1991 the company opened the Waste Transfer Station at its base in Ongar and have steadily expanded operations including the acquisition of neighbouring industrial premises to aid expansion. They operate a fleet of Skip and Hook Loader vehicles serving Commercial and Domestic clients throughout Essex with the Waste transfer station also being open to 3rd party clients.

Q: Why you chose Earth Equipment & CRS?

A: CRS was recommended to us by a competitor, my initial conversation with Sean of CRS led to an introduction with Peter of Earth Equipment. Earth Equipment visited our facility and quickly gained an understanding of our requirements.

Q: What was your challenge before your new installation including material and application?

A: The principal challenge was designing a plant that would fit within our existing infrastructure given the space available. Four alternative designs were prepared before the final decision was made. The material being handled was typical C&D waste having been pre-sorted to remove oversize. Prior to the installation of the plant we were removing the oversize material using mechanical grab, the smaller fractions were being floor picked by hand using machinery to spread the waste which resulted in handling the same material multiple times before final destination.

Q: What was your tonnage before and after your installation?

A: The Waste transfer station is licensed for 233,000 tonnes of Solid non-hazardous commercial and domestic waste per annum. Current throughputs would represent 40% of available capacity. The processing speed of the

plant would give the ability to increase tonnage through the facility.

Q: How has the new installation solved your problem?

A: Whilst the waste still requires a pre –sort to remove the oversize, the material once entering the feed hopper is processed immediately without the need to handle the same material multiple times.

Q: Have you noticed any other benefits since the installation?

A: Processing speed and efficiency has greatly increased, which has improved vehicle turn-around times on-site. Quality of end products has also improved.

Q: Have you noticed any improvements in regards to safety?

A: Ground staff picking within the cabin away from mobile plant has greatly improved Health & Safety on site. Vehicle movements on-site are also safer as the waste streams are more contained giving more room to manoeuvre.

Q: Has the general morale in the company improved since the installation due to employees feeling safer in a cabin as opposed to picking on the ground?

A: Staff are more content in a clean safe environment and appreciate the efficiency the plant has brought to the site operation.

Q: How would you describe the overall plant quality and performance?

A: We had encountered some teething problems as expected with any installation, however both Earth and CRS have been pro-active in resolving any matters that have occurred. Overall I am very pleased with the performance of the plant.

Q: What would you say to any other company thinking of using our services and products?

A: Good product, well designed and efficient.

Q: Would you recommend CRS & Earth Equipment and would you use us in the future?

A: Yes!





Middleton Engineering

Delivering Innovative Baling Solutions for the Recycling Industry.

We are raising the bench mark for Baling Presses again. Our Twin Ram range is designed for the widest waste streams and efficiency.

Telephone

01458-860264

Bigger Machines

Heavier Bales The entry level ME2R80 delivers an 80 tonnes press force, the range topping ME2R150 has a press force Designed to produce uniform and of 150 tonnes and delivers an average throughput of heavier bales than its competitors. over 35 tonnes per hour. Simplifying logistics and container

Bale sizes of: 720 x 1050 x 1400 mm 1050 x 1050 x 1400 mm

loading-reducing costs of

transportation and storage.

Energy **Efficient**

Thanks to its effective 22kw motor, the ME2R80 produces an 80 tonne ram press force with a speed of 30 seconds. Saving 60% on annual running costs and reducing CO² emissions by optimising its efficient programming.

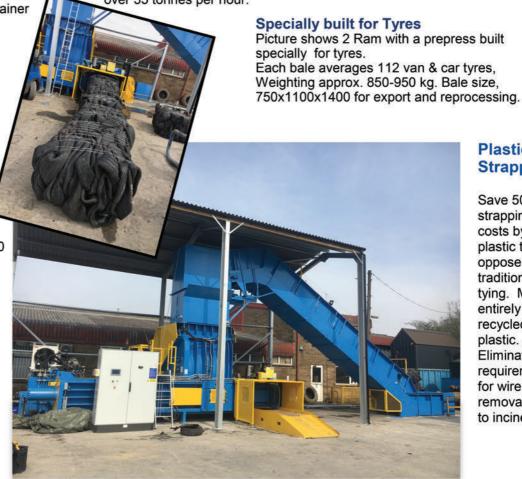
Bale out feed

Middleton Engineering now offer straight to wrap solutions removing the need for tying or strapping bales.

Picture shows 2 Ram with a prepress built Each bale averages 112 van & car tyres, Weighting approx. 850-950 kg. Bale size,

Plastic Strapping

Save 50% of strapping costs by using plastic ties opposed to traditional wire tying. Made entirely from recycled plastic. Eliminating requirements for wire removal prior to incineration.



Control at your Fingertips

All fully automatic ME machinery comes as standard with touch screen controls. For ease of operation and speed of switching waste streams.

Wider Waste Streams

Cardboard RDF & SRF

Aluminium **Textiles**

Steel Cans Film

HDPE Rubber

PET WEEE

GSM Connectivity

Get full diagnostics and support direct from our factory. Scapa ME Twin Rams have the capability to send a signal via SMS or email direct to your operators, informing them of any abnormalities, improving up time.

Dual Tying Technology

Increase your uptime when switching products with dual tying technology. Our fully programmable tying head allows a change over from plastic straps to wire in minutes.

Designed and Built in Britain

Heavy duty construction, available in left or right-handed eject. Incorporated design to the safety standard of BS EN 16252-2012. All of our machines are tailored to your business and will fulfil your requirements.

IF YOU WOULD LIKE MORE INFORMATION, PHONE OR EMAIL US



sales@middletonengineering.co.uk

DESIGN



INSTALL

SERVICE

Company opens redeveloped construction and demolition waste facility in County Durham



WASTE-management firm Remondis have opened a new construction and demolition (C&D) waste-recycling plant at their Chester-Le-Street site, in County Durham. The site was previously owned by JBT Waste Service, before Remondis purchased it in November 2016, which has since been redeveloped and installed with the latest recycling and sorting technologies.

New kit for the facility has been installed and supplied by Kiverco; the main objective being to provide a state-of-the-art facility that processes construction, demolition and commercial waste streams to the highest levels of quality for Remondis. According to Kiverco, the new plant has been developed to optimize recycling and recovery rates by deploying a variety of sorting systems to extract the maximum recycled material from the mixed wastes that it is designed to handle.

Screens have been supplied to size the material; magnets are utilized to remove ferrous metals; and density separators are used to separate light and heavy waste streams. The plant will also use 'near-infrared sorting' technology to ensure maximum quality of outputs.

Dave Hughes, regional director of Remondis, commented: 'This project is a testament to the team that have worked on it. The quality in the execution is obvious to see and this plant will ensure we can deliver the very best levels of service and environmental performance to our customers for years to come.'



Middleton Engineering streamline waste processing for Merthyr Tydfil Council

Based in Meare near Glastonbury, Middleton Engineering design, manufacture and commission innovative bespoke waste processing solutions.

Recently the company has completed a project for Merthyr Tydfil Council to design and supply a sorting system for separating kerbside collected household recyclables which incorporated a SCAPA ME2R80F Twin-Ram Baler.

With over 40 years experience Middleton Engineering has established themselves as a major supplying force within the waste recycling industry, both nationally and worldwide.

John James — Recycling Centre Manager describes the operation, "We are the only waste processing centre in Merthyr Tydfil and handle 6,600 tonnes/annum. We have eleven trucks, out three times a day collecting household waste from the kerbside including mixed cans and plastic, paper, cardboard, glass, food, small electrical items which are all segregated on the truck with the only exception being the cans and plastic.

It's a busy operation with trucks coming onto site, weighing in and initially unloading the food waste, cardboard, paper, glass, textiles and electrical items that do not go through the Middleton system.

Trucks then reverse into the unloading bay and discharge their remaining load of cans and plastics onto the on-floor conveyor.



The sorting system:

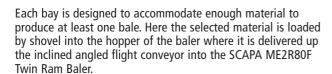
The inclined chain feed conveyor then transfers the material onto a one metre wide slider bed conveyor where any undesirable material can be picked off and disposed of down an adjacent chute.

Material then passes under the first overband magnet where it separates the ferrous materials depositing these items in the bay below. Remaining material then passes over an Eddy Current Separator where the non-ferrous is separated from the plastic which drops through a bottle perforator (used to help in the baling process) where the jaws perforate the plastic removing the air out of it. Aluminium is then flipped into the last bay.









The SCAPA ME2R80F Twin Ram Baler:

Designed and built in the Middleton workshops it is ideal for local authorities, distribution depots and independent recyclers for baling all types of material. Incorporating a wire tier machine which can be supplied with a plastic strapping system or a dual tie system incorporating plastic and wire tie systems which allows the operator to select the number of straps to match the product being baled.

The Scapa ME2R80F Twin Ram Baler incorporates inspection doors with an interlocking safety system, safety switches for oil level and temperature, and a bale separation door which is essential if it is envisaged to bale more than one product without contamination. Operating under high pressure very compact bales can be achieved

thus reducing transport costs. Overall it is a rugged, easy to operate and maintain with a projected lifespan of 20 years.

Sorting System Control:

The bespoke control system is positioned near the operating position of the baler; here all the individual items of the sorting system are controlled via an integrated PLC monitoring system. Full fault diagnostics and automatic controls are provided via a Siemens touch screen HMI, including full isolation of the plant with lock-off procedures.





The electrical control provides a full integrated control to allow the sorting system to operate either automatically or manually.

A main control cabinet is located within the sorting station where the whole operation can be observed. Additionally, an operator intervention system is incorporated which allows operatives to slow the picking belt speed allowing removal of items, which once removed the belt will automatically speed up.

An inverter speed control on all conveyors maintains a regular speed of all conveyors to eliminate bottle necks and blockages.

Winning the contract:

John commented, "When we put the project out to tender in 2015, we looked at the Middleton Engineering drawings and it was easy to see that they stood out above the other tenders. They manufacture in-house so consequently they hold a complete range of spares which makes us very comfortable knowing that any downtime will be short. In particular balers do have problems but Middleton Engineering have always been quick to respond with service the following day!

"This system was completely new to us as we were operating as a bulking station however since installation its been an efficient system to operate. Everything from quotation to commissioning, the system has illustrated how passionate the company is, it speaks volumes for their philosophy and work ethic."

Certainly, looking at the site it's easy to understand how the team at Merthyr Tydfil have won awards for the cleanest aluminium shipped out.

Nothing is stockpiled with a shipment going out every week — a credit to the team who have the total confidence in the Middleton Engineering sorting system.

Premium crusher parts

by the leading crusher service provider



















Long standing user of Volvo Construction Equipment products, Tillicoultry Quarries has purchased a further three new Volvo loading shovels and another A30G articulated hauler for its quarrying operations spread across Scotland's Central Belt and Ayrshire.

This latest package is for two L120H loading shovels complete with 3.5m3 rehandling buckets and boom suspension systems, one of which has been allocated to Tillicoultry's Northfield guarry and the other to Tulliallan and both will be put in charge of general rehandling and stocking out duties. A larger Volvo L150H equipped with a 4.2m³ rehandling bucket has been sourced to operate at Hullerhill sand quarry and completing the line-up, a new A30G has gone to Northfield fitted with locally produced side extensions to maximize its payload capacity.

These new additions to the fleet are due to the continuing expansion and acquisitions in the central belt locality by Tillicoultry Quarries according to Managing Director Wallace Menzies. "We have a long association with Volvo construction equipment products having operated their loading shovels and haulers for the past 32 years," he says. "The Volvo product represents excellent value for money in terms of economical fuel consumption, high residual values, a proven track record for reliability and sustainability and their qualities and pedigree mirror our own high standards in offering a competitive and professional service," he continues.

Powered by a Tier IV final Volvo 8 litre engine developing 276 nett hp with a maximum torque of 1317Nm at just 1450rpm,

the L120H also benefits from Volvo designed and manufactured driveline components designed to offer considerable fuel savings each shift. Fuel savings are further enhanced by the Volvo Eco pedal encouraging the operator to run the machine at its optimum rpm in the engine's torque curve. The larger L150H is installed with a 13 litre engine rated at 303 nett hp and shares the same torque characteristics with maximum torques achieved at relatively low rpm.

With a carrying capacity of 28 tonnes and heaped capacity of 17.5m³ the Volvo A30G also meets the requirements of Stage IV final emissions legislation being powered by an electronically controlled, six cylinder 264kW turbo charged Volvo V-ACT diesel engine. This features high torque at low engine speeds, resulting in good fuel efficiency and high performance. Purpose built by Volvo, the engine is designed to exactly match the Volvo drive train, ensuring the best use of power and torque, even in tough working conditions. The new 30 tonne articulated hauler has been supplied complete with full cantilever tailgate and locally produced side extensions to maximise the load carrying capacity of the truck.

All the machines are fitted with CareTrack as standard, which is Volvo's telematics system that enables remote monitoring of a wide range of machine functions (e.g. location, fuel consumption, service reminders etc.) thus optimizing customer operations. In addition, Tillicoultry Quarries has included service agreements with each machine meaning that SMT GB will take care of the scheduled maintenance with Volvo trained service engineers using genuine Volvo parts.

DUO & Terex Washing Systems host a successful open event featuring the world premiere of the new Terex Washing Systems AggWash[™] 300 at the NRS **Aggregates Woodcote Wood Quarry**

DUO Equipment and Terex Washing Systems (TWS) have recently held a successful two-day event at Woodcote Wood Quarry near Telford which is owned and operated by the NRS Group.

Attended by over 200 key people from several industries the event showcased the DUO Equipment Portfolio with the new NRS - TWS Wash Plant taking centre stage.



NRS - The story so far:

NRS have invested in a total of four wash plants with the Woodcote operation the latest to come on stream. All have been supplied by DUO Equipment.

NRS was formed in 2005 by MD, Mark Ketcher when they operated a small fleet of tippers and plant. This soon expanded from haulage to the operation of inert landfills. In 2011 the company had the opportunity to purchase Saredon Quarry and today NRS operate some of the largest inert tipping facilities and quarrying and recycling aggregate

production operations in the midlands employing over 70 staff.

The fourth DUO washing plant:

Mark Ketcher – MD of NRS, commented, "This is our fourth plant from DUO Equipment, and we have one more that isn't commissioned yet at Meriden. All are different plants with each one more technically advanced than the last. We tendered for this site against a number of major companies and the owner was very impressed with our operation and we won the site. In total it is a £4.5 million investment; we did the civils and used our concrete trucks and aggregate from our other sites. There was an initial issue with flooding but that has now been resolved. It is an extensive site and by the time we get to the top we should have excavated to a depth of 50 metres."

Woodcote Wood Quarry:

Originally a commercial forest the 130-acre site has a reserve of two million tonnes of very soft sand heavy material lying in benches with layers of rock sand. It is projected to process up to 200,000 tonnes/annum.

Alex Moss - CEO for DUO, commented, "The material has to be very carefully and consistently processed with limitations on top and bottom size of sand for specific markets. The tolerances are very tight at -1.0mm of 100% and the bottom end of the grading its 0.5mm of 1% on the silt and has to be consistently maintained."

Tim Hall – Consultant to NRS, added, "When we first looked at the plant for Woodcote, we considered several companies and after consideration we chose the DUO plant which we now have. We liked it because it's a compact plant that produces the right products in the right quantity at the right time. The overall project was completed within the time frame we expected, to the quality we expected. DUO have provided all the back-up and support that was needed; overall we are very pleased.

A world first with the AggWash 300:

The award-winning Terex Washing Systems AggWash™ 300 was the world's first modular scrubbing station to integrate heavy attrition with sizing lightweight contaminants removal, and hydro cyclone-based fines recovery in a single highly portable chassis. Aggwash™ is a rapid-install solution with a compact footprint for a wide range of applications within the aggregates, recycling, remediation and mining sectors.

Quarrying



Primarily designed for the processing of construction and demolition waste but equally suited to virgin material applications.

The NRS Woodcote Wood wash plant:

John Bracken - Director of DUO Equipment, describes the plant process, "The Terex Washing Systems AggWash™ 300 is the first of its kind in the world market and incorporates two 16 x 5 screens, 200tph log washer and a 200 tph classification unit, basically the first modular structure of this size. Processing at 300tph it provides two grades of sand, and four aggregates. It incorporates a recirculatory system where any oversize is returned to a TC1000 Cone Crusher via a surge bin with the feed then re-joining the main conveyor where it is delivered onto a 16 x 5 triple-deck rinsing screen.

"This primary screen then feeds a 200tph twin-shaft log washer which incorporates a high-frequency 8 x 4 trash screen removing organics and lights. Material going forward is then delivered to a 16 x 5 triple-deck part rinser which removes any fine sands remaining after the log washer; these are then sent back to the Fines Master 120C sand classification unit. This screen has the capability of producing up to four products and is currently producing three clean products of 10/20/40mm.

"A feature of the process is the inclusion of the AMP plant which receives any overflow from the sand plant and produces a cut on a really fine sand in order to ensure a pure 35-micron + material.



"The plant at Woodcote Wood incorporates a water treatment system which is fed from the AMP ultra fines sand classification unit into the thickener system. This material is then dosed with flocculent to provide a clarified clean water to return into the plant. The material after the thickener is then pumped away to a lagoon."

The plant is fed by shovel into a 30-tonne feed hopper which was designed and manufactured by DUO Manufacturing and incorporates total access for serviceability.

Plant access:

Access on the Terex Washing Systems AggWash™ 300 is a major design feature with the whole plant incorporating fullwidth walkway access.

John, added, "A great deal of thought has been put into access on the Terex Washing Systems AggWash™ 300, especially for screen box and log washer access. >

Quarrying

Exhibits at the open day:

Alongside the new Terex Washing Systems AggWash™ 300 DUO took the opportunity to display some of the other world-class brands they represent, these included:

- Terex Washing Systems FM 200C a 200tph high capacity twin grade sand plant which is the first out of the factory.
- Powerscreen® Tracpactor 260SR a tracked mobile impact crusher specifically designed for the recycling and demolition markets. Capable of processing a wide range of material at a high output, these plants are versatile, easy to operate and fuel efficient due to their direct drive system

























With over 30 years experience in the construction industry, Agg Pro excel in providing top performing, highest quality products. Our dedicated skilled team of engineers, are strategically placed across the region, providing class leading after-sales support to our customers.

With the latest appointment as McCloskey Washing Systems official distributors, we can offer a complete range of McCloskey machinery:

- Crushers
- Screeners
- Stackers
- Trommels
- Mobile Rinsing Screens
- Compact Sand Plants
- Dewatering Screens
- Modular Plants
- Water Treatment & Management

Leading suppliers of crushing, screening and washing equipment

For information on our range of machinery you can contact us on:

Tel: +44(0)1827 230139

Email: sales@agg-pro.com





QMS recently installed a complete 300tph crushing, screening and stockpiling plant into their customers quarry in West Africa. This is the third complete crushing plant QMS has supplied to this customer in the past two years.

The QMS modular range of crushing plants are 100% manufactured in-house by QMS at state-of-the-art facilities based in Coalville, Leicestershire, U.K. Each module is CE compliant and manufactured in accordance to ISO9001 and BS EN 1090-1:2009+A1:2011 standards.

The complete crushing plant was installed and commissioned by QMS mechanical and electrical service engineers.

This plant comprises of a QMS 1200 x 750mm primary jaw crusher, B3-XC secondary cone and B4 tertiary cone crushers, 1.83x6m two and three deck inclined screens, tunnel feeder, feed hopper and all conveyors.

Primary crushing takes place using the 1275 jaw crusher. The jaw combines both high capacity and reduction ratio. With fully hydraulic setting adjustment and overload protection the design ensures ease of operation and reliability, making them perfect for use in quarrying, mining, recycling and demolition applications.

Secondary and tertiary crushing is undertaken using QMS B series cone crushers. These cones create excellent product shape and can be configured to maximise production of single sized aggregates. Their variable eccentric throw and range of crushing chambers provides maximum versatility allowing the crusher to be configured to suit your individual project needs.

Sizing comes from QMS SVI inclined screens. Their light weight yet high strength design makes these screens capable of handling a wide range of materials and product sizes with

The plant is controlled using the QMS C3 Plug and Play HMI control system. The complete crusher control system features remote touch screen operation allowing visualisation, process control and real-time monitoring of all parameters as well as event logging.

This example is part of a wide range of crushing plants available. QMS has designed and developed a range of predesigned plants to suit most common crushing and screening applications as well as offering custom-made plants for more complex applications, ensuring QMS always has a solution to fit your needs and budget.



Each of the QMS crushing modules can be transported on standard trailers or shipped in containers for ease of shipping worldwide at reduced costs. Their modular design, including all walkways, stairs, handrails and guards, allows each component to be erected on site in a rapid time frame with only the use of basic tools. All components are pre-wired and tested prior to being despatched.

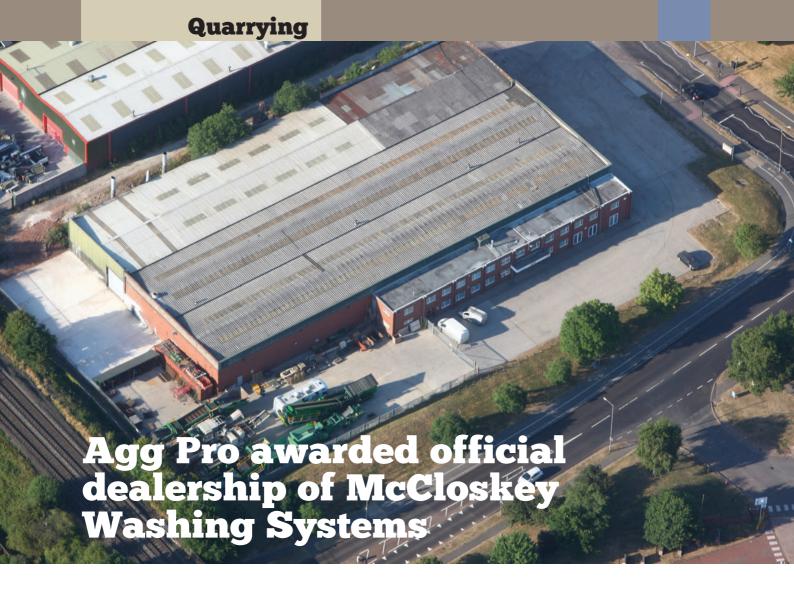
All QMS crushing plants incorporate truly innovative and modern design features and are made using the latest manufacturing techniques. Through years maintaining, servicing and repairing crushers and screens, this industry knowledge provided QMS with new ways to conquer any quarrying and mining challenges.

The crushing and screening equipment is supported by outstanding aftersales service. With a huge selection of spare and wear parts available, you can be sure QMS will keep your plant running all year round.

For more information contact our Sales Department – Sales@qmsupplies.co.uk

AGGREGATE PROCESSING PLANTS





HUB-4 recently went along to visit Agg Pro to learn about their business and the new partnership with McCloskey Washing Systems. Started in 1996 in Tamworth, Agg Pro are one of the top four global dealers for both the GIPO and McCloskey Crushing & Screening brands and are now poised to embrace McCloskey Washing Systems as an integral part of their business.



We talked with Geoff Caves, Managing Director about the business and the exciting opportunity ahead "Customer service is at the forefront of everything we do, and this ethos runs through the whole team to make sure that the customer is totally satisfied with our products and our service. Over the

past 10yrs both the GIPO and McCloskey International brands have been key to our success and we spent a lot of time in the early years making sure that we selected the manufacturers that we wished to represent. We now sell between 80-100 McCloskey machines each year and have plans to enhance that even further with the washing systems side of the business.

"We have long-term customers who have had up to 40 machines from us and we believe in the fact that what we promise is what we will deliver, even to the point that if there is an issue we will put it right at our own cost.

"With considerable investment we have recently expanded our workshop facilities to include two new buildings making the site around 40,000sq ft in total and further redevelopment is planned to maximise space and work-flow. We also have two additional stock holding facilities to cope with demand and will soon have a dedicated spare parts stocking facility for the washing systems side of the business. Our service and support has grown to cover the UK market and we have dedicated customer service personnel on-site here and a team of field-based highly trained service engineers all with fully equipped service vehicles."

Geoff then talked about McCloskey Washing Systems "We were delighted to be approached by McCloskey to represent them on the washing systems side and we see that as a huge positive for both Agg Pro and McCloskey International. It makes total sense that we now represent McCloskey across all their product lines within our geographical territory of operation. We expect a huge growth in turnover with the amount of business we expect to do, and we can also streamline our business overheads as we already have a full infrastructure in place to handle the new business.



"In terms of staff we will expand to include around 4 new members who will be dedicated to the washing side. Our existing and very highly skilled engineers will also bring a whole host of knowledge to the washing business and our bespoke style of fabrication means we work with our client to provide exactly what they require in terms of safety and accessibility offering unlimited guard options to clients such as Tarmac, Cemex and Lafarge. Often, we work very closely with the site manager and health & safety manager, either onsite or here at our production facility to fulfil their exact requirements.

About McCloskey Washing Systems

McCloskey Washing Systems is a leading player for providing equipment to the Materials, Mining and Minerals Industry. They are focused on delivering the highest quality, and highly productive products to customers. McCloskey Washing Systems, a division of McCloskey International are committed to developing class-leading innovative and efficient product equipment to assist customers in meeting their requirements. A major investment in people and facilities means that only the very best, highly motivated individuals are selected to work for their customers. Operating in more than 100 countries, McCloskey Washing Systems is the obvious choice to be the preferred partner in delivering the Modular, Mobile and Static washing systems across the globe.



McCloskey Washing Systems has an enviable reputation within the international market. As a business with a rich heritage their company mission is to be the no 1 provider of reliable and highly productive equipment to the Materials and Minerals Washing industry.

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New CDE plant results in 100% increase in production for D'Arcy Sands

Higher output will support company to fulfil new Aviva Stadium contract

At its Wexford site, near the village of Blackwater, D'Arcy Sands was facing a combination of site-specific challenges, namely water supply and reliance on a traditional bucket wheel classifying system. It recently partnered with industry-leading wet processing equipment manufacturer CDE to commission a new wet processing plant which was showcased at a recent Open Day event in June.



With operations in counties Wexford and Wicklow, the company, owned by father and son business duo Anthony and Tony D'Arcy, has been producing high quality building materials and sports sands for over 25 years.

The company specialises in the production of quality graded sands for a range of sports, including outdoor, synthetic and all-weather sports pitches; sands for golf courses, including bunkers and top dressing for greens and fairways; and its silica sands are also used widely in equestrian sports for training surfaces and racetracks.

Over the years, D'Arcy Sands has worked with clients throughout the UK and Ireland, supplying sands for major projects and events including the Dubai Duty Free Irish Open, Croke Park, Thomond Park, Curragh Racecourse, and Adare Manor Hotel Resort.

Recently, the company secured a contract to supply its sands to the Aviva Stadium.

The Challenge

D'Arcy Sands produces high-spec sports sands for some of the most prestigious venues and events in the UK and Ireland. It's therefore important that the quality and prestige of these projects is reflected in the standard of its product.

Until its new CDE plant was commissioned, D'Arcy Sands had been using a tracked rinser and traditional bucket wheel system for sand classification and dewatering.

An upgrade of the existing bucket wheel system was required to tackle the loss of valuable materials to ponds and excess moisture in the final products.

Water availability proved to be another significant challenge at the company's Wexford site. So much so that it was transporting its sports sand more than nine miles to a separate site with sufficient water supply.

As well as water management, Tony D'Arcy, Manager at D'Arcy Sands, said energy efficiency was another important consideration.

"The plant we had been operating was powered by a diesel hydraulic system, so there existed the potential for spillages that could contaminate our much sought-after sports sands. We work with world-class venues and arenas, so we wanted to take preventative measures and put in place a system that would remove the risk of product being rejected or returned."

A perfect partnership

Garry Stewart, Area Business Development Manager at CDE, explained how the new plant was developed using CDE's cocreation approach.

"Our engineers worked closely with Tony and the team at D'Arcy Sands throughout the design and commissioning process to better understand what the company wanted to achieve by upgrading its plant and to outline any key site challenges they were facing.

"Completed over several site visits and through a series of collaborative design workshops, we designed a bespoke plant specific to D'Arcy Sands to support the company to scale its operations and extract maximum value from the material being processed."

Tony said: "We wanted to partner with a company that could help us realise our growth ambitions by designing a solution that supported our objectives in the most sustainable and economic way possible. Plant build quality coupled the technical know-how and the expertise of its engineers proved CDE was the ideal fit to deliver on our aims."

The Solution

After careful consideration of the site and customer's requirements, CDE presented a custom-built plant featuring the electric-powered M2500 E4 washing plant with integrated hopper, feed conveyor and twin-deck Infinity P2-75 screen. The plant also includes an integrated water management system comprising the A200 AquaCycle thickener, FlocStation poly dosing plant and AquaStore water tank.

CDE's M2500 fully integrated modular washing plant combines feeding, screening, sand washing and stockpiling into one compact and mobile chassis. The E4 model would allow D'Arcy Sands to produce up to four commercial grade washed sand and aggregate products simultaneously.

Importantly for D'Arcy Sands, the M2500 is a maintenance-free and energy efficient allelectric drive operation. Unlike its former diesel hydraulic system, this eliminates the possibility of product becoming contaminated

To improve the efficiency of the company's day-to-day operations, the new plant incorporates CDE's cutting-edge water management system, the AquaCycle thickener.



Quarrying



Waste water from the plant is processed by the AquaCycle thickener which recovers up to 90 per cent of the process water to be recirculated back into the washing plant. This ensures moisture content of D'Arcy Sands' product is reduced from over 20% per cent to an average of 10-15 per cent, resulting in a much faster return on investment.

It also means that, for the first time, the company can process material at its draw site.

The entire system requires under 20m3 of water per hour to operate, an 80 per cent reduction from the 200m3 of water required for its former plant.

Garry said: "By introducing the CDE AquaCycle, D'Arcy Sands is now able to wash material at its Blackwater site. It's the custom-built solution designed by CDE that has made this possible for the Tony and his team. This was unachievable with the old plant."

The Results

"We've doubled production, as a result of the new CDE wet processing plant", Tony explained.

Raw feed material, primarily Wexford sports sand with a small portion of gravel, is being fed into the new plant at a rate of up to 80 tonnes per hour.

"Output is up by over 100 per cent," he said. "We're now processing up to 80 tonnes per hour of feed and extracting over 40 tonnes of our quality graded sports sands. Greater control of fines separation using cyclone technology, which is a new development for our operation, has added more value to our products and is driving significant demand.

"The feedback we have been getting from our customers and in particular the greens keepers who use our sand daily has been excellent with numerous positive comments on the quality, percolation and workability of the sand.

"Importantly for us, the new system allows us to wash material at our Blackwater site when previously we had to transport it off-site, almost ten miles, to a location with a better water supply."

AquaCycle technology is supporting D'Arcy Sands to recycle 90 per cent of their process water requiring a small 20m3 per hour top-up supply which is drawn from a bore well on site.

Inefficiencies in its traditional bucket wheel systems resulted in D'Arcy Sands losing high value resources to pond, as Tony explains.

"Our new system is recovering this resource and helping us to maintain high product output for our premium sands."

Growing Demand

More effective screening made possible by the M2500, which screens and washes up to four in-spec sand and aggregate products in one process, is opening up new markets and opportunities for D'Arcy Sands.

Tony continued: "Producing commercial grade sports sands has always been the primary focus for D'Arcy Sands, but the new plant is producing new revenue streams for us through the production of higher quality aggregates and opening up new markets."

Confident in the quality of its commercial grade sports sands and aggregates, and coupled with its growing demand as a result, the company has also purchased adjoining land at its Blackwater site to increase the lifespan of the operation.

Garry Stewart added: "D'Arcy Sands is a company ready for the future. It has put in place a solid foundation following the purchase of additional land to extend the life of their Blackwater site. This ensures the company has a good source of material to process with the best possible equipment and access to the right knowledge to achieve their growth ambitions."

Project Facts and Figures

- Wet processing plant energy requirements easily met by 250Kva generator set on site
- Water consumption down by 200m3 to 20m3 of water per hour
- Tonnage processed increased from 30-40tph to 80tph
- Tonnage output increased from 15-20tph to 40tph





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By 2030 the Government has a target to reduce water consumption by 20%. The construction and quarrying industries use large quantities of water, most notably for dust suppression and influences how products are designed and built to minimise operational water use.

Minimising the use of potable (drinking) water provides environmental and financial benefits to companies, especially in areas of water stress, such as the South-East region.

Good practice should be replicated on sites and new initiatives trialed to reduce water usage. Our case study below looks at how a 1.5% increase in profit margin was delivered for a customer by initiatives undertaken by Ace Plant.

What is it?

On a site with a construction footprint of 350 hectares, the works involves moving 2.5 million meters cubed of materials onsite and building an 1,800 metre spine road with a railway bridge. The undertaking involves ecological management, construction of a bat house and livestock building, watercourse diversions and drainage installation, along with associated new infrastructure services.

The project was aware that carrying out works during the summer period would require water to reduce dust impact to road users on the A5 and M1, neighbors in a rural village and ecological receptors.

Traditional dampening systems use pressure to discharge water from a bowser onto a splash plate which disperses it outwards. On average, this type of system uses 2000 gallons of water in 8 minutes.

The project knew that water would be a scarce commodity over the busy summer period as no mains connection was available. Non-potable water was taken from on-site settlement lagoons, however, there was only a limited supply.

To minimise water use, bowsers with a hydraulic ultralightweight carbon fibre spinning disc were obtained. This worked by water being gravity fed onto the disc, resulting in the ability to provide a fine mist or site drenching depending on the requirement of site conditions.

The operator had the ability to regulate the discharge via a reducing valve to control the flow of the water or by adjusting the speed of the hydraulic disc.

Why is it important to me?

This system proved to be drastically less resource hungry than traditional systems currently in use. The 2,000 gallons of water lasted 90 minutes, rather than 8 minutes, resulting in being over 10 times more efficient. The additional benefit was that plant usage was also much more effective.

In summary, the result of the initiative undertaken at this site provided a cost saving of over £21,000 in water use alone. In a five-month period 25% of resources were saved equating to over 2,000,000 litres of water. The saving achieved would have been greater, but an agreement was in place with a local quarry for the supply of water at a cost-effective rate.

Ace Plant

We have been supplying a wide range of dust suppression equipment for the past 40 years. Environmental responsibility, particularly in the control of water usage, remains a significant component in the process of developing our new products.

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INNOVATION MEETS EXCAVATION.





CMB International ensure a quick return to production at **CEMEX** Rugeley

Owned and operated by CEMEX UK, Rugeley Quarry is a huge sand and gravel operation situated in Cannock Chase near Rugeley.

The 350-acre site which is the largest of its kind in the UK has sand reserves of 15 million tonnes and is unique in the fact that the depth of the deposit is dug to a depth of 60 metres.

The current processing operation produces in excess of 400,000 tonnes/annum and sells to concrete plants and building contractors as far afield as Telford, Stoke and Oldbury and also supplies an on-site bagging plant which is independently owned.

The range of products sold at Rugeley include fill sand, building sand, concrete sand, 4-20mm gravel, and a 10, a 14 and 20mm single gravel, which are not all produced at the same time, but supplied on demand.



The processing operation:

A six-year old aggregate processing plant is the main stay of the operation. Operating at 230tph the primary two-deck screen had recently suffered a progression of failures causing on-going interruption to production.

Gareth Fenna – QM, takes up the story, "We had been suffering reoccurring downtime and a decision was made to put out to tender for a new screen replacement which after deliberation we awarded the contract to CMB International.

"CMB were certainly the most economically viable and the group had awarded previous projects to them at Angerstein Wharf and Northfleet. As our screen was almost identical to the Northfleet one they were fully aware of what was needed and the first thing they did was to get the old screen back up and running again.'

After a site visit by CMB it was discovered that not only had the screen suffered bearing and gear failures it also had severe cracks across the deck and side plates. Following this discovery, it was decided that a complete replacement screen was required.



Within 6 weeks CMB had manufactured and commissioned a new CMB 280 'Dual-Drive' 20 x 6ft double-deck screen that accommodated the existing SCS screen media. As the material at Rugeley tends to be 'sticky' requiring additional spray bars CMB came up with a design which was accepted.

Liam Holland - General Manager at CMB International, commented, "We designed a new spray bar system to fit the new screen which with a little tweaking and trying different nozzles we eventually succeeded in reaching the required tonnage across the screen."

Subsequent breakdowns of the screen had made it a trying time and as Gareth points out, "We got over the first hurdle very quickly as CMB initially got the screen back into production and with their previous knowledge of the Northfleet screen they were then able to manufacture a new screen for us within six weeks, even producing a new spray bar system.

"It has been a great project that has left us feeling very confident with a new screen which coupled with their efficient service back-up will ensure that any future downtime will be kept to a minimum."

Following the removal of the old screen it was despatched to CMB to have all viable spare parts stripped and stored at Ravenstone, Leicestershire.



About:

CMB International are based at Ravenstone, Leicestershire and and have continuously evolved over the years and now market their own range of crushing and screening equipment that is all designed and manufactured in their UK workshop.

With an ethos to provide effective on-site plant maintenance and help customers get the best possible production from their plant, the CMB philosophy has always been and remains customer driven.

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TN77 Metal Detectors are proving popular with quarry operators in the USA. The 'Metal Detection' branded equipment is used to identify tramp metal in conveyed aggregate and prevent damage to screens and crushers.

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

The TN77 metal detector is a tunnel-type Metal Detector used widely in the quarrying, mining and recycling industries where the conveyed material is non-metallic or non-conductive. The TN77 detects tramp iron and manganese steel such as digger teeth, drill rods, crusher plates, bars, chains, nuts and bolts. Such tramp metal causes significant damage to other processing equipment such as crushers, shredders, screens and conveyors.

TN77 Metal Detector in Operation

In operation, the coil of the Metal Detector (surrounding the conveyor) continuously emits a magnetic field. Any tramp metal passing through the metal detector changes the magnetic field, which is registered by a control. When a change in magnetic field is registered, the control processes the signal from the search coil and then sends a second signal to other circuits which stop the conveyor, operate an audible and/or visual alarm, or initiates a rejection mechanism. One useful optional extra is a marker, whereby either a flag or



spray of ink is deposited when tramp metal is detected. This makes it easier to locate and remove the tramp metal. Each TN77 Metal Detector installed in the USA has a control unit housed in an IP52 wall fixing cabinet. This is positioned locally or remotely from the search coil of the Metal Detector.

Designed to Suit

The search coils of the TN77 Metal Detectors used in the USA vary considerably, with several designed to suit a customer's specific requirements. The flat-pack design of the Metal Detector keeps shipping costs low and installation simple. There is no need to cut the conveyor belt during installation.

"Since Master Magnets was acquired by Bunting Magnetics we have seen a significant increase in sales of Metal Detectors into the USA," explained Joe Cetti, the Metal Detection Product Manager. "We have designed the TN77 with export markets in mind. The flat-pack design keeps shipping costs to a minimum whilst also making installation simple. This design is being used in quarries and mines in many remote locations such as in Australia and Africa. We anticipate a continued growth in our sales to the USA."







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Tru7 invest in a Terex Finlay 863 Screener supplied by the Molson Group

Located in a purpose-built HQ at Kesgrave, Ipswich the Tru7 Group has been in operation for 90 years. Originally started by Percy Nicholls, today his son - MD, Guy Nicholls has maintained the entrepreneurial spirit and is continuing the passion for excellence through his son Jake who is Operations Manager.

Employing over a 100-strong team the company are 'hot on service' and 'hot' on supplying their customers with the best equipment available.

As experts in construction and demolition their expanding portfolio includes the supply of aggregates.

Recently Guy has invested in a Terex Finlay 863 Screener to compliment his portfolio of aggregate processing equipment. Supplied by the Molson Group it was a decision made on machine build, processing outputs and dealing with a company who could back a world-class machine with service that is second to none.

Guy doesn't mince his words and is quick to talk about experiences with past brands and their failings in extended parts supply causing unnecessary downtime on machines that should be working.



Guy, takes up the story, "We got into the tipper business around four years ago and today we are operating a fleet of 40 tippers transporting 20-25 thousand tonnes of 'muck away' a week. We are a very diverse company with a growing line-up of machines and entering into other sectors which has led to the investment of the Finlay Screener.

"I knew Brian Bell very well and I trusted his opinion and he suggested that we invest in a Finlay machine which we have taken on trial. We already have an Ecotec TSS 550 machine with a Spalec screen which is on a Finlay chassis, so our experiences were already positive.

"We currently have a big crushing contract, so we needed another machine to help with this and our intention is to expand into contract crushing and screening and hire for these machines as we see this as a growth area for the business."

Terex Finlay 863 Screener:

The Terex® Finlay 863 mobile screening plant is a compact and aggressive forward-facing screen. This flexible and mobile plant can work in aggregates, sand and gravel, top-soil, construction demolition and recycling applications where site space is at a premium. The fully self-contained plant can be hydraulically folded and ready for transport in less than an hour making it the ideal machine for contract screening. The plant has the capacity to process at a rate of up to 250 tonnes per hour and can be fed either by a tracked mobile crusher or an excavator.

It features an aggressive screen box which can accept bofor bars, screenharps, woven mesh, punch plate and cascade fingers.

The screen box angle can be hydraulically adjusted to an angle between 14° to 18° and the screen box discharge end can be hydraulically raised 500mm to facilitate efficient and easy media access and changing.

An oversize conveyor angle can be hydraulically adjusted from 15° to 24°.

Weighing in at 18.3 tonnes the 863 is powered by a Caterpillar C3.4 73.8hp – Tier 4i, Stage 111B engine.

Brian Bell – Sales Manger for Molson Group, commented, "The main asset of this machine is the screenbox which is phenomenally lively; it does 'punch above its weight', so when you are processing sticky materials the extra vibration will enhance the process.

"It's also a perfect hire machine as when its folded up its incredibly compact and easy to load on a trailer.

Dependant on material a general throughput would be in the region of 150tph. It's an excellent machine for the group and will be a positive addition to their hire fleet."



Bulk Handling



A superior solution:

Alireza Zand – Wharf manager, takes up the story, "It was just over two years ago when we decided to look at mobile feeders to provide a cost effective and reliable solution to barge loading for supply of 6A fill material

for the Thames Tideway Project.

"Installing a conveyor on the jetty didn't make sense because of the high cost and loading speed so we looked at the market for feeders and opted for an Edge RTU220 as it was exactly the machine we wanted at a competitive price."

With such a tight footprint at the wharf the Radial Truck Unloader is fed by trucks off-loading directly into the feed hopper of the RTU220. Each truck taking it in turns is loaded by shovel from the yard stockpile and then making the short journey to the machine.

Ali, continued, "We are very happy with the machine so far; speed of loading is dictated by two trucks loading in turn in a very tight area so we can currently load a 1000 tonne barge in just over 3 hours at approximately 300 tph, although if we could load the RTU220 with a constant feed it would easily do 1000 tph.

"It is a far superior solution compared to a conveyor system on cost and loading speed."

Since February 2017 the RTU220 initially loaded two barges a day with over 250,000 tonnes of 6A feed material going through the machine for projects at Chambers Wharf at Tower Bridge and King Edward Memorial Park and other contracts including the supply of clean aggregate and sand to Hanson at Wandsworth and Euromix.

Ali, added, "We have the 6A material brought in by our deepwater dredgers where it is stockpiled and ready for these types of contracts, it is basically a 40-60 split sand and gravel, 100mm down."

Major projects and the ability to deliver:

The 4-acre site has a very tight footprint and supply to market is facilitated through either the on-site railhead, or by barge, or locally by road to concrete plants at Battersea and Kings Cross

The Greenwich Wharf operation has a chequered history having supplied materials that have contributed to the building of the Millennium Dome, Olympic Village, Crossrail, the Jubilee Line Extension and the Emirates and Tottenham Stadiums. Recently materials have been supplied to the Thames Tideway Tunnel which is a 25km tunnel running under the River Thames to provide capture, storage and conveyance of wastewater discharges that previously discharged into the river.

The Edge RTU220 Radial Truck Unloader:

The RTU220 provides operators with a greater efficient loading method and is designed to allow operators to continuously load directly from trucks into train wagons or barges.

The full HMI control panel and remote-control functions provide operators easy control of the RTU functions whilst loading. The Panel Interface provides easy fine tuning for accurate application performance. The HMI allows for automatic start/stop operation and provides visual data output such as engine load, hydraulic oil temp and fuel consumption displayed while the machine is still operating.

The RTU220 is an independent track mounted unit that provides flexibility and reliability; powered by a Cat4.4 96KW (129BHP) diesel engine, the RTU220 offers huge torque whilst only consuming 12-15 litres per hour (3-4USG).

Further cost savings are provided by a dual power option allowing the RTU to be tracked into position and then connected to on-site 3 phase electrical supply to power conveyors at a higher level of efficiency.

The machine supplied to Greenwich Wharf has a range of applications but is specifically designed to receive material from lorries and dump trucks.

The RTU can accept a full 23 cubic metre (30 cubic yard) load. Its high torque drive system allows the speed of the conveyor belt to be adjusted meaning the output of the machine can be regulated.

Further applications include material stockpiling, and loading of ships, containers and railway carriages. Material is fed into the RTU220s' large 23m³ (30 cubic yards) hopper and is carried to the radial conveyor via the 2200mm (87") wide heavy-duty belt.

Full length impact bars prevent belt sag thus reducing material roll back and prolonging the life of the conveyor belt. Variable belt speed via the HMI control panel controls the flow of material to the radial conveyor. The massive 23m³ hopper capacity increases cycle times and increased on-site production. With dual access, hydraulic flared sides, the RTU Hopper can be fed directly by wheel loaders and grab cranes. Unlike feeder belt systems driven via a drum roller, the RTU220s' sprocket and chain design ensure against belt slippage or stalling. The RTU has the capacity to convey 1000 tonnes per hour (1102UST) with a maximum feed size of 600mm (23").

Material is stockpiled via the 1200mm (48") wide radial product conveyor which provides a discharge height of 6800mm (22'4"). The 140° radial function enhances the flexibility of the RTU allowing it to be utilised in a number of applications. The hydraulic folding head section allows for quick transition from transport to operating position.



Miller UK launch their new and exciting range of GT Quick Couplers for excavators from one tonne right up to 50 tonne

Miller UK invited HUB-4 along to their production facility in Northumberland to take a more detailed look at the new range of GTS & GTX Couplers. As the inventors of the world's first ever fully automatic coupler, twin-lock and fully casted PowerLatch Miller UK has been setting the standard globally. With current annual sales of 13,000 couplers and 6,000 buckets Miller are set to take the market by storm with this new range of GT Quick Couplers offering for the first time a fully hydraulic quick coupler for excavators from one tonne right up to 50 tonne.



We caught up with Barry Robison, Marketing Manager and Stephen Brown, Operations Director who gave us a product demo and tour. Stephen started by explaining about the new GT range "This new GT range features our brand new GroundTouch system, an additional safety feature meaning that an operator can only initiate the attachment change process when the attachment is safely placed on the ground. This innovative GroundTouch pressure system prevents operators from misuse or accidentally releasing attachments, going above and beyond legislative requirements for ground worker safety. We have had a lot of customer feedback of how happy they have been with this GroundTouch system as with current systems there tends to be a lot of complacency that can occur when changing the attachments and our new system standardises the procedure and ensures that the operator to go through a set series of procedures to change the attachment keeping things completely safe. '

The GT range feature the lightest, lowest profile, innovative fully cast body shell capable of withstanding all working environments and our simple effective design encompasses significantly fewer components than before, reducing service intervals and keeping repair and maintenance costs down. This in turn delivers increased productivity and working uptime for clients.

The GTS range is designed for excavators from 1-5 tonne operates via a sliding ram and has an ISO 13031 compliant plunger to the rear which gives you full ISO control. So even

with a hydraulic failure the coupler is still fully locked on, making this an extremely safe system for operatives. The GTX is designed for machines from 6 tonne up to 50 tonne and has a clever pendulum based ISO locking system featuring a nitrogen filled pressurised cylinder — the same technology that is relied upon for aircraft landing gear, which again even with a hydraulic failure the coupler is still fully locked on.



The GT product line features heat-treated high-grade steel designed to guarantee its strength and help eliminate weak points to enhance durability in high stress operations. Its low-profile design delivers a shorter pin to point measurement which in turn delivers maximum breakout force for greater productivity and efficiency and offers the lowest pin to point offset in the market with up to 23% reduction in pin to point offset against existing ranges.

Barry commented "Both the GTS and GTX have been through extensive and rigorous design testing at our new R&D facility. We have designed multi-cycle testing on our own rigs for all the elements that make up the coupler, including the frame, the internals, cylinders, latches, and control switch. The frames are FEA and strain gauge tested, the cylinders are tested to the equivalent of 10 years use, with 15 changes per day, 365 days per year. The coupler is fatigue tested over a course of extreme digging loads for over 100,000 cycles before being signed off. We have also been field testing the new products with clients for over 6mths and we are extremely happy with how they have performed."

Stephen told us about recent investments in their impressive bucket production facility "As you know we also manufacture and repair buckets here in the North East of England and we have invested substantially in the facility here adding a brand new machine shop, new LED lighting throughout, five robotic welding machines, a CNC rolling machine, CNC Press Break and additional plasma cutting machine. Manipulators have also been fitted to some workstations to give more capacity to the operators and free up crane use for less downtime. Three of our new robots each have a 2 tonne capacity table and can weld anything up to a 20 tonne shell, our forth is a tandem fed robot allowing it to weld two items at the same

Bulk Handling



time. We've invested around £1m in robots alone and in the first year using the robots we were able to produce 4,500 buckets. With the demand for our new couplers we also expect bucket production to rise. With this in mind we carry a huge amount of stock in buckets and couplers and our aim for the UK market is for next day delivery for clients who order before 2pm. We also offer products painted to client's specifications.

Off-Highway Truck Body Repair

Whilst walking around the Miller HQ we couldn't help but notice a CAT 785 dump truck body in for refurbishment. Special Products & Repairs Manager Conor Thompson who heads up this division told us more "We are happy to offer all



our UK clients this unique service of repair and have a dedicated team who implement this. On the body you see here we are fitting a new tail, two new extended side boards for extra capacity, a full internal reline, half a canopy, canopy deflectors, main body deflectors, line bore, underside tail bolster and a full repaint. We are taking around 10 tonne of scrap steel off this one and replacing it with about 12 tonne of new steel to produce a fully upgraded and enhanced product, the process taking around 8 weeks in total. We have found this to be a very popular service for our client base and will extend this further over time.

For more information please visit www.millergroundbreaking.com







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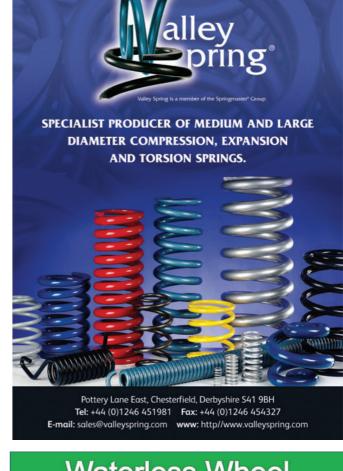
Internal Memory for 280 hours data

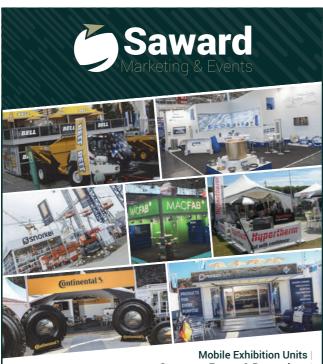
Ranges from 1 to 50 Tonnes

Wireless, easy to install/remove

Transmits data at up to a distance of 100m & up to 10 times a second

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- No water to provide, waste or dispose of
- No water course contamination, or freezing or icing
- No power required and no emissions
- No extra kit to hire no pumps, generators, bowsers, lances etc
- No supervision required, and no breakdowns
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- Up to 60% less surface area than other dry types

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