

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

March/April 2024 Issue 85



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Washing & Screening featured story

Processing mixed inert aggregate waste

Currently ECRA operate a successful business processing mixed inert aggregate waste streams on a busy site of approximately 1 acre.

Over a period of time, they identified that they could recover more materials by washing and reduce the volume of material that was going to landfill.

Having looked at the market they initially approached Tyrone International in 2022 to discuss their current operation and what they would like to achieve.

ECRA stipulated that they wanted the capability to wash at 50tph so that they could meet current demand and have capacity for future growth.



Tyrone International:

Tyrone International [TI] offer game-changing Wash Plant Solutions today, designed to solve tomorrow's challenges. Opening new worlds of opportunity for a more sustainable, efficient, and profitable future for their customers, partners and the wider construction, mining, waste & recycling industries.

Fintan McKeever – Director - TI, commented, "As a company we bring years of industry experience to supply innovative bespoke aggregate washing and water treatment plants which have a clear focus on customers' needs, plant efficiency, ease of maintenance and after-sales support.

"From single modular products to complete turn-key installations, we have redefined the gold standard of Wash Plants with our extensive industry experience and commitment to innovation, including Wet Classification, Water & Sludge Treatment, Screening, Scrubbing & Attrition."

Detailed study of the site:

After the initial contact and discussion TI conducted a detailed study of the site, and analysis of the proposed feed materials and produced a solution that minimised the impact on the current screening and crushing operations.

The new plant was designed to fit into the corner of their existing site and fully utilise an area of the site that could not be used for anything else.





Washing & Screening featured story

A successful installation:

After a successful installation and commissioning the new wash plant is currently processing a variety of inert recyclable aggregates and producing clean fine sand, coarse sand, and 10mm, 20mm and 40mm aggregate.

In addition, a full water treatment plant has been incorporated with a filter press to recycle up to 95% of the water and produce a dry filter cake.

Tyrone T-Scrub 1100 wash plant:

Designed to wash and thoroughly clean the most difficult recycled aggregates this machine can process up to 70tph and produce three washed aggregates. The sand is pumped to the T-Sand 60 for further classification. It is double washed through hydro cyclones to remove all the -5mm trash and silt fraction and split into fine sand and coarse sand. With a robust

This will allow us to recover a far greater percentage of materials from the waste, working towards wrap quality protocols for the various fractions of material which are produced from the wash plant, and subsequently reduce the proportion of material we send to landfill."



design and incomparable access, cost of ownership is reduced, and plant utilisation is maximised.

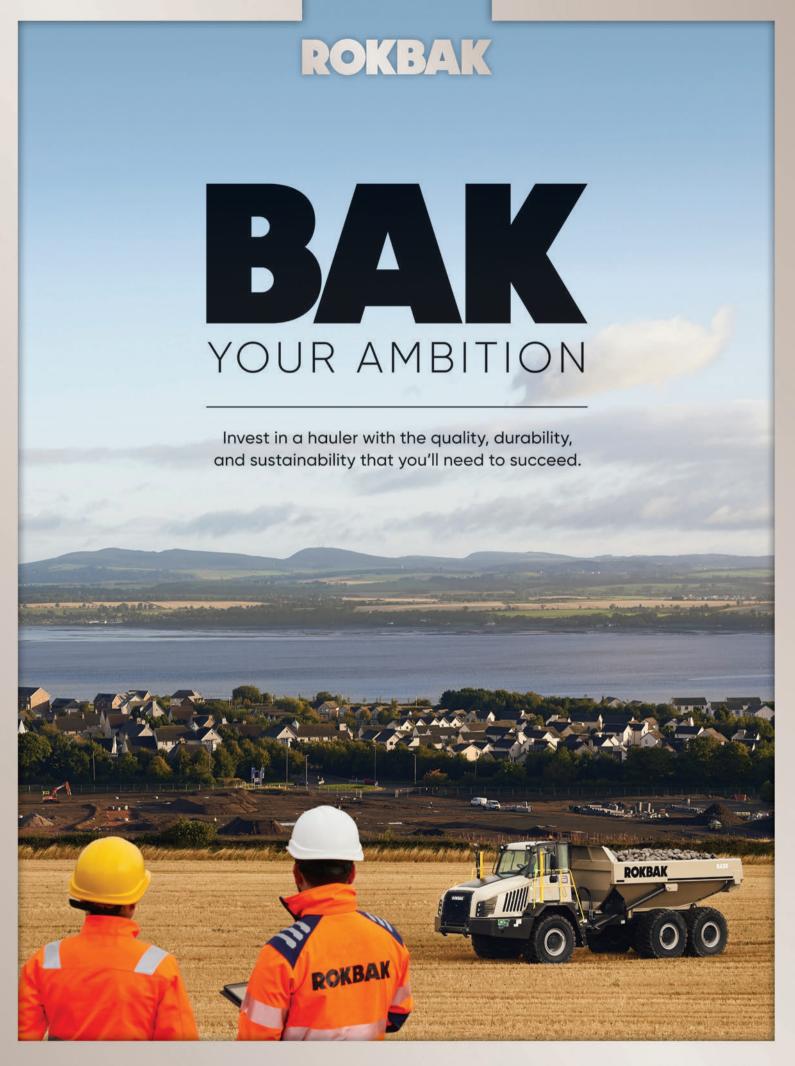
At the ECRA operation the +5mm trash is floated out the back of the T-Scrub logwasher and the -5mm trash is removed on a vibrating screen prior to the water treatment plant.



The plant layout includes extensive walkways for operator maintenance and servicing.

Paul Waters - MD of ECRA, commented, "We are very proud of what we have achieved here with Tyrone International. We immediately started to see the benefits of the new wash plant as soon as it started.





In this issue

| FEATURED AGGREGATE WASHING STORY | 3 |
|--|----|
| FEATURED COVER AGGREGATE WASHING STORY | 8 |
| NEWS | 12 |
| | |
| AGGREGATE WASHING & SCREENING | 20 |
| RECYCLING | 31 |
| QUARRYING | 41 |
| BULK HANDLING | 54 |



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Advertising Enquiries: +44 (0)114 3830243

Publisher John Vincent

Editorial & Marketing Director **John Edwards** 07525 921714 john@hub-4.com

Media Manager **Sophie Morgan** sophie.morgan@hub-4.com

Graphic Designer

Jon Toft

Director Sue Vincent

Associate Director Ash Young

Welcome to issue 85

Welcome to our second edition of 2024 - issue 85.

In this issue the team at Hub-4 present you with another bumper edition reporting on the latest news from the Quarrying/Recycling & Bulk Handling Industries, including a spotlight on Aggregate Washing & Screening.

This year the Hub-4 magazine with have extra circulation in two issues for extra exhibition distribution — Hillhead & RWM.

Onwards into 2024:

This year the Hub-4 magazine with have extra circulation in two issues for extra exhibition distribution — Hillhead & RWM.

If you're starting to look at marketing in 2024 our new media file with feature list can be found here, either PDF download or page flip version:

https://hub-4.com/pages/advertise-with-us

Electronic advertising is also available on the website and on the weekly enewsletter which is distributed to our readers which is on-line here: https://hub-4.com/pages/newsletter

Our increasingly popular social media packages are also available across all our Twitter, Facebook & LinkedIn pages all of which can be linked with electronic web and e-newsletter advertising — why not enquire about our extremely competitive packages.

Equally important is our free weekly e-newsletter which is distributed to our readers and can be found on-line here:

https://hub-4.com/pages/newsletter

Finally, our third edition of 2024 will focus on the **Hillhead Exhbition preview & Material Handlers in the Waste Industry** and I welcome any editorial contributions for this issue.

John Edwards

Editor

MAY-JUNE 24



HILLHEAD PREVIEW [extra circulation]

A look at some of the

leading companies exhibiting at

this bi-annual show for the Quarrying Industry.

RECYCLING -

MATERIAL HANDLERS IN THE WASTE INDUSTRY

METAL RECYCLING IN THE UK.

Editorial copy deadline - 14th May 2024 Advert copy deadline - 21st May 2024



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Published six times a year.

Daniel Charles Aggregates invest in a PowerX Recycled Washing Plant & Water Treatment System

Daniel Charles Construction Ltd was established in 2005 as a traditional style construction company with the aim of becoming the clients' first choice. Since then, the business has gone from strength to strength with Daniel Charles Surveys added in 2007 and the acquisition of Len Kirk Plant Hire in 2021, now known as Daniel Charles Aggregates (DCA).

Operating from their head office at Dunholme, along with Kirks Yard at Whisby Road, Lincoln and Kirks Quarry at Dunston, they have amassed a dedicated and skilled workforce encompassing Plant & Quarry Operatives, Groundworkers, Site Managers, Health and Safety Manager, Contract Managers, Mechanics, Engineers, Surveyors and Head Office staff.

Investment:

Recently DCA have invested in a new Recycled Washing Plant & Water Treatment System which after the usual contract process was awarded to PowerX Equipment. Founded by industry specialists with decades of experience in this market PowerX Equipment are recognised as a market leader and the next generation in aggregate and mineral processing.

This new plant was installed and commissioned in 2023 at Kirks Quarry, Dunston which is situated south-east of Lincoln.

Kirks quarry has extensive reserves of limestone and a few hundred thousand tons of processed C&D waste where the fines have been removed from the product to create a saleable topsoil. [All material is delivered from the companies own C&D sites in the area along with a small waste transfer station in Lincoln].

Prior to the installation of the plant multiple sample analyses were taken of the inert C&D stockpiled waste after it had passed through a Warrior and designated the middle product. The limestone fines coming off the crushing train were also analysed to understand how much of a benefit washing this by-product would have on the process.

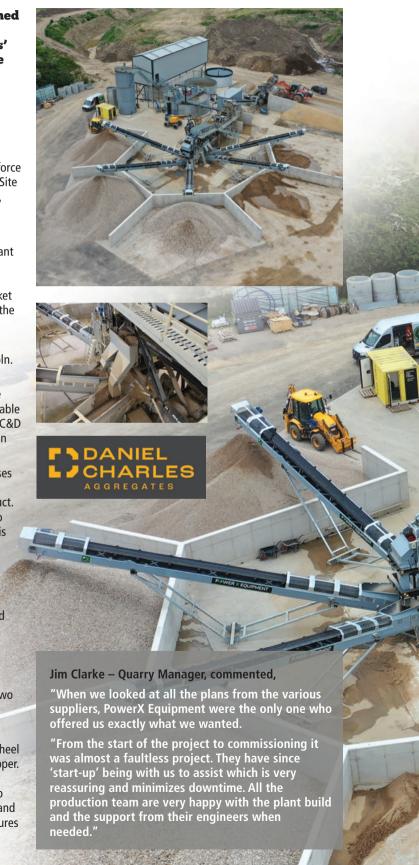
Washing Plant

The plant at Kirks Quarry is centred around an all-electric washing plant, integrating heavy attrition with sizing, lightweight contaminants removal and hydro cyclone based fines recovery on a single highly portable chassis.

Primarily designed for the processing of construction and demolition waste but equally suited to virgin material applications. This recycled aggregate processing plant is capable of producing four grades of aggregate and up to two grades of sand at up to 70tph.

Plant process:

After pre-screening on site, material is then delivered by wheel loader into a 7.5m³ double-deck, live head, heavy-duty hopper. Material is then fed up a 16-metre inclined conveyor and under a ferrous metal overband magnet and delivered onto the Washing Plant where the material is rinsed, scrubbed, and sized through a 2.4m x 1.2m single-deck rinser, which features six isolated spray bars.



Washing & Screening cover story

Material then passes onto a secondary feed conveyor under a second overband magnet into the twin-shaft log washer with the blades conveying the material from the feed end of the scrub.

Any organics such as roots are floated off to be dewatered over a $1.8m \times 0.6m$ trash screen [An angle adjustment on the log washer allows increased material retention and removal of trash].

Underflow from the trash screen is received in a catch box under the screen and then gravity fed to the sump tank under the hull. Any fines off the back end of the log washer are sent to the two rubber lined 375mm cyclones via two rubber lined 125/100 pumps. The 0-2mm, soft and 0-5mm, sharp sand are then dewatered and stockpiled.

Scrubbed aggregate then exits the main discharge of the log washer onto a 2.4m x 1.2m double-deck sizing screen which splits the required products of 10mm, 20mm and 20-50mm aggregate which are then stockpiled by 3 x 15m channel frame conveyors.

Luke Talbot - MD of PowerX, commented,

"Our philosophy at PowerX Equipment is that we are committed to supporting DCC long after their plant installation. We understand that the key to their success is having reliable, fully operational equipment to keep productivity flowing and downtime to an absolute minimum.

"This is the philosophy why we have invested in our Spares and Service Division to ensure we not only have a wide range of parts, but also an expert team of fully qualified and experienced engineers available to help our customers with advice, maintenance, and fitting in a timely manner."



Washing & Screening cover story

The Water Treatment Plant:

The fully integrated water treatment plant at Kirks Quarry, consists of a 10mØ thickener which has a 230m³ volume capacity with a low flocculent consumption. The plant has the facility to dose, flocculants, coagulants, and anti-foaming polymers, to facilitate the processing of more difficult applications.

An 8mØ clarified water tank provides a 125m³ capacity with a ground-level technical room housing the flocculant dosing unit.

95% of the water used in the washing process can be re-used. The dirty water is collected in a sump before being treated and allowed to settle in the thickener. The thickened sludge is then sent to a buffer tank to control the density of the sludge prior to being compressed within the 1500mm x 1500mm x 180 plate filter press enabling the last remaining water to be sent back into the system. DCA are then able to use the 30mm filter cakes that are expelled from the filter press.

The filter press is housed in a bespoke building with walkways around all sides. It operates up to 21 bar feed pressure and features a rapid plate opening and closing system with an automatic shaker system and electric control panel complete with PLC.

The water treatment plant at Kirks Quarry receives the "dirty water" from the washing process with a double target: Clarifying the water to be able to recycle it and concentrate the sludge.

Flocculation principle:

Flocculation consists in mixing the "dirty water" (i.e. water + dry solids in suspension) with a synthetic polymer having a high molecular weight forming a long macromolecular chain (flocculent). This polymer, characterized by its superficial electric tension, acts on the surface tension of the fines to gather them and form "flocs" which could then have an acceptable settling speed.

Preparation and dosing of the flocculant: DOSAFLOC:

The flocculant is delivered as a white powder soluble in water and producing a highly viscous solution. Its preparation at a concentration rate between 2 and 4 g/l is made in 2 stages:

- A first dilution of the flocculant delivered from a powder hopper by means of an Archimedes screw distributor and homogenization in a primary tank fitted with a low-speed agitator.
- Transfer into a second tank (for maturation) before injection and dosing of the flocculent solution is made through a pump fitted with a frequency variator.

Conditioning of the dirty water:

The "dirty water" coming from the cyclone overflow is mixed with the flocculant solution prepared by the Dosafloc. An

additional and final dilution of the flocculant solution through cyclonic spreaders enables to optimize this mixing in the flocculation box fitted with baffle plates. Once prepared the water is directed by gravity into the central feed shaft.

Flocculation Controller:

Sequentially, a sample of flocculated water is taken from the central shaft and the settling speed is measured by the Controlfloc, a glass tube fitted with optical cells. This information is then transferred to the PLC which automatically adjusts the flocculant dosing pump's flow (according to the settings entered during the commissioning stage) in order to optimize the flocculation efficiency and consumption.

After each measure, the glass tube is automatically rinsed. Samples are taken with a vacuum system to avoid using a pump which would distort the measure by breaking the flocs. The optic cells also enable the ability to determine the turbidity of the recycled water and therefore to adjust the coagulant dosing.

Sludge concentration and evacuation:

The sludge settles quickly at the bottom of the 10m diameter thickener where it is concentrated and gathered into the pumping cone thanks to the slow movement of the scraper.

The sludge is then drawn by a pump located alongside the thickener tank (thus offering an easy access for maintenance operation). The choice of the most suitable sludge pump is depending on the requirements in terms of flows and final consistency, as well as the site constraints (pumping distance, geometric head...)

The sludge pumping cycles are controlled according to the measure of the resisting torque applied on the scraper interpreted by the PLC. This gives a reliable information about the quantity and consistency of the sludge at the bottom of the thickener and also offers a safety factor in case of "building up" inside the thickener. If an overload is detected by the invertor, the scraper is automatically and fully lifted to its upper position and then progressively lowered down to dilute the sludge.

Transfer and pumping of recycled waters:

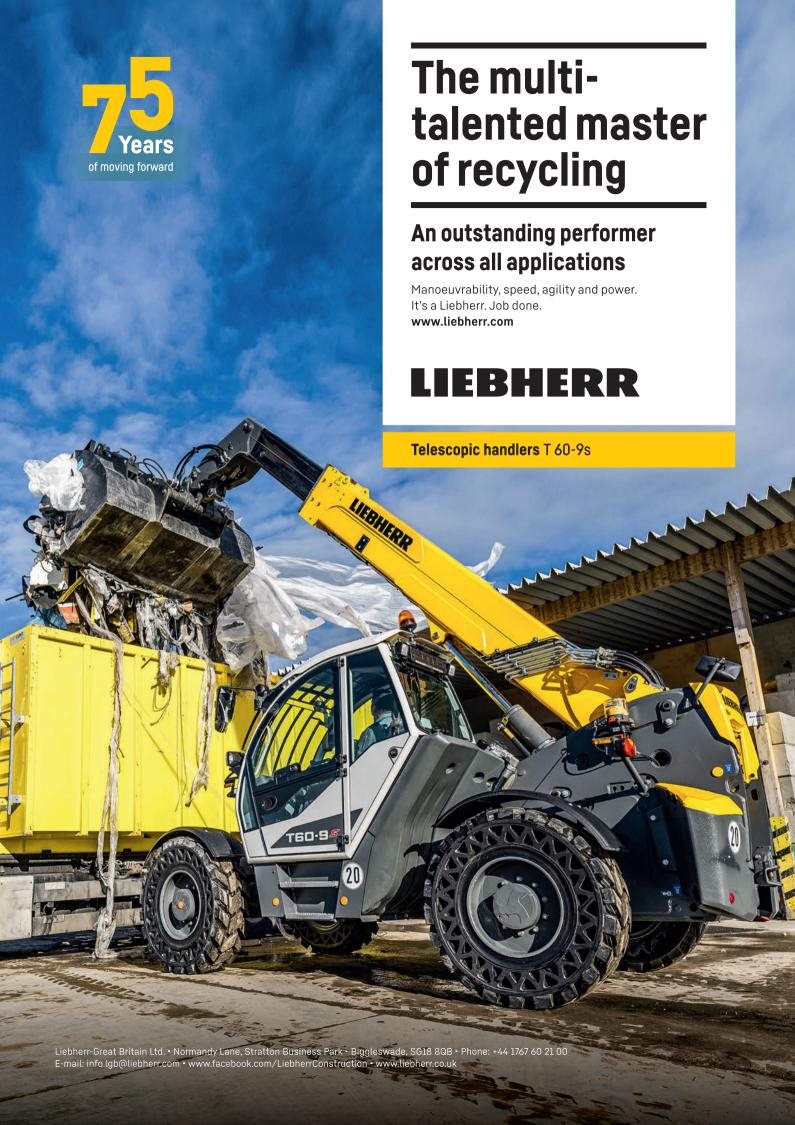
The recycled overflowing waters are discharged in the recycled water storage tank, where the main water pump installed alongside the tank sends it back the washing plant.

An addition of the fresh water is necessary to compensate the losses due to the residual humidity of the dewatered sand and aggregate.

Electrics:

The whole plant is controlled by PLC with touch screen to display the synoptic and to give access to the setting. The main switch and control panel is located inside the technical room.





News



Screening Precision and Efficiency

Known for their high production capacity, efficiency, and durability, the Finlay range of scalping screens offer robust and versatile solutions for a range of applications from fine screening to heavy scalping. The Finlay 890 is a welcome addition to the range, with the ability to process a high tonnage throughput of up to 700 tph / 771 US tph, depending on mesh sizes and material type. The aggressive screen box is engineered to deliver a high-quality screened product in secondary screening applications such as aggregates, topsoil, construction, and demolition (C&D) waste, biomass, compost materials, overburden, foundry waste and processed ores and minerals. It has a modular configuration with a 6.1m x 1.8m (20' x 6') top deck and 5.6m x 1.8m (18' x 6') bottom deck screen and offers variety of media options including abrasion resistant punched plate, bofor bars, tines, and a selection of heavy-duty mesh sizes. Equipped with a hydraulic raise screen box function, the Finlay 890 has convenient access to the bottom deck media for maintenance or replacement.

The Finlay 890 is an aggressive, heavy duty 2-deck scalping screener with a comprehensive variety of screen box media options and a variable screen angle

Versatile Features and Rapid Mobility

The discharge conveyors have individual variable speed controls, granting operators the precision to tailor speeds for specific applications. Adaptability is further enhanced with the capability to interchange both side conveyors in the field,

either on the same or opposite sides. Additionally, the Finlay 890 model can transition into a two-way split configuration, effectively ejecting oversized materials from both the top and bottom deck.

The fully self-contained plant can be hydraulically folded and ready for transport in less than 30 minutes, making it the ideal machine for large scale contract screening projects where a highly productive and dependable screen is paramount.

The Finlay 890 is available with hybrid technology consisting of on-board electrical motors permitting the flexibility to run the plant from an outside power supply or standard on-board engine.

Alan Witherow, Product & Applications Manager at Finlay, stated, "We are excited to announce the production of our first 890 scalping screen. The Finlay 890 boasts advanced features and capabilities for operators seeking high-performance screening solutions. Its versatility ensures suitability across a wide range of applications, reinforcing Finlay's commitment to engineering excellence and our dedication to providing our customers with cutting-edge equipment that meets and exceeds their expectations."

For more information about the Finlay 890 and other innovative products, please visit www.terex.com/finlay/en/product/heavy-duty-screens/890

Built to Last: Powerscreen Unveils New Global Headquarters



Sean Loughran, Powerscreen Business Line Director & General Manager of Terex Dungannon with Northern Ireland First Minister Michelle O'Neill MLA at the official ribbon cutting ceremony of Powerscreen's new headquarters



Sean Loughran and First Minister Michelle O'Neill in front of a Powerscreen Chieftain 1700X on display at the official ribbon cutting ceremony.



Sean Loughran, Powerscreen Business Line Director & General Manager of Terex Dungannon with Northern Ireland First Minister Michelle O'Neill MLA at the official ribbon cutting ceremony of Powerscreen's new headquarters



Dominic Molloy, Chair of Mid Ulster Council, Sean Loughran, Powerscreen Business Line Director & General Manager of Terex Dungannon, First Minister Michelle O'Neill, Francie Molloy, Sinn Fein and Conor Kennedy, Operations Director at Terex Dungannon in front of the MK1, one of Powerscreen's first machines.

Powerscreen®, leading provider of mobile crushing, screening, and conveying equipment, today unveiled its new global headquarters in Dungannon, Co. Tyrone. Under the theme 'Built to Last', the revitalised facility was revealed to local stakeholders including First Minister Michelle O'Neill at an official ribbon cutting ceremony and celebration.

Speaking following a tour of the new facility, First Minister of Northern Ireland Michelle O'Neill said: "Your new headquarters are really impressive. It's a physical demonstration of your success, and a welcome statement of your future ambition. Your growth on this site since the original Powerscreen days is a testament to entrepreneurial spirit and resilience. You have been instrumental in growing an engineering cluster here. You have set the standard in terms of quality and product development, and you have been pioneers in research, development and innovation."

Sean Loughran, Powerscreen Business Line Director & General Manager said ""As pioneers in mobile crushing and screening, we've always believed in building not just equipment, but legacies. As Powerscreen approaches 60 years of operating, we understand the value of durability and innovation. Our new headquarters isn't just bricks and mortar; it's a testament to our commitment to lasting excellence. Built to Last isn't just a strapline for us; it's a promise to our team members, our customers, and our community—a promise of enduring quality, reliability, and progress."

The new headquarters on the Coalisland road includes a new 8,500 sq ft state-of-the-art office space, a modern wellness centre to promote team member wellbeing, and a number of

energy saving enhancements aimed at reducing carbon emissions. The unveiling also represents the latest in a series of strategic investments by Terex to modernise its operations and bringing its facilities into the digital age, such as the integration of robotic welding and automation systems to enhance efficiency and precision in manufacturing processes.

Additionally, the implementation of job tracking, and digital shop floor information systems has streamlined workflow management, while data capture technologies leverage valuable insights for continuous improvement and material management systems to optimise inventory levels and reduce waste.

Peter Doherty, Maintenance & Facilities Manager at Terex Dungannon said "The main building has been reimagined to create a state-of-the-art office space that reflects Powerscreen's standing as a global market leader. As well as extending the footprint, the traditional cellular office accommodation has been replaced with open plan spaces that have been carefully arranged around modern working arrangements and informal collaboration areas."

Doherty continues "Additionally, the building fabric has been upgraded to improve thermal efficiency along with the use of low energy fittings and products - reducing overall energy consumption in line with global Terex policy and targets to implement sustainable practices that minimises the environmental impact of our operations."

Concluding, the First Minister said: "It is companies like Terex that put us (Northern Ireland) on the map, and we are fortunate that you are located here. Your employment of thousands of people across the region is vital and we are proud to have you as a key part of the community."

Conquer the Toughest of Feed Material with the EDGE SCREENPRO S18

Transform even the toughest feed material into profit with the EDGE SCREENPRO S18 heavy duty, tracked scalping Screen. EDGE Innovate, a global leader in the design and distribution of a range of equipment used in the quarrying, port handling and recycling industries has expanded it's offering with a product that delivers high production rates and precision screening.

Impressive design features include, a low-level feed hopper, 2 or 3 way split configuration, hydraulic folding discharge conveyors to facilitate the quick transition from operation to transport and a fully integrated power unit with large service access. A user-friendly control system with sequential start/stop functionality provides exceptional operational performance and unit safety.



News



Offering the largest hopper capacity in its class, the EDGE SCREENPRO S18 encompasses a 1400mm (55") wide, variable speed feeder with forward / reverse functionality. A large feed opening ensures optimum flow of material to the scalping screen. EDGE's intelligent load management system constantly monitors conveyor load pressures and regulates feeder speed resulting in superior uptime by eliminating material overload and ensures optimum screening production at any given time. Hydraulic folding hopper extensions allow for side loading whilst a folding hopper rear door provides even further loading flexibility.

At the heart of the SCREENPRO S18 is an EDGE designed high-stroke scalping screen with a screening area of up to 18.3m² (21.7yds²) and a wide variable working angle to suit an array of applications. The aggressive high stroke action results in superior material separation and a generous screening area ensures precision fines separation. To ensure minimal downtime, the screenbox encompasses hydraulic lift-up functionality for a quick and efficient mesh exchange process, supported by full access walkways on both sides of the screen.

Customers can choose from a wide range of screen media options including woven mesh, punch plate, finger screens and bofor (grizzly) decks to achieve a variety of final grain sizes and to process different feed material.

Adding to the versatility of this new SCREENPRO range is its ability to interchange the highly aggressive scalping screen with EDGE Innovate's award winning flip flow screen. This flexibility combined with numerous screen media options and configurations allows the EDGE SCREENPRO S18 to process a wide range of materials and to tackle screening applications that other conventional screens cannot, such as incinerator slag or wet, damp and sticky material.

The side discharge conveyors offer market leading belt widths and discharge heights whilst set up takes a matter of minutes. Thanks to an intuitive design, the plant is fully customizable both in the field and from the factory with side conveyors that can be reversed or discharged on the same side or converted to a two-way split without any additional parts required. Unlike competing models, the SCREENPRO S18 can be road transported in these set up modes.

To meet the demands of recycling applications, the SCREENPRO S18 can be equipped with both over-band magnets and magnetic head drums for the extraction and recovery of ferrous metals.

The oversize discharge conveyor features a heavy duty 1600mm (63"), chevron belt as standard with a combination of impact bars and rollers absorbing the impact from loading material, thus prolonging the life of the conveyor belt. The oversize discharge conveyor can be lowered to 5° to provide superior access to the lower screen deck and aids in the screen media exchange process.

The EDGE SCREENPRO S18 also offers added remote functionality for improved operator efficiency and safety. All major functions on the S18 including tracking, feed conveyor speed adjustment, sequential start up and hopper jacklegs can be remotely operated from a safe distance of up to 100m or in the comfort of the operator's cabin.

Powered by either a Caterpillar or Cummins Tier 4 Final / Stage V ACERT engine ensures the SCREENPRO S18 drive system provides the operator with a reliably, durable and fuel efficient screening solution. An electric hybrid option further enhances cost savings and environmental benefits, combining the advantages of an electric power unit with traditional diesel/hydraulic power. Utilising a small onboard diesel engine for tracking and set up, operators can then connect to an external electricity supply once the machine is in position.

Tom Connolly, EDGE Innovate Global Sales Manager commented "the EDGE SCREENPRO S18 is a highly functional, reliable, efficient and easy to operate versatile machine that perfectly complements our other products and will serve to further raise and enhance the profile of the EDGE Innovate brand in the years ahead."

For more information on EDGE's new mobile scalper screen, please visit; www.edgeinnovate.com.

Superior Ferrous & Nonferrous Recovery



Eriez' metal separation equipment provides best-in-class metal recovery rates. For example, the Shred1® Ballistic Separator improves ferrous processing leading to better recovery and higher-grade product while delivering it at a lower cost per ton.

INNOVATION Improving Metal Recovery.

Ferrous Recovery

• P-Rex® Scrap Drums.... Highest recovery rates of ferrous metals

• Shred1® Ballistic Separators... Produces a premium low copper fraction

• Dynamic Pulley Separator...... Head Pulley becomes a self-cleaning magnet

• PokerSort®..... Extracts pokers from the shred

Nonferrous Recovery

• RevX-E® Eddy Currents..... Superior strength and durable construction • UHF Eddy Current Recovers NF fines & bare copper wire from ASR waste • Stainless Steel Separator...... Extracts SS fines from Zurik • FinesSort® Fe and NF fines recovery • ProSort II Airless Recovery..... Low cost, low maintenance

metal recovery

Transforming Waste: Thompsons of Prudhoe Create Newcastle's Urban Quarry, Reducing Landfill Impact

Thompsons of Prudhoe, a respected name in Demolition, Deconstruction, and Site Reclamation, is spearheading a ground-breaking project in partnership with Blue Machinery (Scotland) Ltd and Terex Washing Systems. The site is set to unveil a state-of-theart C&D waste washing plant featuring a bespoke 'Full Feeder to Filterpress' washing solution.

With the installation well underway, this pioneering plant represents a significant leap forward in sustainable waste management. Thompsons of Prudhoe, a family-owned business with a rich history spanning over 75 years, remains dedicated to innovation and environmental responsibility.

The advanced facility boasts a comprehensive loop crushing circuit, ensuring an impressive 85% water recovery rate. By leveraging this cutting-edge technology, the plant is poised to become Newcastle's premier urban quarry, diverting an estimated 300,000 tons of aggregate from landfills annually





Metso distributor, McHale Plant Sales 'looks forward' to Scotplant & Hillhead debuts

With ScotPlant and Hillhead looming on the horizon, exhibitors are hard at work planning their displays, arranging staffing, and booking machine transport and hotel accommodation.



Looking forward to the happy and profitable engagement with customers and visitors that both events offer, one newcomer to the UK exhibition scene is first-time exhibitor at both events, McHale Plant



Nearing the completion of their first year as UK distributors for Metso Lokotrack crushers and screening equipment, McHale personnel at all levels are expressing themselves as



'overjoyed' with the welcome they have a received from customers, quarry owners and aggregates producers generally since their appointment by Metso took effect last April.

Speaking to HUB-4, their Business Development Director, Darragh O'Driscoll said: "a sentiment we will be keen to communicate to customers at both events is on our delight over the welcome we have received and with the progress we have been able to make in all areas, not least on the customer service and aftersales fronts".

Machine wise, their focus at ScotPlant and Hillhead will fall on Metso's diverse Lokotrack model choice, with their featured unit likely to be the LT116 jaw crusher. Track mounted and easily transportable within the production site, the LT116 unit is a versatile high capacity primary crushing unit that McHale says 'is easy to transport and delivers productivity and reliability at the worksite'.

Another major part of the McHale story will relate to the Metso mobile screens offering: a five-strong track-mounted line-up under the Lokotrack ST offering and a seven-strong choice of Nordtrack 'S' mobile units.

At Hillhead, it is hoped that arrangements can be completed in time to present what their marketing manager, Sean Ryan says will be "something completely new from the Metso portfolio".

"With a satisfactory number of new sales recorded, added to those for which they now have aftersales responsibility, we look forward to briefing visitors on developments at our Tamworth and Edinburgh locations, particularly our appointment of additional Field Service Engineers and other newcomers on the sales and aftersales fronts," O'Driscoll added.

AUSA and Warwick Ward join forces to distribute the brand throughout the North East, Yorkshire and South East regions of England



AUSA, a manufacturer of compact allterrain industrial vehicles, has signed an agreement with Warwick Ward, one of the largest suppliers of earthmoving and waste recycling equipment, and spare parts in Europe. The agreement encompasses the distribution of AUSA dumpers, rough terrain forklifts, and compact telehandlers throughout the North East, Yorkshire and South East regions of England.

"This new agreement will allow us to penetrate new sectors where our products have great potential," says Russell Perrett, Country Manager of AUSA. "Warwick Ward has long and successful experience in the recycling and scrap metal industry. It is a well-recognised company in the UK for its high standards of customer support and industry expertise, with longstanding relationships that highlight their commitment to excellence."

"AUSA offers a range of compact products that perfectly complement our portfolio," states Simon Causier, Commercial Director of Warwick Ward (machinery) Ltd. "Their innovative vision has allowed them to recently update their models, turning them into even more reliable and advanced vehicles that we are confident will add significant value in the recycling and construction sectors. Specifically, we see the 2.5 tonne capacity forklift, the C251H, as a perfect machine for handling heavy loads quickly and efficiently."

With this agreement, AUSA strengthens its dealer network in the United Kingdom, where it has had a presence since 1988, and aims to further consolidate the brand in the coming years. Meanwhile, Warwick Ward will have different units from the three AUSA product ranges at each of its four commercial locations.

Triangle Tyre at Intermat 2024, Paris

Triangle Tyre will participate to Intermat 2024. fair, the must-attend event for the building and civil engineering sector, that will be held in Paris, France, on April 24-27, 2024.

Low-carbon emissions, innovation, energy, new equations and CSR commitments will be the key themes of 2024 event.

1.000 exhibitors, visitors from all over the world and 150 journalists will take part to the 4-day event to fulfil the construction projects of tomorrow.

Triangle Tyre, 4th manufacturer worldwide in the OTR Radial tire segment, due to its excellent product line-up and efficient service network across Europe, has gained great attention and recognition in the market.

Thanks to its continuous engagement in product and marketing activities, Triangle will proudly attend the show for the first time on a 90 sqm booth, displaying 6 of its best-selling products.

Triangle will feature a range of sizes and products for different types of Off-The-Road equipment, operating in several applications: surface and underground mines, quarries and construction sites.

The segment of Articulated Dump Truck will be represented by the TB598S E4 in the size 29.5R25, versatile tire with nondirectional multi-usage tread, ideal product for muddy and rocky surfaces and highly suitable in a wide range of applications.

For Front-End Loaders, Triangle will present the TL578S E4/L4 ****/*** in size 35/65R33 featuring maximum load capacity; the tire can be used on Block Handler Loaders to move extremely heavy loads on abrasive and aggressive surfaces and in underground transportation.

The L5 range is represented through the TL538S+ and TL 559S+ patterns, in sizes 20.5R25 and 23.5R25, massive and extremely deep treads with wear resistant compounds, confirming the leadership of Triangle in the segment.



The range meets the challenges and requirements of an L5 Loader tire in the harshest environments.

The Rigid Dump truck segment will be covered by two products: the TB577A E4, in the size 24.00R35, latest Triangle's product with a 3-star rating casing and the TB599A E4, 27.00R49, ideal tire for 100-ton payload equipment.

Both tires offer 6 options of tread compound, to improve the TKPH (ton kilometers per hour) performance, allowing cooler running and preventing overheating.

Triangle provides tires and services for many of the world's best machineries' manufacturers and thanks to its extensive range, its products can be used for multiple applications such as mining, guarries, construction, port and industrial.

Caterpillar, Sany, Hyundai, Komatsu, Liebherr, Zoomlion, Terex, Hitachi, Doosan, CNH and many others have chosen Triangle tires for their original equipment.

Caterpillar, the world's leading manufacturer of construction and mining equipment, has also awarded Triangle with the "Supplier Excellence Recognition" consecutively from 2017 to 2022.

Triangle Tyre will continue to innovate and develop its Off-The-Road range adhering to strict and high-quality standards in order to meet the market's demand and globally support its customers and end-users.





Allstone Speedy Skips have been providing a trusted service to the Gloucestershire region for over 40 years. As a family run business, and one of the largest. waste management businesses in the region they supply quality products and services in an efficient, reliable, and sustainable manner.

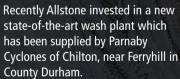
With services ranging from quarried and recycled aggregate supply, muck away, skip hire, grab hire and trade waste disposal, Allstone can provide a complete solution for a construction project.

Their ethos of creating a true circular economy by eliminating unnecessary waste, conserving natural resources, and supporting your sustainability goals, all through the power of recycling, is achieved on a daily basis.



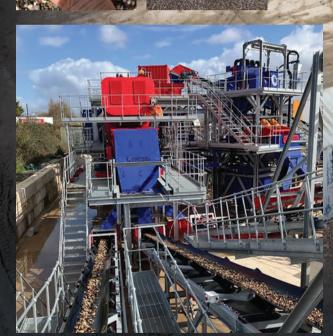
Investment:

As an environmentally conscious family business, Allstone are continually investing for the future to help divert waste to landfill and provide a valuable service to the local community and support a Circular Economy.



Parnaby Cyclones provided a washing and separation solution for Allstone which had a number of challenging design constraints as well as a comprehensive specification.

Ian Parnaby – Project Manager, commented "Our sales and design team worked with Allstone to provide a bespoke proposal to achieve their requirements and to suit the site layout. Maintenance access was especially important for the Allstone team yet, on a very busy site, the available area for the system was very limited. Nevertheless, our team collaborated with them to overcome the challenging site layout while still providing the critical access requirements and output products."





Aggregate Washing & Screening

challenging sources. We can integrate density separation processes into the overall solution for coarse and fine materials allowing heavier contamination to be removed such as dense plastics, saturated organics, gypsum, and wood.

"For Allstone we integrated our density separation cyclone providing a consistent high-quality sand product. Additionally, the system can provide high levels of fines recovery to increase saleable products and reduce consumables in the effluent treatment circuit."

Ocyclone!



Equipment supply:

Parnaby supplied a twin shaft coarse material washer, with 3 stages of sand recovery and cleaning complete with a closedcircuit effluent treatment including a plate filter press. This system produces up to 5 cleaned products of which 3 are graded aggregates and up to 2 grades of sand products.

The coarse material washer was chosen rather than the standard logwasher as it provides more material-on-material attrition so reducing the generation of fines, with the additional benefit of that it provides a higher compatible material size if this is required in the future.

lan, continued, "We always look to provide our clients with unique differentiators which provides much more flexibility with our systems. This allows Allstone to adapt to the current market and opens the equipment to accept a wider range of materials feed so that Allstone can extract value from more



Parnaby philosophy:

Parnaby Cyclones have pride in their customer service and support, as a family business it is their core principle to create a working partnership with their clients helping them achieve their goals and provide high quality, reliable products to safeguard their future. Their experienced team can provide excellent support for maintenance and provide competitive spares at a rapid response time if required.

The new state-of-the-art washing plant is now fully operational and producing three coarse aggregates - 4 x 10mm gravel, 10 x 20mm gravel and 20 x40mm type 2 and two sands, 0 x 4mm grit sand and 0 x 2mm cable sand and 3% [3tph] trommel fines, <20mm [skip fines].

Rowan Elliott - MD, Allstone Speedy Skips, commented, "Partnering with Parnaby Cyclones on this project was absolutely the right decision for the Allstone business.

"Through design, construction and commissioning all the way through to our current operational state, Parnaby has been with us on every step of the journey.

"Reducing waste, conserving natural resources, and driving the local circular economy is at the heart of our company vision, and the quality and performance of the Parnaby equipment is enabling us to deliver this with confidence."



TRANSFORMING WASTE

Complete Solutions For Constructing A Sustainable Future

McLanahan offers industry-leading solutions for processing virgin aggregate as well as recycling construction and demolition waste. Offering complete systems from crushing and screening through tailings and water management, McLanahan helps producers meet industry demand by producing clean, in-spec products from both virgin aggregate and recycled aggregate. Our solutions offer producers the ability to recover process water for reuse, reduce freshwater requirements and further contribute to overall site sustainability.

Increase production, efficiencies and profit while working towards a more sustainable future with McLanahan.



WASHING // SCREENING // SCRUBBING // CLASSIFYING // CRUSHING // FEEDING // TAILINGS & WATER MANAGEMENT

Product Highlight: WS 85 Modular Screen

Here at TEMA ISENMANN, all of our signature products are made with open-cast polyurethane. This open-cast process helps to provide cures that enhance the linking of the polyurethane molecules at a very high temperature.

These components are more labour intensive to manufacture, but they help to provide a greater range of properties which result in overall better performance, wear, and life, along with significant savings.



Of our open-cast polyurethane products, perhaps our most utilised is the WS 85 Modular Screen. These screen panels are high quality, durable for quarrying, and made with the best open cast urethane found anywhere in the world.

WS 85's are made and available in a range of durometers and structural designs. All of these products can be custom built and structurally designed to meet any and all application needs.

All screening modules are built for both fine wet and dry screening needs, as well as primary scalping, and anything in between. Our WS 85 exclusive staggered pattern screens are an alternative option that can be used for increased efficiency.



"TEMA ISENMANN WS 85 screen modules are plant proven to be the best!"

The standard for these modular panel systems is 300 x 1000mm and is stocked in large quantities in the UK. The openings in the screens can range from 0.2mm to. 225.0mm, and the modules range from 30 to 100mm thick and can include dams and diverters if needed. This showcases how custom and made to fit YOUR needs TEMA ISENMANN screening items are!

If you are interested in learning more about our WS 85 Modular Screens, getting a quote, or have any questions, reach out to us via email screendecks@tema.co.uk or give us a call on 01327 264 227. We're glad to talk with you more and take pride in providing the highest quality screening media. Remember to Think Yellow!



Enhanced Efficiency and Productivity with Terex Washing Systems at Hoddam Quarry & Concrete Products

Hoddam Quarry & Concrete Products a longstanding family-run business headquartered in Dumfriesshire, Scotland, has been a key player in the building materials and concrete supply industry since its inception in 1958. The company boasts a diverse portfolio of quarry materials and quality-assured ready-mixed

With a commitment to serving a wide range of clients, from large construction firms to individual homeowners, Hoddam Quarry & Concrete Products operates two sand and gravel quarries at Kilblane and Broom, along with a recently inaugurated hard rock quarry at Hazelbank, St. Ann's.

Challenge:

In 2022, Hoddam Quarry & Concrete Products faced the challenge of upgrading their existing wash plant at the Hoddam site. The goal was to enhance efficiency, increase product variety, and streamline operations while maintaining the highest standards of quality in their offerings. The previous wash plant was becoming outdated, leading to inefficiencies in production and limited product options.









Solution:

In partnership with Terex Washing Systems and their local dealer, Blue Machinery (Scotland) Ltd, Hoddam Contracting opted for a wash plant setup featuring the Terex Washing Systems M2100 and FM 120BW. This new installation revolutionized their washing processes, enabling the production of five distinct products: 2mm sand, 4mm sand, 4-10mm aggregate, 10-20mm aggregate, and 20-40mm aggregate, including a specialized type 1 product.

Key Features of the Washing Systems Plant: Terex Washing Systems M2100:

The Terex M2100 is a high-capacity mobile washing unit that offers exceptional flexibility and efficiency. It is designed to work independently or as part of an entire wash plant system.

With its robust construction and easy setup, the M2100 allows for quick deployment and relocation as needed, making it ideal for Hoddam Quarry & Concrete Products dynamic operations.

The machine features a triple deck screenbox with a choice of modular top and middle decks, allowing for the production of various products simultaneously.



Aggregate Washing & Screening

Terex Washing Systems FM 120 Bucket Wheel:

Terex Washing Systems FM 120 Bucket Wheel is a compact and versatile bucket wheel system designed for efficient material classification and washing.

Operating as a single or twin sand plant, the FM 120BW effectively removes silts, slimes, and clays from the final product, ensuring superior quality.

Its modular design and adjustable weirs provide Hoddam Quarry & Concrete Products with the flexibility to adjust product specifications easily.

Benefits of the combined Set-Up:

their products.

Product Versatility: The M2100, in conjunction with the FM 120BW bucket wheel, provides Hoddam Quarry & Concrete Products with the capability to produce a diverse range of products. The M2100's triple deck screenbox and modular design, combined with the FM 120BW's efficient material washing, allow for the simultaneous production of multiple products.

Efficiency and Simplicity: The M2100's easy setup and operation, paired with the FM 120BW's automated processes, streamline Hoddam Quarry & Concrete Products washing operations. This simplicity of operation reduces training time for operators and minimizes downtime.

Reliability and Performance: Both the M2100 and FM 120BW are known for their robust construction and reliable performance. Hoddam Quarry & Concrete Products can depend on these machines to deliver consistent results, ensuring customer satisfaction with the quality of

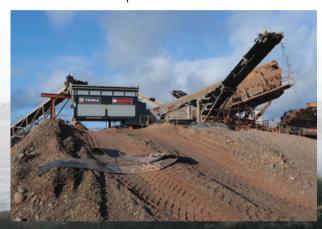
Local Support from Blue Machinery (Scotland) Ltd

Partnering with Blue Machinery (Scotland) Ltd brought numerous advantages to the project:

Proximity: Being local meant that Blue Machinery (Scotland) Ltd could provide swift assistance, whether for routine maintenance or unforeseen technical issues.

Familiarity with Regional Needs: Blue Machinery (Scotland) Ltd team understood the unique requirements of Hoddam Quarry & Concrete Products operations, offering tailored solutions and expert advice.

Efficient Communication: Direct communication channels facilitated guick responses to gueries and ensured minimal downtime for the wash plant.



Customer Testimonial:

"Terex Washing Systems and Blue Machinery (Scotland) Ltd have truly exceeded our expectations with the installation of the M2100 and FM 120BW wash plant at our Broom Quarry. The plant's ability to produce five distinct products has been a game-changer for our operations. We are particularly impressed with the simplicity of the setup and the plant's reliability.

The Terex M2100 and FM 120BW work seamlessly together, providing us with the versatility to meet the demands of our diverse clientele. Having the local support of Blue Machinery (Scotland) Ltd gives us peace of mind, although we haven't needed it yet, thanks to the plant's robust performance. We are so satisfied with the results that we have installed another FM 120BW at one of our additional sites.

Hoddam Quarry & Concrete Products looks forward to a continued partnership with Terex and Blue Machinery (Scotland) Ltd as we focus on delivering top-quality products to our diverse clientele."

Conclusion:

The collaboration between Hoddam Quarry & Concrete Products Terex Washing Systems, and Blue Machinery (Scotland) Ltd' stands as a testament to the success achieved through innovative solutions and local support. The installation of the M2100 and FM 120BW wash plant not only met but exceeded the customer's expectations, enabling increased product variety, streamlined operations, and enhanced efficiency.

As Hoddam Quarry & Concrete Products continues its commitment to quality and sustainability, they can rely on the expertise of Terex Washing Systems and the dedicated support of Blue Machinery (Scotland) Ltd to drive their success into the future.

Goonvean Aggregates increases efficiency, productivity and profitability with McLanahan Wash Plant

Kingdom. Founded in 1931, Goonvean Aggregates serves a wide range of markets, including construction, sports, agriculture and more, with a variety of products, such as subbases and fills, drainage media, graded construction aggregates, mortar and plastering sands and walling stone, to name a few. The company is committed to providing quality products to the marketplace while helping other businesses make a positive contribution to improving environmental sustainability.

Challenge

At its Melbur Quarry in Cornwall, Goonvean Aggregates processes granite-based secondary aggregates. Secondary aggregates are the byproducts of other industrial processes. They are used as fully compliant alternatives to primary aggregates, contributing to sustainable construction practices, the circular economy and overall environmental sustainability.

Goonvean Aggregates receives its feed material — the secondary aggregates — from a supplier. After processing the aggregate, a portion of it would be sent back to the supplier and taken to the landfill, or tip. Since sustainability is extremely important to Goonvean Aggregates, the company wanted a way to be able to utilize all its material without having to send any of it back to the supplier and without having to take any to tip.

Solution

Goonvean Aggregates partnered with McLanahan to design a wash plant with water recycling capabilities to integrate with its existing crushing plant or to be fed independently.

McLanahan supplied an UltraWASH Modular Wash Plant,
UltraSAND Plant and 10m EcoCycle High-Rate Thickener.

The feed material enters the UltraWASH Modular Wash Plant



either directly from the crushing process or directly through a feed hopper. The UltraWASH washes the material and separates it into three aggregate sizes and one double-washed sand product. The UltraSAND Plant washes the residue product, which is then incorporated into one of the other sand products.

The EcoCycle Thickener accepts the waste streams generated from the UltraWASH and UltraSAND Plants and separates the solids from the liquid in the slurry to recover immediately reusable process water. This process water is then reused back in the wash plants for cleaning the aggregate material, further adding to the site's sustainability.

"Since we chose McLanahan as a partner, we've been quite productive in the way we've been able to reutilize and adapt the plant to our bespoke nature for the product we're looking to produce," said Matthew Penny, General Manager of Goonvean Aggregates. "The dialogue and feedback have been very strong and allowed us to end up with a plant that meets our requirements and needs."



Aggregate Washing & Screening



Results

The McLanahan UltraWASH Modular Wash Plant, UltraSAND Plant and EcoCycle High-Rate Thickener are helping Goonvean Aggregates to meet its sustainability goals.

"Our goals as a business are to be more sustainable in every facet of how we operate as a business," Mr. Penny shared. "It's an ongoing process, and we're looking to reduce our carbon footprint. With the McLanahan plant on site, that's allowing us to do so."

In addition to helping Goonvean Aggregates meet its sustainability goals, the McLanahan equipment is also allowing the granite-based secondary aggregate supplier to utilize all its feed material and produce zero waste in the process, eliminating the step of taking material to tip.

"Since we've had the McLanahan plant on site, our productivity and efficiencies have increased. We're able to provide additional products to the local and national market," said Mr. Penny. "As part of this, it means as a company, we're 'zero to tip'. Every part of the product which comes into us, we're able to process and resell as a finished product."



Mr. Penny said that being "zero to tip" has huge environmental impacts for business. Specifically, for Goonvean Aggregates, it means the company can process all its feed material to be more efficient and more productive. It has allowed Goonvean Aggregates to reduce its carbon emissions as well as given the company an additional product offering, increasing profitability.

"It's enhanced our product offering, our productivity, our efficiencies and our profitability," Mr. Penny said about being able to process all the material with the McLanahan wash plants and Thickener.

Overall, Mr. Penny is pleased not only with the McLanahan equipment but with the support Goonvean Aggregates has received from McLanahan throughout the process.

"The support from McLanahan has been excellent and allowed us to proceed and to push on with our strategic goals as a business," Mr. Penny said.



South East Sands and Terex Washing Systems patience rewarded in Lang Lang

South East Sands in Lang Lang is one of the biggest independent sand producers in Victoria.

South East Sands' collaborative partnership with Terex Washing Systems and Terex Jagues has been rewarded after nearly a decade in the making.

Lang Lang is an unassuming place. Located 90 kilometres from Melbourne, it is partly known for being a halfway marker between the state's capital and Phillip Island, the state's penguin capital.

But within the town is South East Sands, one of the area's newest opened businesses and, perhaps, one of its most successful.





By its own measure, South East Sands has become one of Victoria's largest independent sand producers less than a year since it launched.

But behind that success was a nine-year period of planning and development to ensure the operation could be successful and compliant.

Peter Wilson, Business Director, from South East Sands' and Terex Washing Systems sales manager for Australia and New Zealand Ben Willcox share their experience on the journey and the plans for the Victorian producer.

The investors identified Lang Lang, with its unique sand, as a critical area that could serve a Victorian market in desperate need of sand.

"In the industry, there has been a consolidation of ownership between the major players, and a lot of independent quarries have been acquired by larger, vertically integrated, building materials companies," Wilson said.





"We came in as the market was consolidating, demand for the product was increasing, and despite the delays, we had patient investors who believed in this opportunity.

"This sand is unique, very white, but it remains consistent with its gradings and retains the colour.

"It certainly wasn't for the faint-hearted. Only a certain type of investor would have

embarked on something like this, and they backed us in."

There were obstacles to overcome before South East Sands could think about moving sand or commissioning its Terex Washing Systems plant.

The company spent time reshaping the entrance road, sealing it, realigning an intersection, upgrading the power supply, and satisfying numerous local government planning preconditions

At the same time these works were being carried out, Lang Lang experienced its wettest winter in more than 40 years, which held up the construction and commissioning of the processing plant.

"There were times I thought it would never happen because we'd get close to starting, and then the finish line would move again," Wilson said.

"We knew the customers would support us, but now, looking back, it is very satisfying that we got to this point."

SOUTH EAST SANDS

Terex Washing Systems and Terex Jaques have been key supporters of South East Sands.

PARTNERSHIP

As South East Sands got ready to launch in the early stages, it secured Terex Washing Systems as a manufacturer and supplier behind the scenes.

The Terex brand is well-known across the Australian quarrying and aggregates industry. Terex Washing Systems has been researching and developing its product portfolio across six decades to ensure its customers have up-to-date equipment solutions.

Aggregate Washing & Screening

By working with Terex Jaques and Terex Washing Systems, customers gain access to one of Australia's largest and longest-established engineering groups. The group can deliver specialist solutions for turn key plants, known for their reliability and durability.

Wilson recalled spending plenty of time speaking with Terex Washing Systems team of specialists and its engineering base to ensure its machines fit South East Sands' purpose.

"We worked closely with Terex for about six months before we pulled the trigger on production because we were doing something that wasn't straight out of the textbook."

"There's no one-size-fits-all plant that will do everything you want, but what Terex Washing Systems plant does is it gives you the flexibility to tweak it or bolt on other equipment to be flexible.

"Terex Washing Systems equipment has allowed us the scope to fine-tune it to suit us to make the product that we want to make," he said.

South East Sands started with concrete sand from its Terex Washing Systems plant. The modular plant includes an M2100 Tracked Rinser, FM200 Compact, deep cone thickener and flocculant dosing unit that allowed it to get underway with a small footprint.

The compact sand plant works on the principle that a raw dry feed is delivered to a rinsing screen where the material is sized and fluidised using the wash box equipped with a high-pressure spray. The sized sand is then pumped through a cyclone to remove the silts, where it is dewatered over a dewatering screen. The silts are then processed through a thickener, allowing 90 per cent of the plant's water to be recovered for reuse.

Given the outlay for quarries in upfront costs, many often want to scale operations to make a return on investment. South East Sands was no different, and its partnership with Terex Washing Systems was vital.

After working collaboratively with Ben Willcox and the local Terex Jaques team, South East Sands bolted on an FM120 Compact plant to act as a fine sand recovery unit.

"We pride ourselves on working collaboratively with our customers to ensure that our equipment can help them achieve the business outcomes they're looking for."

"Most quarries will look to upscale their business, and by using the FM120 Compact, our solution for South East Sands allows them to achieve this and sets them up for the future."

It provided two significant advantages to the Victorian producer: further quality control over its finished concrete sand production and the creation of fine sand.

The new machine's fine sands opened new opportunities for South East Sands, ranging from garden centres in the retail sector to topdressing Melbourne's golf courses.

"We always knew the original plant was the stepping stone to something bigger," Wilson said.

"Part of the attraction to Terex Washing Systems products was that they were modular, and we could add pieces to flesh out the plant.

"The flexibility has allowed us to see where the market and our customers are going and meet their needs.

"We've been able to fill gaps in the market where supply has gone down, or the resources aren't there anymore, and we've been able to pursue that largely thanks to Terex Washing Systems."

FUTURE PLANS

The partnership between Terex Washing Systems and South East Sands has fuelled a rapid rise in production. The Lang Lang producer has gone from zero customers in May of last year to selling half a million tonnes of sand and a complete range of products 15 months later.

Terex Washing Systems and South East Sands continue working behind the scenes to grow the Lang Lang site's production.

Terex Washing Systems is working with South East Sands on a solution to help stockpile more sand on-site.

"We value our relationship with South East Sands, and our team is excited to collaborate with them to ensure our equipment can help them take the next steps on this journey," Willcox said.

"We've effectively been there since the beginning of the South East Sands business and hope to be there for many more years."

South East Sands expects the solution will help improve product grading and efficiency on-site and for truck operators.

After the nearly decade-long wait to start production, Wilson said the company felt bullish about its future.

"It's very satisfying, and it feels like a vindication of our belief in this project from the start," Wilson said.

"Good things come to those who wait, and we couldn't have got there without Terex Washing Systems."





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Producing Low Copper Shred for Steel Mills

Author: Mike Shattuck, Recycling Market Manager

Sheet steel mills use a blend of pig iron, DRI, and pre-consumer scrap (bushing). Typically, only about 25% of lower-cost shredded scrap is used in the blend, with the remaining 75% a mix of the higher-cost pig iron, DRI, and preconsumer scrap.

With the higher cost combined with the limited availability of these commodities, using a higher percentage of low copper shredded scrap allows steel mills to reduce the cost per ton of steel produced.

Process

In a scrap yard, the Shred1 Ballistic Separator follows the primary scrap drums and shredder, just before a picking station. Shredded material is accelerated up to 1,000 fpm in

the Shred1. A magnetic element at the separator's end attracts more magnetic steel pieces, dropping them behind a splitter. This material constitutes the low copper stream (#1). making up about 75% of the material. This material is then conveyed to the stacking conveyor without further action needed. The copper content of this fraction is typically between 0.16%-.020% copper.

The less magnetic material is influenced more by the belt speed's ballistics than by the magnet's attraction. It is directed over a splitter, discharged from the Shred1, and conveyed to a polishing drum. This material, termed copper concentrate, comprises the remaining 25% of the feed.

The #2 material is presented to a magnetic drum with a reduced magnetic field or a polishing drum. This drum is set to "cherry pick" the best ferrous of the #2, which is liberated from any copper-bearing materials. This material, typically making up 10%-15% of the #2 fraction, is blended back to the #1 stream and sold as low copper shred. This increases recovery of the low copper shred.

The #2 material after the polishing drum is presented to a picking station where copper-bearing materials and any nonferrous material are ready for manual picking. This material can be sold to mills that do not require a low copper product or sent for further processing to advance the liberation of copper from steel.

Testing

Material was collected from multiple scrap yards and processed under a Gamma Tech analyzer to verify copper content of the feed material. With over 1,000 tons of material, the average copper content was .29%.

The Shred1 was configured for a 75/25 split of material, with 75% designated as #1 (low copper) and the remaining 25% as #2 (copper concentrate). After processing 1,000 tons on the Shred1 Ballistic Separator, the #1 fraction underwent assay analysis, revealing a copper content of 0.16%.

The #2 shred underwent polishing drum treatment, recovering an additional 10%. Assay analysis showed a copper content recovery of 0.18%. This shred can be blended into the #1 material without compromising its copper content, enhancing overall recovery.



Unrecovered #2 material at the polishing drum was directed to a picking station, where manual removal of copper-bearing and nonferrous materials occurs. With only 15% of the infeed directed to the picking station, fewer pickers are needed. This reduced feed enables quicker and more efficient work, as the material burden is lighter, and copper-bearing materials are easier to identify. Typical copper picking in a yard ranges from 5-7 lbs. per ton of shred, but with the Shred1, this typically rises to 12-14 lbs. per ton.

Conclusion

By installing a Shred1 Ballistic Separator and a polishing drum, scrap yards can provide premium low copper shredded scrap to steel mills while reducing labor and increasing copper pickings. In many instances, the lower copper scrap commands a premium of more than \$40 per ton.

Telehandler trio ticks all the boxes

Frustrated by recurring problems with its existing telehandler fleet, waste management business Dunmow Group needed machines that were reliable, safe and productive. Liebherr ticked all the boxes.

Essex-based Dunmow is no stranger to Liebherr equipment having run materials handling machines for several years and when it needed to solve its telehandler problems it returned to the German manufacturer for assistance.

Site Manager Mark Folkes explained: 'We had been running another manufacturer's machines for several years and felt that the quality was deteriorating to the point where we were having issues on a weekly basis.' Having experienced little downtime with previous Liebherr models, the company placed an order for a trio of new 7m machines. 'They are running well and performing as we expect them to,' said Folkes.

Formed in 1987 as a skip hire business, Dunmow operates at three locations handling a combined total of more than 300,000 tonnes a year with a recycling rate exceeding 90%. That performance has been achieved through heavy investment in upgrading facilities, processes and fleet; training and developing employees; and a programme of continual innovation to keep pace with changes to legislation and to meet customers' expectations of how their waste and recyclables are managed.

Because the telehandlers are used for a variety of applications - such as moving material from processing plants to stockpiles and loading finished products into trucks – they are fitted with general-purpose buckets, one of which has a top clamp.

Operators at Brightlingsea are impressed by the cabs of their new machines, citing the exceptional visibility from the seat, the rear-view cameras that send images to the cab's large colour screen and the wide-opening doors that allow easy and safe access. Automotive-style dashboards feature easy-to-read gauges while a multi-function joystick guides all boom controls and travel direction, meaning the operator can always have one hand on the steering wheel.

With performance and productivity living up to expectations, Dunmow has been similarly impressed by the newcomers' frugal fuel consumption, averaging just 6.77 litres an hour. 'We wanted a machine capable of doing the work, giving good availability, that is safe and still returns good fuel figures,' said Folkes. 'The Liebherr telehandlers do just that for



Spending on static and mobile machinery has seen the arrival of a fleet of Liebherr material handling machines at the company's Brightlingsea, Chelmsford and Clacton depots, including electric models at two of those locations.

Handling a wide variety of materials at Brightlingsea is primarily the responsibility of the three new T 55-7S telehandlers. With maximum 5.5 tonne lift capacity, all were kitted out to Liebherr's waste handling specification including Camso semi-solid tyres, additional body protection, wide-core radiator and reversible fan. Standard features are FOPS protection to front screen, quick coupler, auto-lube and LED lighting. Dunmow's machines have additionally been equipped with state-of-the-art fire suppression systems from its sister company, Fireward Automatic Fire Suppression.



Recycling News

Spec check

The T 55-7S is powered by a Liebherr Deutz TCD4.1 diesel engine delivering 156hp and driving a hydraulic system that uses a 200 litres per minute load-sensing pump to provide power for all functions including the hydrostatic drivetrain.

Providing stepless travel drive with a maximum 20kph speed, the hydrostatic transmission delivers sufficient speed across the ground alongside classleading pushing power for a full bucket on each cycle. A further benefit of hydrostatic drive is a substantial reduction in brake use and wear.

Operators can choose from a variety of quick couplers for speedy changeover of tools and with a third hydraulic circuit and power outlet as standard, the machine is able to handle a wide range of powered attachments when required.







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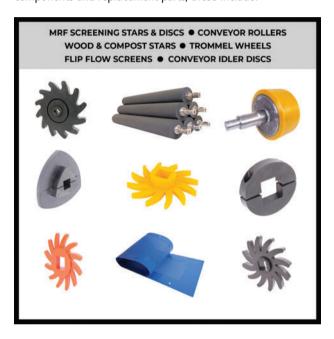
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Designed to be fitted to most of the wood waste and compost waste star screens which are available in the recycling industry.

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Designed for bolting connections to various screen decks and all have square holes in a linear pattern.

The company have a good range of readily available replacement components in stock, and also possess the capability to craft custom, tailor-made parts from either rubber or polyurethane, utilizing their in-house manufacturing facilities. Therefore, for customers with a specific project in

mind, taking advantage of their experience and expertise is beneficial.

The industry relies heavily on durable, efficient materials to ensure smooth operations. Both rubber and polyurethane possess properties that are ideal for manufacturing components which withstand the challenges of waste management and recycling applications.







Sales Executive Phil Holt adds: "As well as supplying many customers with replacement wear parts such as stars and discs, we have also worked on many bespoke projects within the recycling industry. Our customers often need a unique solution to improve the efficiency of their machinery, and we are always happy to help them achieve this."

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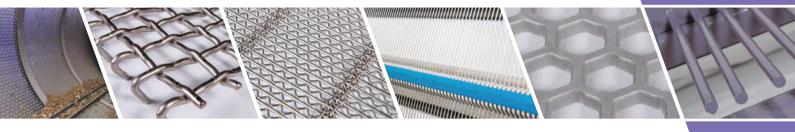
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When Should Safety Harnesses be worn in MEWPs?



Safety harnesses and lanyards are strongly recommended to be worn in boom-type platforms. In recent years, there have been ongoing debates within the industry, highlighting that there are some organisations who are using fall restraint equipment in scissor lifts.

There are risks that are created by using a harness and lanyard in a vertical platform e.g. reduced visibility for manoeuvring. It's important for operators to be aware of when a harness and lanyard imposes more of a risk, than protection.



Visibility

Operators need to have full visibility when manoeuvring in a scissor lift. Wearing a safety harness and lanyard in a scissor lift restricts the mobility of the operator as the lanyard is attached to a fixed anchor point and the platform is always over the chassis, making it unachievable to gain full visibility when operating the machine. This is not the case in boom-type machines as the platform is outside the chassis.

Guardrails act as additional protection in scissor lifts. Operators should avoid overreaching or leaning out of the basket as this will increase the chances of falling at height.

Risk assessments will allow operators to identify the risks, and whether a fall restraint harness is required in a scissor lift.

The Catapult Effect

When stored energy, or an impact to the MEWPs structure on the boom-type platform causes the boom to flex, it creates the catapult effect. The further the platform is extended, the greater the whiplash effect. In a vertical lift, the risk of catapulting does not exist which is why some manufacturers do not install anchor points to the platform. As a result, it is strongly recommended that operators wear a safety harness and lanyard in all boomtype platforms.

Training

Safety harness training provides workers with the skills and knowledge that is needed to implement good working practice whilst using the equipment.

As an IPAF training centre, we can deliver fully accredited IPAF approved safety harness training which can be completed remotely as e-learning, or instructor led at our training centre or your own site. The IPAF Harness Awareness (HA) course is aimed at safety professionals, managers and supervisors who are responsible for creating safe systems at work. Upon completion of the course, delegates will have a complete understanding and will have everything they need to supply the right equipment and systems to their teams.

For more information, contact Certora today and one of their experienced team of training co-ordinators will be more than happy to help - 01246 386900.



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- IPAF Mobile Platforms (3a and 3b)
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- **IPAF MEWPS for Managers**
- IPAF Safety Harness (HA, HU)
- **IPAF Site Assessment**
- **PASMA Towers for Users**
- **PASMA Low Level Access**
- **PASMA Combined**
- **PASMA Towers on Stairs**
- PASMA Working at Height (Novice)
- **Bi-Line Training**
- **Fall Arrest Training**
- Working Safely at Height Awareness























CRS NI Ltd, one of the leading Waste **Solutions providers from Northern** Ireland teamed up with Bailey's Skip Hire & Recycling Ltd, to design, manufacture and install a new Waste Transfer Station.

Bailey's Skip Hire & Recycling are a familyowned business, with over 20 years of experience in waste management. They provide a waste disposal service for both domestic and business customers from their facilities in Corby.

Baileys wanted to increase production capabilities. They needed a plant capable of processing up to 50 tonnes of C&D and C&I waste per hour. The result was a Plant now capable of running 70 tonnes per hour.

The previous Plant at Baileys proved a laboursome process for the company, with a variety of issues restricted their ability to increase production beyond 15 tonnes per hour. Levi Robinson, General Manager at Baileys Skip Hire & Recycling Ltd explained what the company were dealing with at the time;

"The current plant was heavily reliant on manual labour. Due to Brexit and other issues that we were facing in the UK, we couldn't get the staff. We decided that automation was the best route to improve quality and quantity."

An already established relationship, and trust in the CRS brand, meant choosing CRS as their preferred supplier, was an easy decision to make.

"We have had CRS machinery in the past. We understand the quality of their workmanship, so it was a natural ask for us to get them in to design and quote on the build that you see



Recycling News Levi explained "It's not a simple task of getting more tonnage in, the quality of the product has to be there as well. So, it was a case of them understanding what we needed and they put pen to paper and started designing for us." Baileys are now retrieving a range of clean aggregates which they can competitively sell, including -10mm Fines, 10-50mm Mid Fraction and +50mm Fraction. The new plant produces a range of Lights for SRF/RDF, Low quality wood, High quality wood, PVC, Hard Plastics, Plastic, Cardboard, Copper Wire, Metals and Aluminium. This Waste Transfer Station has been designed to incorporate the latest, innovative sorting equipment from CRS. Production has now increased through an efficient sorting process allowing for a 97% recovery rate of quality recyclable aggregates. Levi Robinson, concluded; "From start to finish, it's been simple, CRS didn't over complicate things. I needed to grow the business and what they've produced and what've given us here, is exactly what we needed." "We are already getting third parties tipping with us, because we can sort their waste for them." CRS were delighted to be awarded the project by Baileys. Sean Conlon, company director, commented "CRS pride themselves in developing solid relationships with their clients and we see Baileys as another example of a client returning to us as a result of ongoing work built up over the years. Thanks to Levi and Nathan at Baileys for placing their trust in us." CRS NI Ltd deliver bespoke waste solutions for all applications across the waste recycling industry. The company was grown since their inception in 2009, to provide complete static recycling waste solutions along with a range of mobile machines, followed by onsite installation. For more information telephone us on 028 8076 0496 or visit www.crsni.com



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Origin Story: The Sources and Remedies for Conveyor Dust

Daniel Marshall, Process Engineer, Martin Engineering

The hero of this origin story is the operator who prevents dust. Particulate emissions in workplaces around the world are coming into acute focus, affecting the health and morale of workers, inspiring stakeholders to seek solutions. Long-term exposure leading chronic lung diseases is well-known, but medical studies have linked dust in bulk handling to kidney disease, heart disease, cancer, and even cognitive and memory issues. Many of these regulated particulates, such as respirable crystalline silica (RCS), are invisible to the naked eye, so staff working around a conveyor system are often unaware of the danger or the level of exposure.



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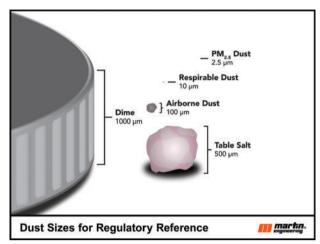
Dust control for operations with several conveyor transfers can be a serious challenge.

Operators can protect staff by understanding how particulates become airborne at each stage of the conveying process so that they can better assess the sources of dust within the system and ways to mitigate those emissions. Some dust solutions are more complicated to solve than others. Modern conveyor equipment designs have taken dust into account and offered solutions that are easier to maintain and support workplace safety compliance.

Specs on Dust Specks

In the United States, inspectors from the Occupational Safety and Health Administration (OSHA) and the Mining Safety and Health Administration (MSHA) equip trained workers with personal dust monitors that they wear throughout their shift. The small machines collect particulates from the air to measure RCS, heavy metals and other regulated substances. The filters capture particulate matter (PM) smaller than 10 microns (µm) in size. In the case of RCS, the regulated measurement must be less than 50 micrograms (µg) in weight over an 8-hour time-weighted average (TWA), i.e., a single

For perspective, PM smaller than 200um, roughly the size of sand dust, is light enough to remain airborne on ambient air currents. When PM reaches 100µm - approximately the size of a cross section of a human hair – it becomes invisible to the naked eye. At 10µm or smaller, the particulate is considered "respirable" meaning it can surpass the body's natural defenses and enter deep into the lung causing serious damage and health issues.



Copyright © Martin Engineering 2024 Respirable dust is invisible to the naked eye, travels long distances, and is the most detrimental to worker health.

Once measured, inspectors usually order violators to address air quality. Personal protective equipment (PPE) such as respirators can be the answer in the short term, but for the long term, regulators recommend that operators address the problem using "engineering controls." These are equipment solutions that prevent emissions, reducing or eliminating the need for PPE. The reason for this is PPE can be hard to monitor throughout a shift, is often inadequately maintained, and the internal safety policy commonly lapses as time goes on since respirators can be challenging to wear day in and day out throughout entire shifts.

Relevant International standards include:

- Australia AS2895-2004 Workplace Atmospheres Method for Sampling and Gravimetric Determination of Respirable Dust and AS3640 – 1989 Workplace atmospheres – Method for sampling and gravimetric determination of inhalable
- Canada Alberta's Occupational Health and Safety Code (2009) Part 36 (Mining) Section 601 (1)(2), 742 (1-5); Section 743 (1.1). Health, Safety and Reclamation Code for Mines in British Columbia (6.24.2); Province of Quebec's Regulation respecting occupational health and safety in mines (98).
- European Union DIN EN 620 Continuous handling equipment and systems - Safety and EMC requirements for fixed belt conveyors for bulk materials (5.5); EN 1127-1:1997; DIN EN 620 Annex A
- South Africa SANS 1929 (2011) Ambient air quality -Limits for common pollutant; National Environmental Management: Air Quality Act, 2004 National Dust Control Regulations (4.2)(6.2 a-f)
- United States OSHA 29 CFR 1910.22; CFR 29 1910.307 Hazardous (classified) locations; CFR 29 1910.1200 Hazard communication; CFR 29 1910.269 Electric power generation, transmission and Distribution; CFR 29 1910.272 Grain handling facilities. MSHA 30 CFR Section 56.5001 and 57.5001

Conveyor Dust Emissions

The volume of conveyor dust emissions is dependent on the conditions and the application. Operators and designers should first know the material characteristics and how they change as they pass through the processing and conveying system. Examples of this can be found in most industries from cement to mining as raw material is reduced from large to small, processed and stockpiled.

Year-round weather conditions can cause dust, especially during dry seasons, which pull humidity out of the air, increasing emissions. Prevailing winds or changes in wind patterns can suddenly shift a dust-free operation into one with several violations.

Conveyor dust emissions are also derived from many sources including transition points, material impact and cargo disruption:

- Dust at the transition happens when material falls to the belt, hitting the sides of the chute or rock boxes on the way down. As it falls, material not contained by a drop chute (such as onto a stockpile) separates, exposing the entire stream to ambient air currents allowing emissions.
- Dust on impact happens when material lands on the belt with no controls such as a rock box or curved drop chute. Depending on the height, weight, and density of the material, the impact on the belt causes air turbulence and shifting leading to airborne emissions.
- Dust from disruption happens along the conveyor path, often between idlers where the belt slumps. This causes the cargo to shift and bounce slightly along the belt path, disrupting material, and causing dust emissions.

MATERIAL CHARACTERISTICS Any of these characteristics can be altered to minimize the dust generated. Most dust control solutions target one or more of these characteristics. **INCREASE MATERIAL COHESIVENESS** · Harder to separate individual particles · Particles stay in body of material INCREASE MATERIAL INCREASE PARTICLE SIZE · Heavier particles are harder to pick up · Fall out of air more readily PARTICLE SIZE PASSIVE DUST CONTROL MINIMIZE AIR VELOCITY If air is controlled, dust can be managed MINIMIZE AIR Reducing air velocity allows particles to fall back to material stream martn.

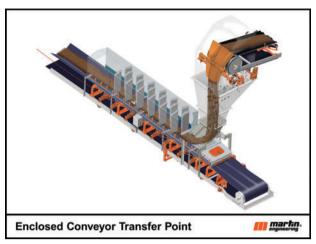
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Dust suppression can be engineered controls like enclosed transfer points. Dust collection include dust bags or mechanical air cleaners.

Loading the Belt

Loading zone design has shifted over the past decade in response to the need for dust reduction and greater efficiency and is an excellent example of an engineering control. Rather than transitions from conveyor to conveyor or storage container to conveyor that are straight drops from heights,

chutes direct and control material flow using spoon designs. These designs ensure that material is loaded in the center of the belt with little impact. This reduces dust, spillage, mistracking and belt damage commonly associated with conveyor transitions.



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A controlled material flow with dust curtains help dramatically minimize dust emissions in the loading zone.

The impact of material on the belt can cause a splashing effect and produce air turbulence that seeks exit points from the chute through gaps between the skirt and the belt created by the slump between impact idlers. These rollers also tend to break under long-term pressure, causing them to seize. So, another innovation replaces impact idlers with bed of steel angles lined by energy-absorbing impact bars with a top layer of low friction, ultra-high molecular weight (UHMW) polymer or polyurethane. The bar design helps the skirtboard sealing systems consisting of a wear liner and skirting to retain a consistent seal at the loading point to reduce the amount of spillage and dust emissions.

Eliminating moving parts and the requisite lubrication of rolling components drastically reduces the amount of maintenance and improves safety by promoting a tight seal between the skirting and the bar. Some manufacturers have even developed innovative designs that mount the cradles on rails, allowing slide-out removal to reduce maintenance time and improve safety.

Dust During Transport

After cargo has been loaded, the stilling and settling zones of the transfer enclosure should be properly designed to have a sealed environment that controls airflow with negligible dust emissions. This design should include closely set idlers or idlers that transition between cradles. Another important element is continuous external skirting in single strips that run the length of the enclosure on either side. Inside the enclosure, strategically placed dust curtains slow airflow enough for particulates to settle back into the cargo stream. Dust bags and compact mechanical air cleaners, when installed on the enclosure, will also capture dust and ensure a dust-free exit from the enclosure.

Once the material has left the enclosure, wind can be an issue so many operators cover exposed conveyors. However, this does not control dust from material shifting, disruption over idlers, or mistracking. These actions can cause spillage and dust to fall along the length of the conveyor. Installing tracking devices along the belt path helps reduce spillage from mistracking even if cargo shifts.



Copyright @ Martin Engineering 2024 Belt tracking keeps loads centered and minimizes dust from spillage and disruption.

Dust at the Discharge Zone

More often than not, the conveyor discharges down an open shaft with a dead drop into the transfer chute leading to another conveyor, into a hopper or silo, or onto a storage pile. When the material leaves the belt, it separates, exposing the entire stream which allows smaller particulates to become airborne. Stacker conveyors and tripper conveyors are especially prone to this and often utilize a misting ring or specially designed sock to control the stream.

However, material often hits the back of the transfer chute or impacts on rock boxes which can result in dust blowing back up the chute. Enclosing the discharge zone and controlling the impact of material using a spoon design will mitigate blowback. Also, adding air cannons helps direct cargo and airflow, as well as prevent unscheduled downtime from buildup and blockages within the chute.

Dust on the Return

Conveyor belts across all bulk handling sectors take a tremendous amount of punishment and the single most expensive piece of equipment on the conveyor system is the belting. No matter how careful the upkeep, the belt will eventually start to show divots and cracks. The weight of the cargo can cause dry material to stick to the surface and dust and fines collect in the flaws. If not properly cleaned, the adhered material will not be discharged with the cargo flow and remain on the belt as carryback, spilling fines and emitting dust along the return path of the system.

Primary cleaners remove the most abrasive and hardest material left on the belt after discharge. Mounted at the head pulley on a tensioned assembly and the engineered polyurethane construction, many blades are in a curved configuration that allows the blade tip to fit snuggly against the belt and wear evenly throughout the blade's life with only minor adjustments to the tensioner. One innovative primary cleaner design requires no tensioning at all after initial installation. It features a matrix of tungsten carbide scrapers installed diagonally to form a 3-dimensional curve around the head pulley and typically delivers up to 4 times the service life of urethane cleaners without ever needing re-tensioning.



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The low-profile primary cleaner takes up less space than standard cleaners

Secondary and tertiary cleaners are located immediately after the belt leaves the head pulley to address dust and fines that escape the primary cleaner. Generally equipped with spring or air tensioners that easily adjust to fluctuations in the belt, secondary and tertiary cleaners dislodge dusty carryback, adding it back into the cargo flow.

Case Study - Coal Mine - Shandong Province, China

A coal mining facility in Eastern China with a production capacity of approximately 1 million TPY experienced dust and spillage from one of its main conveyors. Fugitive dust drastically lowered the workplace air quality and clogged equipment. Breakdowns of rolling components caused misalignment of the belt leading to spillage along the belt path. Piles of spillage blocked access to the system and walkways, which had to be cleaned requiring extra labor and raising the cost of operation. Internal resources attempted to fabricate an enclosure to contain dust emissions but it proved to be unsuccessful and dangerous to maintain.



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Primary, secondary, and tertiary bladed systems ensure dust from carryback is mitigated.

The team from Martin Engineering China designed a transfer point system that effectively settles the load and centers it on the belt. Technicians installed a Martin® Impact Cradle, Slider Cradles and ApronSeal™ Skirting, as well as a Tracker™ system to maintain proper belt alignment. Designed for heavy, high impact loads, the transfer point retains a tight seal on the belt to reduce dust emissions and spillage.

Following the installation, the customer reports a drastic reduction in fugitive dust and spillage, resulting in fewer equipment breakdowns, better air quality and increased production, with less product loss. Operators say that they are "very satisfied" with the products and service Martin Engineering provided and will continue a positive working relationship.



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The new system completely enclosed the process, nearly eliminating dust and spillage.

Conveyor Dust: Not Just a Forgone Conclusion

The prevailing impression that bulk handling is inherently dusty is an old idea that regulators are trying to reverse. By identifying causes of dust and retrofitting modern equipment, operators find that they can control emissions at the source and increase efficiency. Designers and engineers of highquality conveyor accessories are constantly striving to innovate, adding ways for operators to reduce employee interactions with equipment, significantly lower dust emissions, improve workplace safety and remain compliant. With the help of equipment manufacturers, operators can be air quality heroes.

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Striking the Balance: The Power of Client-Focused Corporate Events and Trade Shows



Introduction:

In the evolving landscape of business engagement, corporate events and trade shows stand out as indispensable tools for organisations to connect with their audience, foster relationships, and showcase their products or services. However, the debate often arises about which avenueclient-focused corporate

events or trade shows—holds more sway. In this exploration, I offer and insight into the dual power of both, examining the unique positives each could offer you as a business.

The Attraction of Corporate Events: Tailored Experiences:

Corporate events provide an unparalleled opportunity for organisations to create a bespoke experience for their clients. Whether it's a product launch, a demo day, or a targeted seminar or presentation, these events allow for a personalised touch, ensuring that attendees feel valued and appreciated. The power of tailor-made experiences lies in the lasting impression they leave, fostering stronger client relationships to both existing clients and those potential new ones that may otherwise have never engaged with your business.

Brand Immersion:

Hosting a corporate event allows for a deep dive into the brand's ethos and values. Organisations can craft an immersive atmosphere that goes beyond the transactional, allowing clients to connect with the brand on a personal level. Through carefully curated presentations, workshops, and interactive sessions, clients are more likely to develop a profound understanding of the company's mission, fostering brand loyalty. People often consider a brand to be a logo or corporate colours, but it's much more than that. The values of a company and the people working within it are often far more important to a client and often far more difficult to showcase on a piece of paper or on social media. Creating the environment for this interaction to take place is a huge benefit to any organisation.

Focused Networking:

As discussed, corporate events create an environment conducive to focused networking. Attendees, often comprised of key clients and stakeholders, can engage in meaningful conversations without the distractions inherent in larger trade show settings. This focused networking can lead to quality connections, potential collaborations, and a strengthened professional network. I often hear the term 'People buy from People'. For many service providers, or products where guidance is welcomed and offered the people play a critical element to any sale.

The Strengths of Trade Shows:

Industry Exposure:

Trade shows serve as expansive platforms that allow companies to showcase their products or services to a broad audience within their industry. The sheer scale of these events provides unparalleled exposure, potentially attracting new clients, partners, and investors. It's a stage where innovation and industry trends take centre stage, giving organisations the opportunity to position themselves as industry leaders. Taking your product or service out to your market can also be more feasible through a trade show when your business is growing into new market areas or countries.

Market Research Opportunities:

Participating in trade shows offers more than just a chance to display products—it's also a valuable opportunity for market research. Organisations can gain insights into industry trends, competitor offerings, and customer preferences by engaging with a diverse audience. This knowledge can be a strategic asset in refining products, services, and marketing strategies. There is also often an expectation to see you at many large industry events. Questions can often spread across the marketplace if providers aren't present. My advice to this would be to ensure you are selecting the right trade shows at the right time, in the right countries. There are so many trade shows globally that any business needs to be selective when choosing the right ones to exhibit at.





Lead Generation on a Grand Scale:

Trade shows are fertile grounds for lead generation. The sheer volume of attendees provides organisations with a vast pool of potential clients and collaborators. I have always said though that engaging the right people and capturing the right leads is important. There is no point in scanning every exhibitor badge if the aim of the capture is for strong buyer potential. If it's for brand awareness and to build up a good market database, then that is different. Ensure you have clarity of what your objectives are for the show and who you are wanting to target or talk to.

Engaging booth designs, product demonstrations, and interactive presentations can capture the attention of a diverse audience, translating into a robust lead generation pipeline. These shows also give businesses to look at their own supply chain so when planning these investments don't just think about staffing the stand itself, but also the possibilities to invest in staff to walk the show and find the right suppliers for your own manufacturing departments.



In Summary:

While corporate events and trade shows offer distinct advantages, the real power lies in striking a balance between the two. A well-thought-out strategy can involve a mix of client-focused corporate events for nurturing existing relationships and trade shows for expanding market reach and garnering new opportunities. Budgets will always dictate certain decisions, however with an effective business strategy that considers both options I believe that both can be leveraged to achieve positive returns on both investment and objectives.



Molson Green supply a Terex Ecotec Phoenix 2100T tracked trommel to increase productivity

Sand quarrying at Heath and Reach on the outskirts of Leighton Buzzard has been conducted for nearly 50 years. The huge site, operated by L.B Silica Sands produces 500,000 tonnes of high-quality sands in various grades per year. As the sand is dug from the site, the resulting void is backfilled with inert material and is under a constant scheme of restoration.

The sand is dug out using a variety of large excavators from parent company M O'Brien Group with the material stockpiled around the site's processing area according to the seams they come from. The resulting stockpiles are then processed using a variety of tracked screens, trommels and the site's static wash plant before it is then shipped out across the South of England and beyond.

To assist with an increase in productivity, L.B Silica Sands has recently taken delivery of a new Terex Ecotec Phoenix 2100T tracked trommel from UK supplier Molson Green.

Some of the as dug material contains a large quantity of aggregates mixed into the sand and the trommel is seen as the ideal processing unit capable of removing the larger material to leave a coarse, clean sand.

With an operating weight of 27.5 tonnes, the Phoenix 2100T is designed with a large, 5.6m3 intake hopper capable of quickly taking a full, 4m3 from the attending loading shovel. A heavyduty, hydraulically adjustable grizzly bar allows clumps of material to break up prior to entering the trommel itself. Any material bridging the bars on the grizzly can be tipped off with just the press of a button leaving the entrance to the hopper clear for another load. The 4.1m long feeder uses 1.05m wide



belt to steadily pass the incoming material into the 6.1m long, 1.94m diameter drum. Driven by four friction wheels, the drum's incline can be altered from 4 to 7 degrees allowing material to pass through at a different rate. A variety of different screening media can be fitted and is designed to be changed with the minimum of downtime. A set of heavy-duty cleaning brushes are mounted to one side of the drum ensuring the screens are kept free of any clogging material. Should anyone be working in extremely sticky material, a second set of brushes can be added as an optional extra.











Power to the Phoenix comes from a self-contained Caterpillar C4.4 Stage V/Tier 4 Final engine. Mounted within a sturdy frame, the fuel-efficient engine and the latest intelligent screening technology ensures the Phoenix 2100T delivers superior screening efficiency.

The Phoenix 2100T is ready to work in minutes of arriving on site with no special tooling required. The user-friendly control system with push button start/stop offers simple operation and diagnostics, allowing the operator to effortlessly configure the machine to suit the required application. The fully proportional, hydrostatic feeder combined with an intelligent control system continually monitors the machine adjusting the feeder speed to optimise screening performance and throughput.

In LB Silica Sands operation, the main 1200mm wide output conveyor feeds a radial stacker allowing for large amounts of material to be screened without the need for moving any plant around. The 1.05m wide oversize conveyor removes any larger material and like the main output conveyor is fully adjustable and hydraulically foldable reducing set-up and tear down times and costs.

"We purchased the Phoenix to replace an older machine and have been very pleased with its productivity." Quarry Manager Jim Duffy commented.



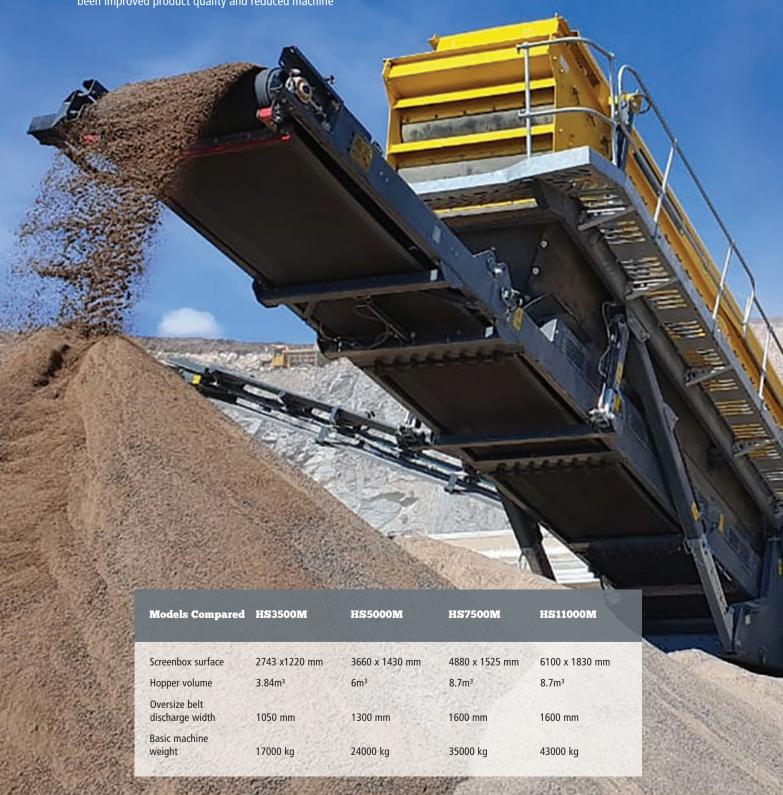
Stars of the Big Screen

As we all look forward to spring, it means one thing, screening season is about to kick off for many and Rubble Master's market leading range of tracked scalping and sizing screens promise to be at the heart of that season.

The scalping and sizing have proved very popular in the UK in recent years. By uniting the knowledge of Rubble Master in building compact, electrified crushers, and the experience of the RM Dungannon in building outstanding screens there has been improved product quality and reduced machine

production time. UK dealer Red Knight 6 Ltd (RK6) continues to see that investment pay off with ongoing deals across all types of customers.

"We have completed numerous deals on the scalpers over the last years and the feedback remains fantastic. The hydraulics, a range of screen sizes and power unit are exactly what customers want, the scalpers consistently exceeded expectations because of the variety on offer," said Paul Donnelly, Managing Director at RK6.





Now the RK6 team are seeing increased interest in the sizing/finishing range. The MSC range is made up of the MSC8500M and MSC10500M, both available in 2 and 3 deck variants. Each of the machines benefits from a heavy-duty vibrating tipping grid with a 9.2m3 hopper and easy to change

"The feedback remains consistent customers regarding the finishers, they are exceeding customers expectations and consistently provide the right size of material from a multitude of screen options," continued Paul.

Thanks to further collaboration between the RM headquarters in Linz and the screening facility in Dungannon a fully electrified hybrid models are now available, with the MSC8500e leading the way. It is something that has long been a feature of the crushing machines, but the same technology

has been incorporated into the screeners, another example of the two sites working closely together for the benefit of customers.

"Efficiency of operation is key but the ability to reduce fuel costs and have a positive environmental impact is crucial. We have seen a genuine improvement across both screening ranges and our customers are benefitting from that as well," finished Paul.

For more information visit – www.redknight6.co.uk For more information visit www.redknight6.co.uk or call 01293 862 619



Telematics direct Rokbak customers' efficiencies and uptime

US Rokbak dealer GT Mid Atlantic found that telematics systems became so beneficial to increasing customer uptime and productivity that it established a dedicated unit to monitor equipment - something which has proven to be a huge success with its customers.

Rokbak dealer and US construction equipment supplier GT Mid Atlantic (GTMA) has a lot of equipment to keep track of with a huge rental fleet of approximately 600 machines, 74 of which are Rokbak articulated haulers. Luckily, with Rokbak's Haul Track telematics system, this task becomes a little easier.

GTMA operates across Maryland, Delaware, New Jersey, Washington D.C., Philadelphia and northern Virginia and West Virginia. It's one of the region's premier sources for equipment, aftermarket and remanufactured heavy equipment parts.

At the heart of GTMA's extensive operation in its New Jersey branch is a technical control area, dubbed the 'War Room', which is devoted to telematics monitoring. It's here that the team work to increase customer uptime and productivity. For example, with data from Rokbak's Haul Track telematics system, they can detail the precise location of each truck within a specific fleet, see where each unit has been working, track loads, calculate the hours worked as well as monitor speed, fuel consumption and idle time.

"There are times when we're aware a machine has a problem before the customer knows," explains Eric Marburger, GTMA Vice-President and General Manager – Maryland & Delaware. "When we go out to the site, we know exactly where the fault is. For example, it may be low fuel pressure, which means we'll bring fuel filters with us so we've got the parts we need to fix the issue.

"Fundamentally telematics enables increased uptime and productivity for the customer and reduced travel time and mileage for us."

Inside the War Room

The War Room is now an integral part of how GTMA operates, further enhancing reliability and earned trust in the dealer and truck in the eyes of the customer



The 'War Room' telematics setup has become so important to the way GT Mid Atlantic now operates.

A full-time telematics manager monitors the multiple screens the telematics groups are superimposed onto in the War Room. It is his job to proactively monitor machine health via easily understandable diagnostic and preventative maintenance data. The machines can be tracked anywhere that receives a



satellite signal, with the location of the machine shooting up on screen with a red marker when there is an issue.

"Our telematics unit allows us to proactively tell the customer about an issue and fix it in a timely manner before it becomes a problem," says Anthony Nuzzo, GTMA Product Support.

"Telematics detail exactly what's going on – it bleeds into everything we do. I've got as much information at my fingertips as I need. The telematics system will let you know where the truck is, when it's due for service, whether it's running and how many hours are on the machine. Everyone should have it on their equipment."

Customer insight

Long-time GTMA customer, Maryland contractor Potomac Excavating, has two Rokbak RA30s which are used for cut and fill operations on both small and large job sites ranging up to 30 acres

"Telematics allow me to keep better track of both the health and use of the trucks without having to be on-site every day to monitor them," explains Potomac Excavating Equipment Manager Aden Price. "Being able to use the location services helps me keep track of which machine is at which location for transportation purposes, and the health monitoring service allows me to do general diagnosing from my phone. This way, if a machine has a fault code come up, I can easily access the code and the serial number of the truck and get in contact with the service department to get it worked on without having to go and find the machine and obtain that information in person."

"Customers are often flabbergasted about what we're able to do," says Eric. "They absolutely love the fact that we're proactive and sometimes able to come up with a plan before



Mark Notarcola, GT Mid Atlantic Regional Service Manager and Anthony Nuzzo, GT Mid Atlantic Product Support Representative.



Potomac Excavating Equipment Manager Aden Price.

they've even contacted us. "It's reassuring for customers to know they've got top-level product support."

Rokbak on track

"Telematics systems like Haul Track are helping customers to work in the most efficient way," concludes Eric. "It is about catching things before they're a problem and acquiring



Handling Aggregates from Self-Unloading Vessels: Telestack offer flexible and cost-effective systems!

The drive to extract any cost from the movement of aggregate remains a priority for any stakeholder. As a fundamental commodity in the construction supply chain, the focus on how it is moved and handled continues in an effort to reduce the high level of labour and time involved in the process. While the majority of aggregates in Europe have historically been moved by truck and rail, increasing efforts to reduce environmental impacts, road congestion and pollution are driving companies to seek eco-friendly, efficient, and reliable alternatives, such as marine transportation.

Transporting and handling aggregate cargo using selfunloading vessels offers significant advantages to companies seeking an environmentally responsible shipping solution. From crushed limestone to sand, gravel and stone, belt selfunloading technology offers significant advantages including reducing cost as a result of the reduced labour required to complete the process. Short sea shipping routes in the North Sea, the Atlantic Ocean and the Mediterranean provide a wellestablished transportation network to facilitate the process and the development of self-unloading vessels are designed to facilitate the process.

International Sales Manager with Telestack, the stalwarts in mobile port equipment, explains the benefits of self-unloading vessels, "Belt self-unloading vessels are equipped with long, discharge booms and integrated conveyer belts. When aggregate cargo is discharged from the vessel, it is smoothly delivered directly from the holds along conveyer belts through the boom to shore at a rate of up to 3,000tonnes/hour and more."

It is at this point however that many Ports encounter difficulties in handling the aggregates from the discharge boom point and onwards to storage or trucks for on-going transport. Typically, this is done via a dedicated fixed hopper / conveyor system which transfers the material to the storage area. This means that the ports infrastructure needs a dedicated area for discharge, which in some cases is not feasible and limits the flexibility of the both the vessel owner/operator and the port / stevedore on shore.

In the event of no fixed hoppers/conveyor system, the material is transferred directly to the ground for handling with wheel loaders, grabs and trucks. When handling tonnages of up to 3,000 tonnes/hour, this can mean many wheel loaders, trucks operating in the boom discharge point struggle to keep up with the tonnage requirements of transferring the material away from the shore side. The self-unloading vessel has a fixed window to discharge, so this puts many pressures and costs on the shore operators to move / transfer the material as quickly as possible to ensure unloading rates are maintained.

Donnelly continues "This greatly increases the cost per tonne via double / triple handling of the aggregate via the auxiliary equipment with high fuel and labour costs. This also highlights a major safety concern working under pressure with an extensive range of equipment required in a single area during the unloading phase."

In certain scenario's where the vessel can discharge directly to the storage area, the limited space requirements means the material still needs to moved or stockpiled to maximise the current infrastructure, again causing a 'bottle-neck' in the handling process while increasing costs and further traffic on site. Also, this technology means the vessel or discharge boom does not have to move at any stage during the unloading process to fill the stockyard area, as the mobile unloading / stacking system is doing the material transfer saving time and labour.

Telestack offer a solution to this issue by utilising a mobile conveyor systems direct from the discharge point (vessel discharge boom) to the storage area, while eliminating the need for any wheel loaders, grabs or any further resources. These mobile conveyor systems allow the equipment to be used when the vessel is berthed and the moved off-site or into the storage area, which makes it a perfect solution for multicargo berths who do not have a dedicated unloading facilities.

The range of designs from Telestack allow for handling rates from 200 tonnes/hour to 1,000 tonnes/hour from smaller 3,000dwt to 10,000dwt self-unloading discharge vessels. The range also extends for the largest self-unloaders with handling rates from 1,000 tonnes / hour up to 3,000 tonnes / hour of aggregates. These proven designs allow for a self-propelled mobile system that can handle the smallest to the largest self-unloading vessels, all ensuring the same principles of:

- Reduce costs per tonne
- Eliminate double / triple handling at the shore side
- Remove wheel loaders / trucks and grabs from the handling process (fuel / labour)
- Improve site safety (less traffic in specific area)
- Reduce dust and emissions (all electric mobile conveyor systems)
- Direct material transfer from 'Vessel to Stockyard' remove 'bottlenecks'

The optional all-electric driven units ensure the environmental and emissions concerns are addressed in all cases, meeting stricter port regulations reducing carbon footprint. Also, further options in relation to dust enclosed conveyors systems and dust extraction can all be utilised on the equipment, depending on local regulations.

The Telestack mobile conveyor systems utilised in combination with the self-unloading vessels offers a significant advantage in offering new opportunities for ports / stevedores to establish new business and processes which will make them more competitive in their industry. By improving this process of handling the material more efficiently operators can utilise space on the shore and increase bulk tonnages through their facility.

Traditional methods of using wheel loaders

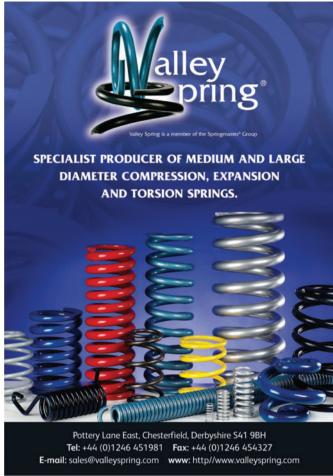
A flexible alternative method using Telestack mobile equipment

Self Discharging Vessel - Telestack Mobile Conveyor system



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Advertisers Index

| BRIMONN | 36 |
|----------------|--------------------|
| CLIFTON RUBBER | 44 |
| EDGE | 36 |
| ERIEZ | 16 |
| HARPSCREEN | 34 |
| LIEBHERR | 11 |
| MCLANAHAN | 22 |
| MOLSON | 30 |
| POWERX | FRONT COVER |
| RK6 | 40 |
| ROKBAK | 6 |
| SPRINGMASTERS | 55 |
| TWS | BACK COVER |
| TYRONE | INSIDE FRONT COVER |
| WEIR | 45 |
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