

**Doppstadt**



**INTRODUCING THE NEW RANGE OF DOPPSTADT SHREDDERS**





# EXPERTS SAY YOU CAN ONLY FOCUS ON ONE THING AT A TIME.

**We chose articulated  
dump trucks**





# Construction industry begins to emerge from the Covid-19 crisis

**The Covid-19 pandemic is one of the biggest challenges the construction industry has ever faced. With much of the world going into lockdown, most markets and sectors ground to a halt. Paul Douglas, Managing Director of British articulated hauler manufacturer Terex Trucks, shares some industry insight into the European construction market and explains why he believes there is light at the end of the tunnel.**



Paul Douglas, Managing Director, Terex Trucks



The Covid-19 pandemic has been extremely tough for everyone, including construction equipment manufacturers who have had to reduce or suspend production at their factories over the last few months. Recently, we've started to see some OEMs gradually bring teams back to work and begin a 'new normality'. At Terex Trucks, we temporarily suspended production at the end of

March at our facility in Motherwell, Scotland, in line with our parent company the Volvo Group. During this time, we operated with a small team of dedicated employees who worked to support customers and maintain vital spare parts distribution. I'm pleased to say that now we've restarted production and welcomed more of the team back to work. The health, safety and wellbeing of our employees, customers and the general public is our number one priority and we have introduced a wide range of protection and prevention measures at our site. Right now, it's hard to predict exactly what's going to happen in the global construction sector over the next few months, but we do see cause for cautious optimism due to the essential nature of construction work.

Our customers are active in businesses that are vital to society and the construction industry will be key to global economic recovery. To kick-start economies and drive recovery from the pandemic, we are already seeing governments invest in construction and infrastructure projects as an effective way to create jobs and boost their economies – and there are some key projects on the horizon.

As a British manufacturer of articulated dump trucks, we closely follow the European market – including our home market of the UK. The latest figures from the Construction Equipment Association show that sales of construction and earthmoving equipment in the UK market fell by 40% in the first five months of the year, compared with the same period in 2019. Sales in May were down by 54.5%, compared with the same month last year, as a result of the ongoing impact of Covid-19. However, this was a lower reduction than we saw in April when sales were down by 74%, compared with 2019 levels. While we can't draw any clear conclusions from this data at this time, I can safely say that the entire industry is hoping that this indicates that April could be the low point in sales this year due to the pandemic and we might see an improvement in the third quarter.



## Back to business

In the UK, which is the biggest market for articulated trucks in Europe followed by France and Germany, OEMs are gearing up for the major infrastructure project High Speed 2 (HS2). Serving eight of Britain's ten largest cities, this high speed railway linking up London, the Midlands and the North is one of the most important economic regeneration projects in Britain for decades, expected to kick-start not just the construction industry but the wider economy. The government has given its approval for work to begin and, due to this project alone, the UK could see demand for articulated dump trucks rise by an additional 1,000 machines over the next few years. In the first stages of the project, articulated haulers such as our Terex Trucks TA300 and TA400 will be used for preparatory tasks and transporting materials before the main construction work can begin. This includes jobs like vegetation clearance and earthwork for tunnel portals and compound facilities.

In France, where we are expanding our distribution network and currently have four dealers – The Manu Lorraine Group, Framateq, Promatex and Griset Material – the population is returning to work and our dealers have started up their sales activities again. Looking ahead, an important project that is expected to boost the French construction sector as well as the wider economy is the Seine-Nord Europe Canal project. This will involve the construction of a 107km inland waterway link extending from France to Belgium, connecting the Seine basin north of Paris to the Rhine basin and the northern European waterway network. For the construction, 55 million m<sup>3</sup> of earth will have to be excavated and transported. Robust and reliable dump trucks like the TA300 and TA400 are the natural choice for this task.



As construction activity has slowed down throughout Europe during the last few months, it's not only machine sales that have decreased – the demand for machine rentals has also declined. This has had a significant impact on German rental companies – where renting accounts for 70 per cent of the market activity – as well as the Italian market.





### 70 years of hauling heritage

None of us could've predicted how much Covid-19 would change our lives in such a short period of time. At Terex Trucks, we started the year looking forward to celebrating 70 years of manufacturing robust and reliable off-highway haulers. Since Volvo Construction Equipment (Volvo CE)

acquired Terex Trucks in 2014, we've made substantial investments and improvements of around £35 million in our people, processes, products, facilities and distribution network – and we're continuing to invest. All these investments not only enable us to improve the quality of our articulated dump trucks, but also to be more energy efficient and improve safety.



Because the articulated hauler is the only product Terex Trucks develops, we're able to focus all our attention on this machine. We've installed a new transmission on the TA300 and a new drop-box on the TA400, improved the hydraulic system, added telematics, designed a new operator environment, created a new aesthetic and improved the engine enclosure. We've listened to our customers and thanks to their feedback, they are now reaping the rewards of these investments with lower operational costs, higher uptime levels, fuel efficiency savings, extended service intervals, faster fault detection, top quality customer service, and industry-leading parts availability that comes with two years or 6000 hours of parts warranty – whichever comes first. With our hauling heritage and know-how combined with Volvo CE's considerable expertise, experience and financial backing, there has never been a better time to invest in a Terex Trucks hauler – and with building sites starting to re-open, we're now getting ready to celebrate our anniversary by providing our trucks to even more customers.



# Partner for positive change

The world around us — from skyscrapers, bridges and highways to the internet and all the devices connected to it — is made of aggregates, minerals and metals. The newly formed Metso Outotec provides the technologies and services needed to responsibly produce the commodities that build modern society. We lean on more than 150 years of experience to continuously innovate solutions for a more efficient and sustainable tomorrow. That's why we are your partner for positive change.

**Metso UK Ltd**  
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**Metso:Outotec**



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# Welcome to issue 63...

**Having felt like I had been held captive I finally managed my first site visit last week. The total joy of walking around a remote plant in Oxfordshire just made my day!**

You can read the whole story of Grundon's new PowerX plant on page 33.

I guess the next question on every one's lips is when is the next industry exhibition?

With two in the UK rescheduled for November it still looks questionable whether they will go ahead. Certainly, in Lyon, France, Pollutec are convinced they will go ahead with their show in November and bauma China certainly seems to be on!

Anyway, back to matters in hand – this issue includes a feature on Washing & Screening which includes some interesting stories and is well worth a read.

Things at HUB4 are still moving forward and with only a slight blip back in March each edition grows in size.

Talking of future editions, the forthcoming September issue will include a huge Recycling special on MRFs and associated machinery which will include shredders, balers, and metal recycling amongst others.

If you are a company operating in this sector, then inclusion is a must!

Keep safe...

**John Edwards**

Editor



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



# While the Rest Imita

**Doppstadt have recently released two new shredders to their 'smart' range. These two impressive new machines are now available to the UK market.**



## METHOR

With the Methor, Doppstadt have taken a new approach, as it's the first shredder that has been designed for processing several materials

containing very different waste fractions (e.g. wood, commercial waste, green waste, construction & demolition waste) at the same time. However, it still includes all the benefits of their larger shredders, offering the uncompromising quality of Doppstadt's high-performance technology.

The Methor is the only single shaft shredder in its class with bolt-on tools, whilst also being the system with the largest selection of tools. The Shredders' innovative Hydraulic Direct

Drive continuously adapts the shredding system's performance to its demand. The load torque on the drive is continuously optimised, which has a positive impact on consumption and wear and tear. If the pump pressure increases suddenly because of a blockage, the drive automatically switches to the reversing program, which protects the Methor from any damage.

The load-sensing material feed system works closely with the Hydraulic Direct Drive. It utilises the pump pressure of the drive to control the angle of the feed hopper. As a result, the Methor can be loaded in relation to the machine's current load, allowing it to operate continually and even more dynamically.

In addition to using the machine's intuitive control panel, key functions can also be activated using the wireless remote control. The Methor can also be used to set up a WiFi hotspot, allowing it to be configured and monitored using any browser installed on an internet-enabled device.

## MACHINE DETAILS



### OPERATING CONCEPT

The Methor has an intuitive control panel, the core functions of which can also be implemented via a wireless remote control. The system can also be used to set up a WiFi hotspot, allowing it to be monitored and evaluated using any browser installed on an internet-enabled device.



### SMART HOPPER

Large feed area with tipping hopper. Material feed is controlled automatically in relation to the load of the shredding shaft. In conjunction with the hydraulic drive, it allows a shredding with an optimal load torque curve and corresponding efficiency.



### HYDRAULIC DIRECT DRIVE

This fully hydraulic drive delivers an optimum torque to the shaft and allows the implementation of any engine. The system utilizes the hydraulic pump's intelligent control system to flexibly respond to any blockage.



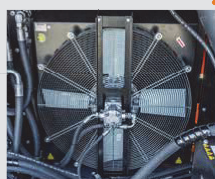
### OPTION: HEIGHT-ADJUSTABLE OVERBELT MAGNET

Its angle is adjusted hydraulically or with the aid of threaded rods. It can also remain in the transport position of the machine's belt.



### FLUENT PROCESS

To ensure outstanding process reliability, input materials are shredded and discharged in the belt's direction of conveyance. The shredding compartment is designed in such a way that it operates with a conveyor belt without an articulated and under belt. That also simplifies assembly and disassembly.



### COOLING CONCEPT

The hydraulic unit has its own cooling system, which is independent of the drive system. The fan is driven hydraulically. It is designed for a maximum blockage (obstruction) of up to 50 % of the area and its rotational speed is regulated in relation to the system's temperature. As a result, it can be used at an ambient temperature of up to 48 °C.



### SHAFT DRIVE AND SUPPORT

The shaft is driven by slow speed radial piston pumps with high torque. They achieve a high degree of efficiency and minimal loss of power without requiring a gearbox. The shaft is supported by truck tires, which also allows for a quick switchover (approx. 60 minutes).



### OPTION: AUXILIARY CHASSIS & DRAWBAR

For the mobile hook lift Methor, there is an auxiliary chassis available with rugged solid rubber tires and drawbar. That makes it easy to move the machine around on site by lifting it up via hydraulic rams.



### EASY ACCESS CONCEPT

All drive and hydraulic components are optimally ventilated and can be easily ground accessed via the large door panels.



### OPTION: HYDRAULIC QUICK COUPLERS

For a quick and leak-free removal of the shaft, the Methor can be equipped with hydraulic quick couplers that can be released without tools.



### SHAFT DESIGN

The shafts utilize our tried-and-tested Dopp-Lock® system and are designed with emphasis placed on cost and weight optimization. The shredding shafts are available with tooth sizes XL, L, M and S.

### MODULAR DESIGN

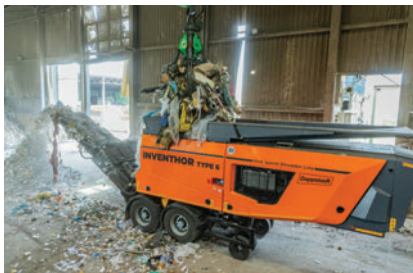
The Methor is available on a hook lift frame, on tracks or as a stationary system. Whilst it's factory-mounted with a diesel engine or an electric motor, it is also possible to integrate any other drive.





# te, the Best Innovate

t shredding' line, with the new **METHOR** and **INVENTHOR TYPE 6**.  
market through Doppstadt's exclusive dealer, **Blue Machinery Group**.



## INVENTHOR TYPE 6

The Inventhor Type 6 sets shredding efficiency standards. Benefiting from its unique VarioDirect Drive, highest

uptime, simple & flexible operation right from the first tonne. The successor of the highly popular DW 3060, takes advantage of the latest Doppstadt shredder technology for your business.

Powerful, dynamic, and ready to use anywhere you need it. The Inventhor Type 6 shreds with high efficiency, whether its green waste, commercial & industrial waste, municipal waste, waste wood and many more applications. This new shredder works perfectly alongside Doppstadt's extensive product range.

The Inventhor Type 6 promises more efficiency. When compared to the DW and the competitor twin-shaft shredders, the Inventhor Type 6 achieves, at least, the same production as the competitors despite the lower energy requirements. This industry leading machine is extremely flexible and yields high-class results.

Flexible to use, easy to move. The Inventhor Type 6 comes on tracks or a semitrailer with king-pin or six-wheel trailer with drawbar for transport up to 80 km/h. Economic efficiency in operation also means that the shredder can be moved quickly to the place where you need it. With the tracked version you can move the Inventhor Type 6 safely and quickly on any surface, even during the shredding process.

Blue Machinery Group are the exclusive Doppstadt dealers across the UK & Ireland, for any further information on either of these fantastic shredders, call 0345 217 8755 or send an email to [sales@bluegroup.co.uk](mailto:sales@bluegroup.co.uk)

## MACHINE DETAILS



### COOLING SYSTEM DESIGN

Highly efficient cooling system geometry, directly upstream of hydraulic, reversible fan.



### PLUG & PLAY

Simple operating concept makes daily routine tasks easy with the press of a button using different programs.



### ENGINE COMPARTMENT

The engine compartment offers lots of space and easy access to all components, such as engine equipment, transfer case with direct engine connection or to the load-sensing system.



### SMART HOPPER

Extended feed area and automatic adjustment of material feed to increase the production of the shredding system.



### MATERIAL FEED AND SHREDDING CHAMBER

The steep walls of the feed hopper ensure continuous production. The flexible shredding concept with different shaft configurations allows a precise adaptation to different material requirements.



### VARIODIRECT DRIVE

The newly developed and patented Vario-Direct Drive delivers steplessly variable power directly to the shredding shaft.



### REAR BELT OPTIONS

The central DoppHitch attachment system makes it easy to utilize different rear-mounted system solutions. Selectable belt length options offer high discharge heights and steplessly adjustable belt angles.



### INNOVATIVE DOOR CONCEPT

All door panels open upwards ensuring optimum access. The GRP door panels with their large air vents ensure optimal ventilation, while reducing noise emissions at the same time.



### EASY ACCESS CONCEPT

The counter comb door which opens up to 90° greatly ensures easy access to the entire shredding compartment. It also increases on-the-job safety and ensures a fast re-start after service work.



### MULTI TOOL CONCEPT

Use of shredding tools equipped with Dopp-Lock® system from other slow speed shredders, available in sizes M and L including the new generation of limiters.

### OPTIONAL CHASSIS

The Inventhor Type 6 is available both on a semi-trailer chassis with drive unit or on a remote-controlled track-mounted chassis.





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# Edge Innovate release new Tracked Radial Stockpiler – the Edge TSR80

**A global leader in the design and distribution of a range of equipment used in the quarrying, port handling and recycling industries, EDGE Innovate has revealed their latest portable material handling offering with the launch of the TSR80. The new mobile conveyor will take its place in EDGE's ever-growing material handling product line up.**

The EDGE TSR80 is an 80ft long tracked mounted conveyor with radial stockpiling functionality. Essentially, the TSR80 has packaged all the advantages of a mobile radial stacker and that of a tracked mounted stockpiler into one product. The TSR80 has the ability to self-propel across even the roughest terrains and the capacity to create massive radial stockpiles. It is the perfect stockpiling solution for operators who frequently reposition their processing plant or want a conveyor to fulfil a number of different roles on-site.

## Features:

The TSR80 offers operators a host of design features such as a high torque belt drive, 1200mm (48") wide conveyor, hydraulic variable feed in height, adjustable operating angle, radial stockpiling functionality and quick transition from transport to operational mode. With a maximum discharge height of 11.8m (38'10") and 360° radial capability, the EDGE TSR80 can create stockpile volumes up to 34,237m<sup>3</sup> (40,947yd<sup>3</sup>).

In addition, the TSR80 has an optional automatic stockpiling programme which combines automatic radial drive functions and self-angle adjustment enabling the TSR80 to create huge radial stockpiles with minimal supervision and prevents material segregation.

The core design principal for the TSR80 has been to provide customers with a conveyor that could create large radial

stockpiles and can easily be transported both locally and around site with minimal fuss or cost. The TSR80 has been designed to fold down with its own power source and to drive onto a range of low boys and low loaders.





# Experience the Progress.



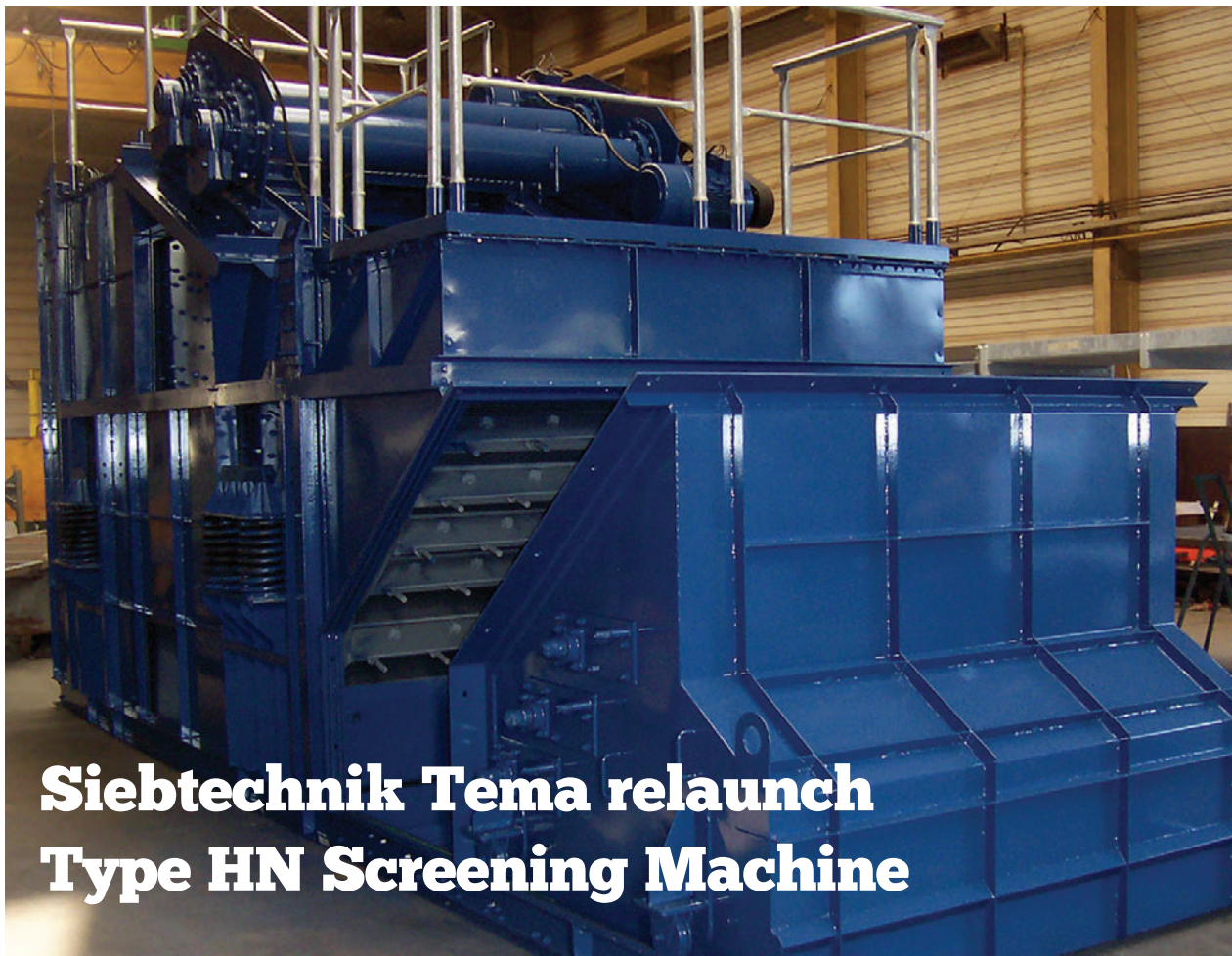
## Material handling equipment

- Quality Liebherr components optimise entire machine performance
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# LIEBHERR





## Siebtechnik Tema relaunch Type HN Screening Machine

**For the manufacture of standard asphalt-bound base and surface layers stationary, semi-mobile or mobile asphalt mixing systems are employed. These consist essentially of a dry drum, bucket conveyor, screening machine, aggregate silos, weighing and mixing equipment and a shipment loading system.**

The aggregates, which make up about 80 to 90% by weight of the asphalt formulation, are heated to the required temperatures in the burner-heated dryer drum. The quality of the asphalt layer depends on, amongst other things, the quality of the binding materials and the correct grain composition of the largest component by volume, the grainy aggregates. For this reason, the screening machine is of special importance.

Siebtechnik Tema have recently relaunched their Type HN Screening Machine with an improved dust enclosure.

### **The advantages:**

The new SIEBTECHNIK TEMA type HN screening machine has the advantage of a simple two-shaft linear motion external mechanism which maintains low operational temperatures and does not require expensive cooling systems. Being very maintenance-friendly this facilitates shorter downtime in cases of maintenance or repair. The split enclosure which is now on rails allows easy access to the internal screen surfaces.

- Customer-specific concept
- Temperature resistance of the components
- Drive system, screen box and screen cloth to suit the screened material
- Compact design

- Low-clog classification
- Excellent vibration insulation
- Robust design
- Long-life time-tested components
- Optimally adapted drive concept
- Low-maintenance and repair-friendly

Hot chippings at temperatures of up to 450°C have been reliably screened with this system in numerous applications across Europe.

### **Making the right choices:**

Here the right choice of screen cloth and the kind of screen cloth tensioning is also important, with excellent accessibility of the machines.

This in combination with the dust enclosure, which in the new, split version incorporates a fully extendable chute introduce further improvements on the earlier system.

The new screens can also feature an internal bypass if required.

Simon Parry-Jones – Sales Engineer, commented, “Most of the screens on the market feature a through shaft design which tend to suffer with premature bearing failures due to the elevated operational temperatures. We have a number of the new screens in the UK which have all been received very well.”

### **Watch the video:**

<https://www.youtube.com/watch?v=P1JIE8eAXIA&feature=youtu.be>

This provides a great insight into the benefits of this design over through-shaft designs.



# WEG awards Premier Partner status to distributor



**Industrial automation manufacturer, WEG has awarded Irish parts supplier, Technidrive with its prestigious premier distributor status. Having supplied WEG's products for over 15 years, Technidrive has expanded significantly in recent years, now stocking a complete range of WEG electric motors, drives and automation products.**

This premier distributor status means that Technidrive is not only the go-to supplier of WEG products in the Irish market but is also the expert systems integrator of choice in this region. Businesses looking to implement automated production lines can benefit from WEG and Technidrive's combined wealth of engineering experience.

"Industrial businesses are always looking for ways to boost productivity, increase energy efficiency and reduce waste," explained Russell Maccabe UK Sales Manager at WEG. "To reap these benefits, businesses must look beyond each individual product's specifications and consider the operation of their entire system. For this level of analysis, expert knowledge is required. Technidrive's in-house expertise as a systems integrator is what sets the company apart, and that's why we've chosen to award our premier distributor status.

"We've had a long and fruitful partnership with Technidrive, who shares our philosophy of finding flexible design outcomes for complex applications using the entire WEG product line. Existing and new customers can expect end-to-end systems, with a focus on sound technical advice and excellent customer service."

"WEG has a distinguished reputation in the Irish market," explained John Coulter, Managing Director at Technidrive. "We're pleased to offer a complete range of quality WEG products, which coupled with our technical expertise, means that we are able to offer a tailored turn-key service for our customers. We have extensive application experience in industries spanning the food and beverage sector to general processing, so all industrial businesses can benefit from our complete automated design service.

"We have a large team of capable engineers and new business premises, so we are in a unique position to be able to carry out extensive customer site visits, conduct technical calculations and provide bespoke systems integration. This ensures the correct combination of WEG products are supplied for each individual customer application. For example, when integrating a soft PLC into a systems architecture, we match productivity requirements and efficiency to achieve optimum performance. What's more, our in-house technical support team are always on hand to offer assistance to our customer base."

Technidrive supplies WEG product lines such as variable speed drives, soft starters, energy efficient motors, gearboxes and control gear. For more information about this new distributor status, or WEG's full range of industrial products visit [www.weg.net](http://www.weg.net). To explore Technidrive's full range of products and services visit [www.technidrive.co.uk](http://www.technidrive.co.uk).



# Metso Outotec starts operations – partner for positive change for tomorrow's aggregates, minerals, metals and recycling industries

CEO Pekka Vauramo



**As sustainable processing of the world's natural resources is becoming a norm within the industries, Metso Outotec is driving the transformation. Metso Outotec, a unique new company with leadership in sustainable minerals and metals processing and recycling technologies begins its**

**operations today. Headquartered in Finland and listed in Nasdaq Helsinki, Metso Outotec employs over 15 000 professionals in more than 50 countries.**

The company offers its customers crushing and screening equipment for the production of aggregates as well as equipment and solutions for minerals processing, metals refining, chemical processing, and metal and waste recycling. Metso Outotec's industry-leading service capabilities and global network are complemented with a comprehensive range of spare and wear parts, refurbishments and professional services.

Metso Outotec brings together a long history of technological leadership, customer focus and excellence in services, leveraging the strengths of both companies. The benefits to customers and other stakeholders are unmatched in the industry: full offering that ranges from ore body to metal, extensive global services network and significant investment in R&D, allowing the company to create sustainable technologies to the customers' benefit. The combination offers potential for significant cross-selling and cost synergies and an even stronger platform for innovation, digital leadership and growth.

## The partner for positive change

The growing interest towards the environment and the impacts of climate change, urbanization, decreasing ore grades and electrification are forcing traditional industries like aggregates, minerals processing and metals refining to redefine their license to operate. Metso Outotec can drive these industries towards a responsible use of the world's natural resources.



Crushing and screening solutions



Life cycle services and solutions for complete plants

"It is our core expertise to help our customers transform the industry. We offer sustainable technologies and services that reduce the consumption of energy and water by increasing process efficiency, recycling and reprocessing of tailings and waste. Our extensive offering and expertise help our customers improve their business and lower their risks. We are their partner for positive change," says Pekka Vauramo, the President and CEO of Metso Outotec.

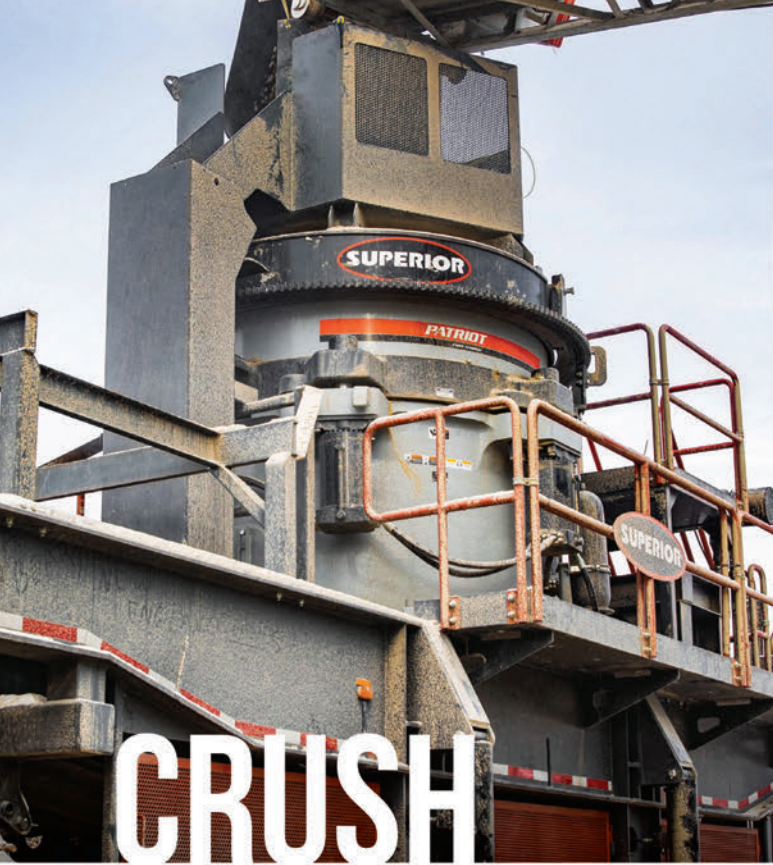
"We have the best talent in the industry, and I am very excited to start the journey together today," he concludes.

[www.mogroup.com](http://www.mogroup.com)

Metso Truck Body launched in 2019.  
Haul more with less







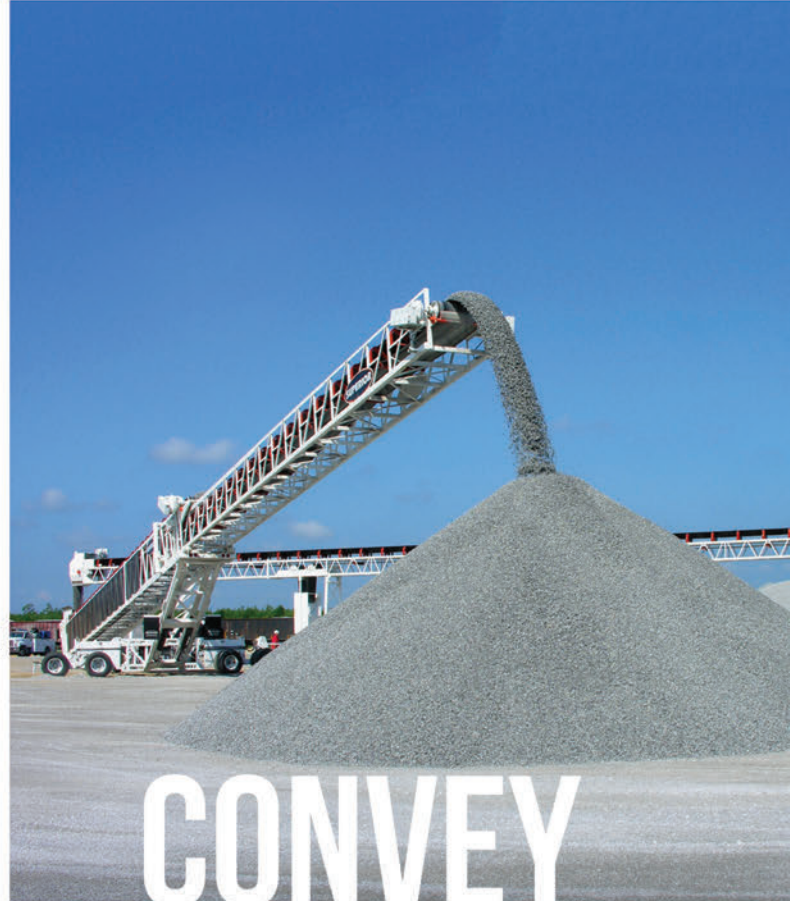
# CRUSH



# SCREEN



# WASH



# CONVEY



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



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# Terex Ecotec expand Shredder Range with new TSS 390 Single Shaft Shredder

**Leading environmental equipment specialist, Terex Ecotec, is expanding its shredding range with the introduction of the TSS 390, a robust and versatile single shaft, slow speed shredder. Powered by a fuel efficient 493HP Scania DC13 engine, it is designed for maximum output and minimum down time. Ideal for volume reduction, the TSS 390 can handle the toughest of materials, is simple to operate and offers excellent all-round serviceability.**

Tony Devlin, Business Line Director for Terex Ecotec said, "We are committed to delivering innovative, high quality products and the addition of the TSS 390 will further enhance an already significant range of shredding products. The TSS 390 has been rigorously tested and proven in a diverse range of applications and will open up new opportunities in the market. It will be manufactured in our new state-of-the-art manufacturing facility in Derry, Northern Ireland which will support the ongoing growth and development of Terex Ecotec's ever expanding product portfolio."

The TSS 390's 3m long shredding shaft was expertly designed in-house and is made from heavy-duty steel with easily replaceable, bolt-on shredding teeth. Being hydrostatically driven, it offers the benefit of full speed, full torque reverse and provides protection against contaminants. This combined with customisable shredding programs enable the operator to configure the machine to their specific requirements and offers improved shaft cleaning in difficult applications, reducing wrappage and optimising throughput.

Shredding takes place against a hydraulically adjustable counter comb which allows the operator to easily tailor the product size to suit their needs. This comb can be operated in either a fixed position, where product size is critical or in release mode when the comb can open rapidly to allow large contaminants to pass without the need to stop shredding.

Designed to provide operators with unrivalled levels of service access the shredding chamber has hydraulically operated doors on both sides allowing chamber maintenance to be



carried out with ease. The TSS 390 offers quick set-up and will be ready to shred in a matter of minutes. All conveyors are modular in design allowing each one to be removed independently reducing maintenance downtime. A separate transfer conveyor with a high specification belt ensures material is effectively removed from below the shredding chamber. Both the transfer and product conveyors benefit from a speed monitoring which adds additional protection against blockages.

The optional over-band magnet provides magnetic separation and is both height and angle adjustable via a remote control. The magnet can be configured to discharge from either side of the machine and lifts up and away from the product conveyor when not in use. The chamber camera and monitor screen are an optional extra, however it enables the operator to see exactly what is happening inside the chamber and helps refine the shredding programs to provide maximum throughput in even the most difficult applications.

Available in both tracked and wheeled variants the TSS 390 will come fitted as standard with the industry leading T-Link telematics solution. T-Link has been designed to improve productivity, efficiency and profitability for customers.

To learn more about the new TSS 390 and to locate your nearest dealer visit [www.terex.com/ecotec](http://www.terex.com/ecotec)





# Washing Plant Sale - new dates announced

**DUO and Euro Auctions, announce the final date for the biggest sale of washing and recycling plants, including screeners, crushers, excavators, loaders and ancillary aggregate processing equipment, at a one day unreserved sale to be held on the 27th August 2020, with viewing on the 26th August.**

This exciting one-day sale, to be held at the DUO site in Burton-on-Trent, is part of a 'stock refresh' ahead of the new and exciting expansion program. DUO have acquired a new site in Coventry, where the very latest aggregate processing, recycling machinery and ancillary plant equipment will be installed, showcasing the very best machinery available in the industry. The Burton-on-Trent site will be decommissioned, hence all equipment will be sold on the ground, to make way for the new venture.

## Showcase of NEW TECHNOLOGY

On the 27th August, DUO will be showcasing the latest washing technology and equipment from Powerscreen, Doosan, and Terex, which will be installed at the new DUO site in Coventry.

## Star Buy!

The stars of the sale will be five Terex® AggreSand 165 washing plants, and three Italian Technoidea 1000 filter presses. The AggreSand 165 modular aggregate washing plant combines washing and screening with sand processing on a modular chassis. It brings together tried and trusted Terex Washing Systems components in an innovative modular design, setting itself apart from other washing systems in the marketplace. The three filter presses are manufactured by Italian manufacturer 'Technoidea Impianti', global leaders in water purification and treatment of sludge.

## The Auction

World leading auctioneers, Euro Auctions, have been appointed as valuer and auctioneers to manage the disposal of all lots. This is an unreserved public auction, with all lots sold on the day to the highest bidder. To obtain a bidding number for this auction, register on line at [www.euroauctions.com](http://www.euroauctions.com).

Viewing 26th August 2020

Sale 27th August 2020

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## Wash Plants

- Five complete Terex® AggreSand 165 washing plants
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## Sand Plants

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## Conveyors:

- Terex 5032 Conveyor – various, including T6532 Conveyor (50ft)
- Radial Conveyors ranging from 20' to 70'.
- Static Lattice Conveyors ranging from 20' to 70'.

## Screeners

- Powerscreen Horizon 6203 Screener
- AggreScalp
- 1050 x 2300 Overband Magnet complete
- Chieftain 1400
- Warrior 1400

## Crushers

- Maggoteaux Impact 2400 static
- Powerscreen XA750 Jaw Crusher
- Powerscreen 550 SR Trakpactor
- Powerscreen 320 Trakpactor
- Maxtrak 1300 Powerscreen

## Plant, Machinery & Commercial

- Doosan Wheeled Loaders – DL350 / DL420-5
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- CAT – Motor Graders
- Various commercial vehicles

**All equipment has been fully DEALER maintained**



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## New concrete plant provides expansion for Hills Quarry Products

**Hills Quarry Products is pleased to announce it is taking over the operation of an existing concrete plant in Gloucester. The plant was recently purchased from Chelmix Concrete Ltd.**

Peter Andrew, Group director said: "Our new site at Gloucester will greatly expand the geographical area which Hills Quarry Products operates and also enhance the level of service we can provide to our customers with a mini-mix service now available from all our concrete plants."

The site is being registered with the Quality Scheme for Ready-Mixed Concrete (QSRMC) and will be providing high-quality concrete and screed, available for collection or delivery using 4m<sup>3</sup>, 6m<sup>3</sup> and 8m<sup>3</sup> sized vehicles.

We look forward to welcoming new and existing customers to the site very soon.

Our site address is: The Old Bakery Yard, 14 Lower Tuffley Lane, Gloucester GL2 5DP

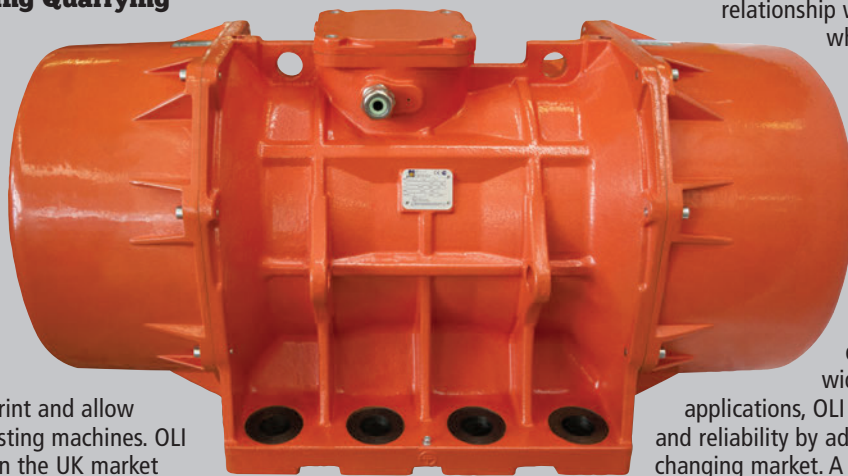
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For this purpose, three production sites were set up in the main regions of the world and subsidiaries were opened in 19 countries. In consequence of which the motto of our company 'When you need it, where you need it', has a deeper meaning.

OLI's paramount objective is to establish a mutually beneficial relationship with our customers, who are a key influence in shaping the company's business model. Meeting the customers' needs is a priority, achieving a trustful partnership is the reward. By supplying competitive high-quality products for wide ranging applications, OLI combines performance and reliability by adapting to the ever-changing market. A strong believer in innovation, OLI is constantly striving to be ahead of the curve and new products are constantly being developed to complement our range.



## Euro Auctions Holds: **Stock Refresh Sale** On Behalf Of **Thursday 27<sup>th</sup> August @ 8.30am**



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## QK launch Radial Tracked Conveyor



Quarry King based in Co. Tyrone; N. Ireland have recently introduced the QK TRACKPILER® TR6536 tracked radial conveyor. QK already offer an extremely popular range of wheeled radial and tracked conveyors and have now combined the advantages of these into one product.

The TR6536 is capable of producing maximum stockpiling capacity when receiving material from crushers, shredders and screens thus eliminating material contamination, compaction, and segregation. It is ideal for a range of applications including sand and gravel, topsoil, compost, mulch, and C&D waste.

As well as offering fully tracked on-site movement and producing huge stockpiling capacity the TR6536 eliminates dual handling of material with a wheel loader and can reduce fuel maintenance and labour costs by up to 80%.

The TR6536 is available with either a Tier 3 CAT or Tier IV/Tier V Deutz engine which are enclosed in a fully protected power unit with easy access for service and maintenance. Both the radial wheel movement and raise and lower are operated by remote control.

Like other conveyors in the QK Conveyor range, the simple yet robust design of the TR6536 provides a value for money solution to fit many producers need for large stockpiling capacity. It is easily transported on a low loader and can be containerised for cost effective shipping worldwide.

Quarry King offer a wide range of wheeled and tracked conveyors, belt feed hoppers, vibrating feeders, crusher surge bins and silos which can be found on their website [www.qkconveyors.com](http://www.qkconveyors.com)

For more information on the TR6536 or any of the QK Conveyor range please email [info@quarryking.com](mailto:info@quarryking.com) or call +44 (0)28 9557 5911.



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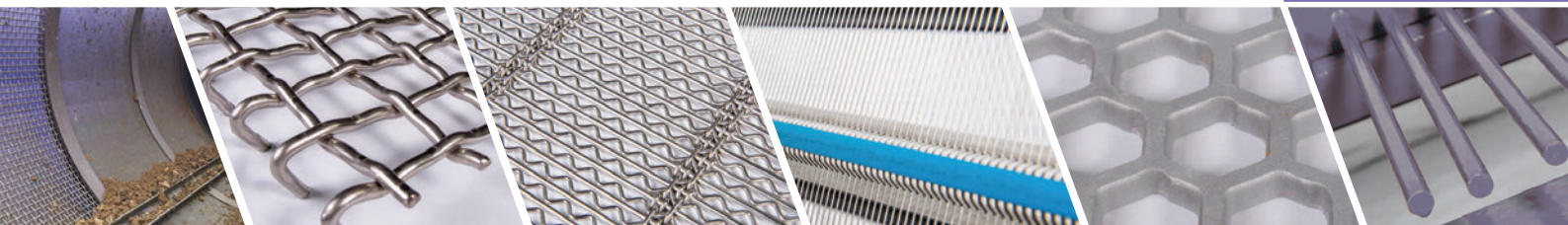
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## Environmental responsible Dust Suppression Solutions remain a key focus with Ace Plant

**Ace Plant have been manufacturing and supplying Dust Suppression equipment for many years. During this time, we have developed individually designed machinery and adapted standard equipment to provide bespoke Dust Suppression.**

With dust in the workplace being one of the largest issues in terms of health & safety, we actively engage with our clients and work alongside suppliers to enlarge the range of equipment available specifically designed to control dust.

Environmental responsibility, particularly in the control of water usage, remains a significant factor in the process of developing our new products.

### Dust Suppression Units

For simple Dust Suppression, tractor and tanker combinations are available. Consisting of 5200L, 7200L & 9000L versions, our Dust Suppression Units are fitted with hydraulically driven vacuum pumps rather than PTO – maximising safety. These pressure-fed units are normally fitted with a rear splash plate, making it particularly suitable for dampening down residual dust on haul roads where a high-volume water application is required. We also offer a more compact 2250L unit which is fitted with a petrol driven water pump and rear splash plate. These 2250L units are ideal for smaller sites and they can also be used to feed water to the internal Dust Suppression systems of crushing/screening equipment.



### Spinning Disc Option

In situations where water consumption is an issue, we have developed a hydraulically driven carbon fibre spinning disc assembly mounted to the rear of our larger Dust Suppression Units. The idea is that the spinning disc atomises gravity fed water into a fine mist so that an area is not soaked unnecessarily and is only dampened as required. Being gravity fed, this method uses less water than pressurised systems. The spinning disc makes water usage more efficient and more economical as it gives the operator greater control and a longer time between re-fills.

### Rain Gun Option

When a more targeted approach is required, our rain gun provides an alternative solution. Powered by a high-capacity centrifugal hydraulic pump, a throw of up to 70m can be produced. Hydraulically operated from the safety of inside the cab of the tractor, the rain gun can be accurately directed onto stockpiles and other difficult to reach areas at a distance.

### Quickspray

Our Quickspray telehandler/forklift/loader mounted unit provides accurate, efficient, and effective Dust Suppression - it also helps to ensure existing equipment fleets are used to capacity. Using the same carbon fibre spinning disc assembly as mentioned previously, the disc creates a fine mist that traps dust without soaking an area unnecessarily. The spinning disc makes water usage more efficient, economical and gives the operator greater control.

### Dust Fighter

Our Dust Fighter fan assisted range offers a controllable low water usage solution. One item within the range, our DF7500MPT Dust Fighter, is complete with its own remote control. The unit can be aimed, turned on/off, and oscillated at the touch of a button. Fitted with a 2000L on-board water tank and 22KVA generating set, the unit is completely self-contained and has a throw of up to 40 meters.

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# Crush It Forward

## User-friendly automation drives next-level crushing efficiency

By Bryan Weiss, Automation Manager for Superior Industries

**Overall plant systems integration and crushing circuit automation will continue to grow, expanding quickly in capabilities over each coming year.** For some folks, adapting to a new cone crusher automation program fuels fears of frustrating learning curves, operational failures and troubleshooting headaches. But rest assured — the right automation program is designed with true simplicity and safety at the forefront. From a simple setup to safe startups and shutdowns, crusher automation systems should be easy to install, easy to understand, and

easy to monitor by any member of the quarry crew. Most importantly, optimum automation ensures safe, reliable, and profitable material processing.

### Simple setup

Look for an automation system with a simple, user-friendly sensor communication network. Past systems may feature dozens of separate conductor wires running from the PLC to each component, which is a complicated and time-consuming network to set up, and a major hassle to maintain over time.

A simple sensor communication network accesses a standard 4-wire cable system from the cone crusher to all auxiliary systems. It is a quick, easy setup that streamlines diagnostics and troubleshooting, while minimizing the downtime associated with common conventional systems.

### Safe startup & shutdown

A major advantage is safely controlling motor starts and stops with one touch on the screen. This ensures that the crusher is always safely starting up and shutting down in the proper sequencing (without operator intervention) to protect machine performance. A one-touch start and stop feature eliminates the need for an additional box for electrical push buttons in the tower.





For a safe startup, the automation system will monitor the lubrication system for proper temperature and flow before allowing the crusher to start up – and should an event occur, it will automatically shut off the crusher as well as the crusher feed.



For a safe shutdown, the operator hits the one-touch stop feature and proper sequencing automatically starts with shutting off the feed, followed by the cone and the discharge. The lubrication will run for an additional five minutes until all the oil flushes through

and the cone comes to a complete stop. At that time, the lubrication system will shut down. Notably, the system tracks how long it takes the crusher to shut down – from full RPM to a full stop. By tracking shutdown times, operators have a way to help diagnose abnormal bushing wear.

The right automation system is all about simplicity – and end users find there is nothing to fear – and everything to gain in peace of mind and optimum crushing performance.

Bryan Weiss is the automation manager for Superior Industries, a single-source manufacturer of crushing, screening, washing and material handling systems.

## Field-proven Automation

**In both portable and stationary operations, user-friendly automation systems are impacting crushing efficiency, and ensuring lower operating costs per ton. The latter has proven true for an Idaho, U.S.A.-based contract crusher who is operating a Superior Industries Patriot® P300 Cone Crusher Plant, equipped with Superior's Vantage® Automation System.**

According to Matthew Voigt, Superior Industries product manager for portable plants, the crushing plant combines a 225kW cone, a triple-deck screen and seven feed and discharge conveyors – all on one chassis and configured for both open and closed circuits. The plant also features new patent-pending "Level-Assist" technology as an innovation that further streamlines crushing plant portability. Voigt explains that after lowering the hydraulic cylinders to get the plant to the desired operating height, the level-assist system automatically levels the plant. "One worker can get the job done in less than five minutes. It saves a lot of time in setup," he adds.

As to automation on the portable plant, Voigt stresses that the Vantage Automation System monitors all the vital functions of the crusher. "It's simple, easy to use, and acts as a warning system that alerts operators to conditions such as bowl float, excessive amperage or temperatures, and lubrication issues," he says, adding that, "since it's built completely in-house, the system is more affordable, and offers the user a one-call service and support package."

On older crushers, Voigt says that maintenance crews had to constantly rely upon gauges to monitor operating parameters. "Also, it was such a hassle to change settings on older crushers, causing crews to check the settings less often than necessary," he says. "Today, crews operate the new plant from a touchscreen control panel that allows them to easily adjust crusher settings, or to start and stop the plant in sequence with the push of a button."

Operating an automated Patriot P500 Cone Crusher, the Tulsa Rock Quarry in Oklahoma, U.S.A., reports a decrease in operating costs, and an increase in plant uptime. The plant's processing team likes a number of the automation system's features, particularly the simplicity of the sensor communication network, which accesses a standard 4-wire cable system from the cone crusher to all auxiliary systems. Other big benefits include the capability of making setting adjustments on the fly, which gives them greater flexibility regarding changes in material feed; and allows them to easily tweak processing within all circuits of the plant.

Tulsa Rock Processing Engineer Mike Neal says that the automation system's auto-feed function is one of the biggest advantages. Regardless of changes in the feed, the system will always maintain the desired material feed levels in the cone, while also maintaining the desired amperage on the motor to ensure optimum crushing efficiency.





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# Kelston Sparkes Group take delivery of a new GipoKombi RC150 FDR Impact Crusher from material processing experts AGG PRO

**The Kelston Sparkes Group (KSG Ltd) was founded by the late Mr Kelston Sparkes in 1952 initially as an agricultural contractor. Now in its 68th year of trading the company remains a family run business specialising in earthworks, earthmoving, quarrying and crushing & screening.**

During this time the company has grown to become one of the largest and most respected earthmoving and quarrying contractors in the UK.

In keeping with the company ethos of continuous development by investing in the latest innovative solutions to maintain the rigorous standards set by KSG Ltd and the blue chip companies with whom they partner, they have recently taken delivery of a new GipoKombi RC 150 FDR from Tamworth based AGG PRO, the UK & Ireland agent for Gipo AG.

GipoKombi units are a highly efficient processing system with crusher, product screen and a pre-screen mounted on a single tracked chassis. Where previously it was necessary to use multiple machines to produce a final graded product, now only one is required to do so.

This gives major cost advantages in acquisition, transport, labour, fuel consumption and environmental load.

At the heart of the machine is the Gipo P150 Impact Crusher with variable speed 1300 mm diameter rotor, 1.5m feed

opening, hydraulic CSS adjustment and hydraulic blockage release. An underpan vibratory feeder regulates material surges.

Crushed material passes over a large capacity screen with oversize material travelling, via the return conveyor, to the hopper for re-crushing. This way it is possible to achieve 100% product passing at the required size.

A hydraulically operated bypass chute means that the change to crusher run materials can easily be made.

Operation director Mr Kelston Stark takes up the story.

"Having renewed a contract with a long-term client we were in the market for a new machine to increase our production capabilities but with very specific machine requirements. After talking to a few suppliers it quickly became apparent that AGG PRO & Gipo AG were the only company able to meet our needs. We found it refreshing that they were able to build a machine to our exact requirements rather than modify a standard machine to suit. As this machine will be moving a lot as it follows the quarry face it made sense to go with a GipoKombi plant with crusher and screener on a single chassis thus considerably speeding up relocation.

We already have a good relationship with the team at AGG PRO and after a visit to the Gipo factory in Switzerland, a decision was made to add another Gipo machine to the fleet".





# Conveyor service contracts reduce downtime, hazards & costs

**Improve efficiency, reduce risk and control operating costs**

**In a number of industries, operators are increasingly turning to outside contractors to take advantage of consistent maintenance schedules and expert service. Conducted by experienced and well-trained technicians from specialty companies, these contracts have been found to improve safety and control costs.**

Specialty contracting may be a better choice for service than internal resources, since the providers are fully trained on the newest equipment designs and safety procedures. In many cases, they may be able to secure replacement equipment more quickly during periods of unscheduled downtime due to their industry-wide contacts.

Performance problems with conveyor components and systems can frequently be traced to improper installation or insufficient maintenance. It's recommended that the component manufacturer or expert contractor install equipment on both new and retrofit applications. Serious performance problems stem from a lack of proper maintenance. Using a specialty contractor (also known as a 'certified contractor') for installation and ongoing maintenance contributes to safer and more efficient production -- with less unscheduled downtime -- and in the long run saves money and reduces injuries.

## Training and Retention

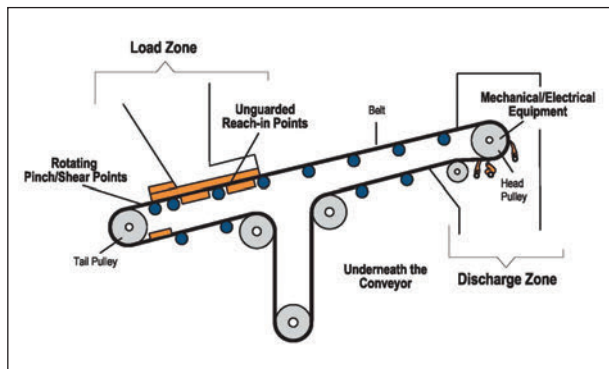
The time and resources required to train employees on equipment and certify them to conduct certain procedures such as confined space entry, electrical work, etc. can be a significant ongoing expense. As workers become more experienced and gain certifications to properly maintain efficient systems, their value in the marketplace rises, and retention can become an issue. In contrast, specialty contractors must be experienced, knowledgeable and certified to conduct the appointed maintenance, and it's up to the contracted company to retain and train that staff.

## Maintenance Danger Zones

Due to a greater emphasis on safety and the expensive consequences of unscheduled downtime, bulk handlers are being more meticulous about conveyor operation and maintenance. This increased scrutiny includes regular cleaning of spillage, improved dust control, and additional monitoring and maintenance, exposing employees to a moving system more often. These changes introduce a variety of hazards.

Conveyor danger zones where work injuries are likely to occur [Fig. 1]:

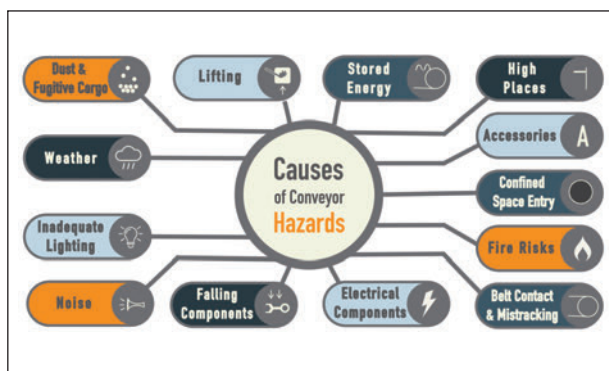
- Loading zone
- Discharge zone
- Mechanical / electrical equipment
- Rotating pinch/shear points
- Underneath the conveyor
- Unguarded reach-in points



**Figure 1:** Danger zones exist along the entire length of the belt, many at maintenance points.

Most common conveyor-related issues are found across a wide range of industries, and personnel who work around the equipment on a daily basis often become complacent about the conditions, viewing issues as an unavoidable outcome of production rather than abnormalities in need of resolution. An experienced maintenance contractor recognizes these problems and may present solutions that internal resources have overlooked. The improvements are designed to reduce employee exposure, improve workplace safety and maximize productivity.

Sources of hazards include [Fig. 2]:



**Figure 2:** The list of potential sources of hazards is long and varied.

## Types of Service Contracts

Maintenance programs differ by provider and may be customizable to suit individual customers, but they generally fall into three categories: inspection/report, cleaning/servicing and full service.

Contracted services, such as mobile belt cleaner maintenance, help reduce component failures.

A scheduled inspection and report contract sends a specialty contractor to thoroughly examine a system -- from belt health to equipment function to the surrounding environment -- and identify potential issues. A report is produced that presents findings and offers solutions.

The cleaning and servicing contracts are perhaps the most common. From spillage and silo cleaning to monitoring and





changing belt cleaner blades, services can be very specific and fill gaps where maintenance crews might be overstretched. The first advantage to this is that a conveyor can be surveyed without requiring the attention of plant personnel, freeing them to go about their usual tasks. A second advantage is that the outside surveyor is an expert in proper conveyor practices and current governmental regulations.

At the highest level, a full service and maintenance contract sends trained technicians who take accountability for monitoring, maintaining and reporting on every level of system function. They replace wear components when needed and propose required upgrades in order to maximize efficiency, safety and uptime. This provides operators with cost certainty, making it easier to project and manage the cost of operation.

### Return On Investment (ROI)

Increasing speeds and volumes on older conveyor systems designed for lower production levels contribute to workplace injuries and increased downtime.[2] Capital investments in newer semi- or fully-automated systems designed for higher throughput require less labor, but the maintenance staff needs to be highly trained and specialized technicians.

Maintenance service contracts deliver the best ROI through a series of factors:

- Compliance – The contractor points out compliance issues and offers solutions prior to expensive fines and violations.
- Injuries / Liability – Contractors rely on a strict set of safety procedures to conduct maintenance, reducing liability.
- Efficiency – Maintenance service contracts focus on improving and sustaining uptime with the least capital investment possible.
- Consistency – Contractors have a clear directive and are not affected by internal factors (labor disputes, morale, etc.).
- Cost of Operation – With a defined scope of work on a set budget, along with clear reporting and recommendations on pending needs, operators can better forecast improvements and control labor costs, further improving ROI over time.

Scheduled maintenance from outside experts helps maximize equipment life and reduce downtime.

### Conclusion

Maintenance service contracts are not just a way of controlling and potentially reducing the cost of operation; they are also a safety mechanism. For example, one case study showed a 79% reduction in lost time incidents and a 40% improvement in production using specialty services, which demonstrated payback in days from an annual specialty maintenance contract.[3]

Workloads may preclude staff from maintaining proper compliance or they just might not notice some violations. Outside resources take ownership of the plant's efficient and productive use of the conveyor system and strive to improve conveyor efficiency, maximize equipment life and safety to add value to the operation.

At the core of the issue is lower operating costs and improved production. The work should match or improve efficiency regarding downtime and throughput. If the criteria of compliance, cost savings and efficiency are met, then the maintenance service contract has provided a tenable ongoing solution.

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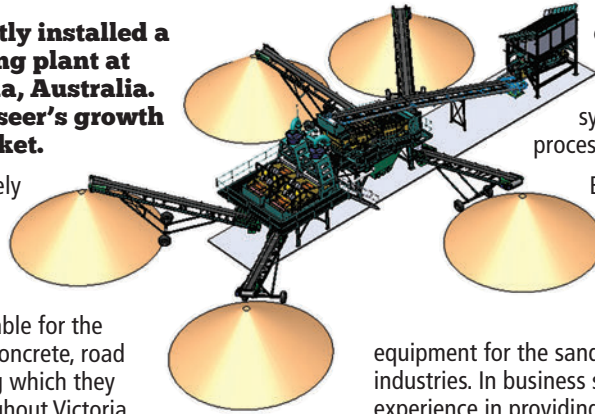
## Dernaseer provide Modular Washing Plant to Skye Sands

**Dernaseer have recently installed a modular M450 washing plant at Skye Sands in Victoria, Australia. This continues Dernaseer's growth in the Australian market.**

Skye Sands Pty Ltd is privately owned by the French Family since 1972 and they are dedicated to providing quality sand and specialty blended sand products suitable for the manufacture of pre-mixed concrete, road construction and bricklaying which they provide to customers throughout Victoria.

Skye Sands founder Rusty French had been looking for a semi-mobile large capacity sand washing solution and came across Dernaseer during a visit to Northern Ireland. After considering other options he decided that the M450 best suited his needs for robust build and ease of service and maintenance as well as high capacity for producing in spec sand.

The turnkey M450 washing system incorporates a 15m<sup>3</sup> capacity belt feed hopper with remote control tipping grid; galvanised 1000mm feed conveyor; 6m x 1.8m washing screen fitted with modular polyurethane screens; dual DSP150 cyclone sand plants; and a 32m powered radial sand conveyor



capable of stockpiling 13000m<sup>3</sup> of sand. The Skye Sands plant also includes a WT9 water treatment system which recycles up to 85% of the process water used in the washing plant.

Based in Dungannon, Co. Tyrone, Dernaseer specialise in the design and manufacture of washing plants and screening

equipment for the sand & gravel, quarry and recycling industries. In business since 1988 the company has extensive experience in providing the correct solution for washing and offers everything from a complete turnkey washing plant to any component from its range of washing equipment including screens, cyclone sand treatment plants, log washers, bucketwheel sand washers and water treatment plants.

In Australia Dernaseer are supported by Tricon Equipment [www.triconequipment.com.au](http://www.triconequipment.com.au)

For more information on Dernaseer's product range please email [info@dernaseerwashing.com](mailto:info@dernaseerwashing.com) or call +44 (0)78 098 64869

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Designed & manufactured here in UK, our innovative technologies separate composite materials into predetermined components, helping our customers reduce costs or increase revenues, develop new markets or differentiate their business.

Our process incorporates a combination of density separation, washing, de-watering and treatment creating a continuous closed loop automated system. Our renowned cyclone systems ensure we can finely tune performance to achieve tight tolerances on output material, enabling our customers to produce a range of products for specific market conditions, maximise returns and differentiate themselves from their competitors.

Our solutions allow marketeers to develop promotional material around key themes such as resource efficiency, circular economy and sustainability which clearly resonate within the construction sector and offers commercial teams exciting opportunities to up sell & cross sell new products to new and existing customers.

Underpinning our technology is the unique treatment knowledge & separation insight accumulated over close to 50 years and we are immensely proud that it has been passed down through 2nd & even 3rd generation family members working in our organisation.



Adrian Parnaby – Managing Director acknowledges that one of our great strengths is the knowledge and data we have collected over the years within a variety of mineral, waste material recycling, treatment, and niche industrial sectors. We have a dedicated team that has worked across the globe in mineral and coal mining, aggregate, glass and plastic recycling, IBA, automotive residues, WEEE, sweepers, new metals and niche manufacturing applications. Our customers can rely on a single trusted technology partner to provide the design, manufacturing, processing capability and service support and offer additional guidance on potential new material market opportunities.

Our aim is to provide a compelling business case for every function across our customers organisation, so that representatives from production, operations, HSQE, sales and marketing and finance all have absolute confidence in our solution.





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# Grundon Sand & Gravel enjoy the benefits of a new PowerX Equipment Wash Plant and Water Treatment System

**Located at Cholsey near Wallingford, Oxfordshire, New Barn Farm Quarry is the latest quarry operation to be opened by Grundon Sand & Gravel (GSG)**

## **A £6 million investment:**

With Grundon purchasing the site in July 2015 and gaining planning permission in November 2018 an estimated 2.5 million tonnes of sand and gravel is expected to be extracted over the next 18 years. Once quarry operations are complete a 20-year conservation and restoration programme will be put in place.

GSG have invested £6 million in the 66-acre site, which included a 'state-of-the-art' Sand Plant and Water Treatment System which will provide gravel and a variety of sands for the building, construction, leisure and landscaping sectors, including two local concrete plants as well as selling directly to the general public.

## **Golden Harvest Gravel:**

The opening of the new quarry also sees GSG launch an exclusive new Golden Harvest Gravel into its gravel range. Blending shades of gold, bronze, and cream, it is an exceptionally durable hard flint, and is ideal for areas with high footfall, such as driveways and car parks, as well as landscaping areas. It is available in 10mm and 20mm grades.

Andy Bright- GSG General Manager, commented, "We are delighted to add New Barn Farm Quarry to our quarry portfolio. We believe it will prove a valuable resource for the local housebuilding and construction industries throughout the

wider Oxfordshire, Berkshire, and Buckinghamshire region, underlining our reputation as a leading supplier of sands and aggregates.

"We are also pleased to have brought new jobs to the area and look forward to welcoming local people through our gates for their own gardening and landscaping requirements."

## **PowerX Equipment - The next generation in Aggregate & Mineral Processing:**

The plant has been designed, supplied and commissioned by PowerX Equipment with the stockpilers and conveyor system manufactured and supplied by Duo Manufacturing. The whole project was supplied as a

turnkey package with plant civils and entrance road construction completed by Duo Operations.

PowerX Equipment is the next generation in aggregate and mineral processing.

Whether a client is looking to incorporate a single item of equipment or create an entire, integrated plant solution, PowerX Equipment design, supply and install; Aggregate Washing, Crushing & Screening, Water & Silt Management Systems, Bulk Materials Handling, Recycling and Materials Processing





## The Processing Plant:

As well as supplying the wash plant and MS water treatment system PowerX also installed a 400m long feed conveyor including a feed hopper situated adjacent to the current dig. Here material is loaded into the hopper and is conveyed to a hopper fed radial conveyor next to the processing plant. From this, the material is either fed direct to the main plant or stockpiled adjacent to it.

With the plant operating at 200tph material is fed via a hopper to the inclined primary conveyor and then onto a Terex Washing Systems 4.9 x 1.5m triple-deck rinsing screen. Here the rinsed fractions of 10mm/20mm/+20mm are split and sent to radial stockpilers.



The soft sand production is dealt with by an AMP compact soft sand plant which consists of a high-energy 2.4m x 1.2m dewatering screen and one 150/100 centrifugal pump and is completed by four 250mm polyurethane cyclones to reclaim the material above 20µm.

Arranged in a cluster with equal feed, each cyclone has a knife valve with chutes and rubber lined distributor box. Both sand plants are of modular design to allow complete flexibility.

Both sands are then delivered to their respective stockpile by radial conveyors.

## Twin sands production:

The main product, sand, then falls through the bottom deck of the rinsing screen and is then pumped up to the single hydro-cyclone of the AMP compact sharp sand plant. Silt from the thickener is also delivered and measured back into the feed of both the sharp and soft sand processes consistently maintaining the concrete specification.

Consisting of a high-energy 2.4m x 1.2m dewatering screen and one 200/150 centrifugal pump for sharp sand, the plant specification is completed with one 625mm diameter conical bottom hydro-cyclone hydro vortex.







## Added benefits with the PowerX Equipment Design:

John Collins – Technical Director for PowerX, comments, “The main difference with this plant compared to most S&G plants, is that the plant design ensures that all the silt is deposited back into the sand product which means they don’t require silt ponds.

“They have a fresh water pond and a thickener and the silt from the thickener is measured back into the coarse sand to keep that within the concrete specification and then into the fine sand and this is effectively the main difference with this and other S&G plants.

“Having originally been told by other suppliers that it could not be done, the plant operated correctly within a set of parameters will operate all day long. On the flipside of this, it is not something you can do anywhere, because if the material you are washing is really dirty there is a limit to how much you can put in the sand.

“The ‘as raised’ material at New Barn Farm only has an average silt content of 6-8% so it allowed Grundon’s that benefit to lose that silt straight back into the sand without them going out of specification.”



## Water Treatment Plant:

The wash plant at New Barn Farm incorporates a MS water treatment system featuring a 12m diameter – 3m high – 340m<sup>3</sup> volume capacity thickener which provides a minimum of 380m<sup>3</sup>/hr flow rate with a low flocculent consumption. An 8m diameter – 3m high clarified water tank provides a 150m<sup>3</sup> capacity with a technical room housing the flocculent system. A flocculent mixing plant and flocculent sampling plant make up the system.



Ed Fagan – Head of Projects, Engineering and Design – Grundon Sand and Gravel, commented, “We are extremely pleased with the design and performance of the plant which has enabled us to eliminate the requirement for silt ponds and ensure production is as efficient as possible. The PowerX team were very professional in their approach to the project showing great attention to detail and a strong emphasis on H&S throughout the project programme.”



# 70%

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McLanahan customers have been known to achieve moisture levels as low as 7% when using a McLanahan Dewatering Screen.

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**McLanahan**



# Good Vibrations

## The Benefits of Vibrating Screen Media

by Lars Bräunling, MAJOR director of product technology

**With screening typically occurring at both the beginning and end of production, optimizing the process is vital for overall plant efficiency. There are a number of screen media options on the market but selecting one that best fits your operation is key to maximizing your production potential. The right choice can provide high-quality results – increasing throughput and decreasing downtime. The wrong choice can lead to pegging, blinding, breakdowns, and product that doesn't meet spec or quality standards – resulting in lost production and profits.**

Working with OEM-certified screen media dealers or directly with media producers ensures your screen media choice is ideally suited for your operation. Additionally, understanding the difference between screen media options can help you figure out where to start the conversation.

The vibration capabilities of a particular screen media, for example, are often overlooked by aggregate and mining producers but have a huge impact on overall performance.

### Here's why:

#### Static Cling

Traditional screen media — such as perforated plate, woven wire mesh, and engineered polyurethane or rubber media — is static, relying on the vibration of the screen box to do the majority of the heavy lifting. This limits vibration to 800 or 900 cycles per minute.

In most cases, this does not hinder traditional screen media from achieving adequate production and throughput, but it is not fully utilizing screening equipment, either. In situations where the screen media is not the ideal option for the process, this limited vibration could, in conjunction with other factors, contribute to pegging and blinding.

#### More than Buzz

To maximize screening potential and minimize the risk of pegging and blinding, producers should consider integrating high-performance wire screen media, which features wires that vibrate independently to amplify the screen process and increase throughput. Unlike static screen media, high-performance screen media uses bonded polyurethane or rubber strips to hold individually vibrating wires. These wires move freely within opening size specifications, creating more screening action and increasing overall efficiency. High-performance screen media can amplify the work of the screen box for vibrations of 6,000 to 10,000 cycles per minute — up to 13 times greater than the standard vibration of static media options.

#### Crunching the Numbers

Increasing vibration with high-performance screen media produces several efficiency-enhancing results. Because each wire is vibrating independently at high speed, high-performance screen media virtually eliminates screen buildup



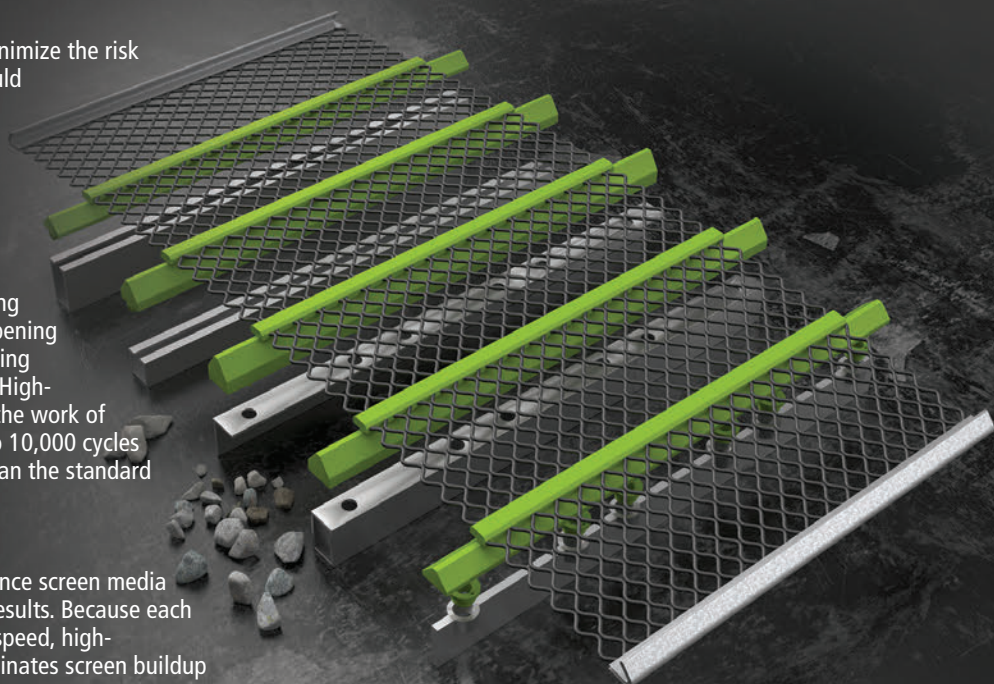
from blinding, pegging and clogging. This can significantly reduce downtime both for cleaning and premature replacements.

Additionally, operating at a higher frequency than traditional static screen media, high-performance options accelerate natural stratification. The design achieves maximum throughput thanks to better material-to-screen contact. The high stratification and a wider material spread results in greater quantities of fine material passing through the open area, resulting in less carryover and higher throughput.

With the right high-performance screen media, operations can amplify the screening process, resulting in production increases of up to 40%.

#### Feel the Vibration

High-performance screen media can improve efficiency and virtually eliminate common screening problems. But knowing that is only one part of the equation. Contact a MAJOR certified dealer to walk through personalized screen media options that fit your operation and optimize your output.





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Working closely with customers from initial design and concept through to final commissioning, our team of fully qualified and experienced in-house engineers deliver aggregate and sand washing equipment that are bespoke to each client's requirements. Utilising the Bruce modular design approach, proven technologies, and branded components has led to successful installations globally.

Our program of continuous improvement has facilitated significant advances in the range of machinery that we manufacture, most notably the Bruce Washpod. Now featuring the Dual Shaft Logwasher, Dual Cyclones and a larger de-watering screen area, the Bruce Washpod continues to be the machine of choice for operators seeking in-spec aggregates and sands in one neat and compact package. In addition to the Washpod, Bruce Engineering offer a full range of washing solutions including the Bruce SandPod and BWS range of cyclone sand plants. Furthermore, the Bruce BWB Waterbath



has proven a huge hit in the waste recycling industry by offering a simple but effective aggregate clean up system.

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# Mansfield Sand Meets Production Goals with McLanahan Hydrosizer™ Plant

**Mansfield Sand Company Limited has been quarrying sand in North Nottinghamshire, England for more than 170 years. They are known countrywide as a supplier of materials for top class sports and sporting venues across the United Kingdom and Ireland. They supply sand material to 16 Premier League Clubs, 16 Championship Clubs and 120 other football league and non-league clubs for use in their stadiums and training ground facilities.**

Besides sand for football stadiums, Mansfield Sand also produces a wide range of products for landscaping and equestrian uses, including championship golf and world class show jumping arenas, as well as asphalt sand, foundry sand, and sand for concrete and brick products.

## Challenge

In 2014, Mansfield Sand wanted to upgrade their plant and control system to process a new deposit. They required a plant that would process 300 metric tons per hour of -65mm sand to manufacture their various products, including golf sand that meets United States Golf Association standards, block pavior sand and asphalt sand.

In addition to this requirement, the local planning commission also set a noise restriction in place so the new plant would not disturb some rare birds nesting near the boundaries of the site.

It was at this time that Neill Rowland, McLanahan Applications Engineer, knocked on their door. He explained that McLanahan could offer them a Hydrosizer™ sand plant that would produce five different products in one pass.



"One of the things that sold the plant was McLanahan's technical ability to offer this," said Rowland, noting that experience and confidence also played a role in Mansfield Sand's decision to work with McLanahan.

Mansfield Sand was familiar with Hydrosizer™ systems from an existing plant they had been operating for several decades, so they had already realized the benefits of Hydrosizers™ for what they were trying to achieve.

"When you start getting down to really fine sizing, Hydrosizer™ classification is really more efficient and more cost-effective," explained Rowland. "The Hydrosizer™ is the only piece of equipment suitable for the application to achieve the tight tolerances."

## Solution

McLanahan installed a Hydrosizer™ plant incorporating McLanahan Pumps, Sumps, Hydrocyclones, Separator™, Dewatering Screens and Blending System with the ability of blending to 1% accuracy to help Mansfield Sand meet the strict specifications required of their final products. The final products are discharged at less than 15% moisture, which creates stockpiling efficiency and allows for further drying processes.

To meet the requirements set forth by the planning commission, the entire plant is housed within a galvanized structure, clad and insulated to reduce the noise level. The plant's components are also lined with rubber to protect them from the abrasiveness of the sand.



After some calculations from Mansfield Sand's laboratory technicians, the company discovered the waste from the wash plant would fill their lagoon within 18 months, so they turned to McLanahan for help with their water management.

McLanahan provided an Ultra Fines Recovery System to recover fines down to 40 microns to extend the life of Mansfield Sand's lagoon system.

"Anything bigger than 40 microns is recovered," Rowland said. "Anything less is going to the lagoon."

## Results

Since commissioning the Hydrosizer™ plant, Mansfield Sand Company has not received a single customer complaint due to the performance of the equipment. The plant's modern control system gives Mansfield Sand the ability to adjust the product to meet consumer demands.

"The plant does have quite a bit of functionality for them to develop product and potentially react to market changes," explained Rowland.

In four years of operation, the Hydrosizer™ plant has proven to be both stable and reliable. It produces a consistent 280 mtp, and to date, the plant has produced 2 million tons of sand for Mansfield Sand Company. Furthermore, the Ultra Fines Recovery system has doubled the life of their lagoon by allowing Mansfield Sand to capture the fine material.

"It's a low-value product, but it's a product they can sell, and it's a product that isn't filling their lagoon, which is the real benefit to them," Rowland said.



Overall, Mansfield Sand is pleased with the Hydrosizer™ plant and Ultra Fines Recovery System.

"A good team effort by both parties and a professional working relationship providing a technologically advanced plant gives Mansfield Sand flexibility, controllability and future-proofing for the estimated 30-year life of the site," said Richard Abraham, Managing Director of Mansfield Sand. "Now, four years on, we continue to have a fantastic working relationship together. Our process plant continues to manufacture our premium quality sands to Mansfield Sand's exacting standards. The partnership between Mansfield Sand and McLanahan has rested on the McLanahan team's awareness of the importance we place on the reputation of our products and our respect for their experience. The partnership had a lot to prove, and it proved to be a great success."







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# The wash-bear® from Orba Group Ltd

London head quartered, but covering the whole of the UK and Ireland, Orba Group Ltd specialises in the supply of machinery solutions for recycling, construction, demolition and waste management as well as providing bespoke solutions for these industries. The company is also the official UK/Ireland dealer for wash-bear machinery, manufactured by Moerschen GmbH, which are German designed and engineered and built to the highest quality.

The processing involved in breaking materials down to RC material is part of the everyday business of the construction and material handling industry. The wash-bear® has been designed to service businesses in these sectors through highly efficient technology for separating lightweight materials from building rubble. The wash-bear® works according to the proven floating-sinking principle and reliably and cleanly separates light materials such as wood, artificial and insulating materials from the minerals. With the wash-bear® all mineral substances can be cleaned, but most of all, RCL building materials.

### Nearly 100% material separation

In addition to its process efficiency, which ensures almost 100% separation of contaminants and mineral fractions, the wash-bear® also scores thanks to its high levels of process effectiveness. This results from the economical handling of the resources to be used through the robust, maintenance-free design of the system technology. The closed system consumes whatever water adheres to the discharged mineral meaning that in a 10 hour shift 4-8 m3 is used in practice, whereby the inlet is controlled automatically by floats. This technique avoids the build-up of chemicals in the eluate.

### Low energy requirement

The water used is absorbed into the basic moisture of the RC material. What comes out with regard to the chemical composition, at most, is what was discarded by the rubble in the system. The economy of the system continues with the energy expenditure, which at 8-15kW/h during operation is significantly lower than an air sieve with a similar performance. Nevertheless, the drive power is enough to start the wash-bear® in full load. Thanks to its compact dimensions, the wash-bear® can be easily integrated into the overall process chain even on narrow construction sites. By using (the



optional) 'clean extension', the wash-bear® becomes a powerful wet-processing system for the removal of fine fractions, e.g. when washing track ballast.

The current generation of systems is available as wash-bear® 2.0 in three models, which are designated as 'S, L, XL' depending on size. Their hourly throughput rates range between 100 t/h and 190 t/h - depending on the input. All types are designed with a mobile lift hook for easy transport.

### The wash-bear® - your advantages

In effect, the wash-bear® from the Orba Group Ltd is a highly efficient mobile piece of equipment for separating lightweight materials from building rubble with extremely low operating and maintenance costs. There is no accruing waste water, no sediment residues and is flexible enough to provide bespoke solutions for special applications, as well as being easily integrated into existing systems meaning that manual sorting is no longer necessary.



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## Kiverco customers applaud company's recycling plants and ongoing support in new video

**Kiverco has launched a new video to highlight that its dynamic and enduring recycling plants are the best designed and built on the market.**

What makes this video stand out from the crowd is that Kiverco is not saying that it designs and delivers the best recycling plants on the market – its customers are!

<https://www.youtube.com/watch?v=NAHWDLYJ9Tk>

The video also serves to highlight the wide range of applications Kiverco designs and builds recycling solutions for as well as its track record delivering plants across the world.

Some of those customers in the video applauding Kiverco include pan-European company Remondis; Lowmac, The Michael George Group, Fresh Start Waste Services and Sharp Group in the UK; RPD GmbH from Germany; McQuillan Environmental from Northern Ireland; Lincom Group, Australia and even the Cypriot Minister of Agriculture, Rural Development and Environment.

Steve Patterson, Managing Director, Remondis says on the video: "Would we use Kiverco again. Yes, we would. I would say to everybody definitely make sure Kiverco are on the shortlist." He goes on to say: "Ultimately, the capital investment in a plant like this is important but it has to deliver the benefits that you want. That is more important. This costs of it not operating efficiently are greater than anything you might save on the capex side."

Similarly, Robert Hall, Director Lowmac said: "I would implore that people who are looking to change their plant or looking to upgrade, by all means, give them a shout because their service was second to none... Kiverco during the installation, delivered the plant on time, in budget and never let us down in terms of service. They've been great from day one."

Hans-Georg Limburg, Owner and Managing Director, RPD GmbH says: "The build quality evident in the equipment tells me this was a solid investment."

Ian White, Tom White Waste adds that "Uptime has been outstanding and it is backed up by great service, parts and support," while Mark Walker, Head of Operations, Fresh Start Waste Services comments: "Kiverco's equipment has revolutionised our recycling operation. It has doubled our capacity."

"This video has been created to demonstrate that we design it right, build it right and always do the right thing by our



One of the four Kiverco plants installed for the Mlck George Group

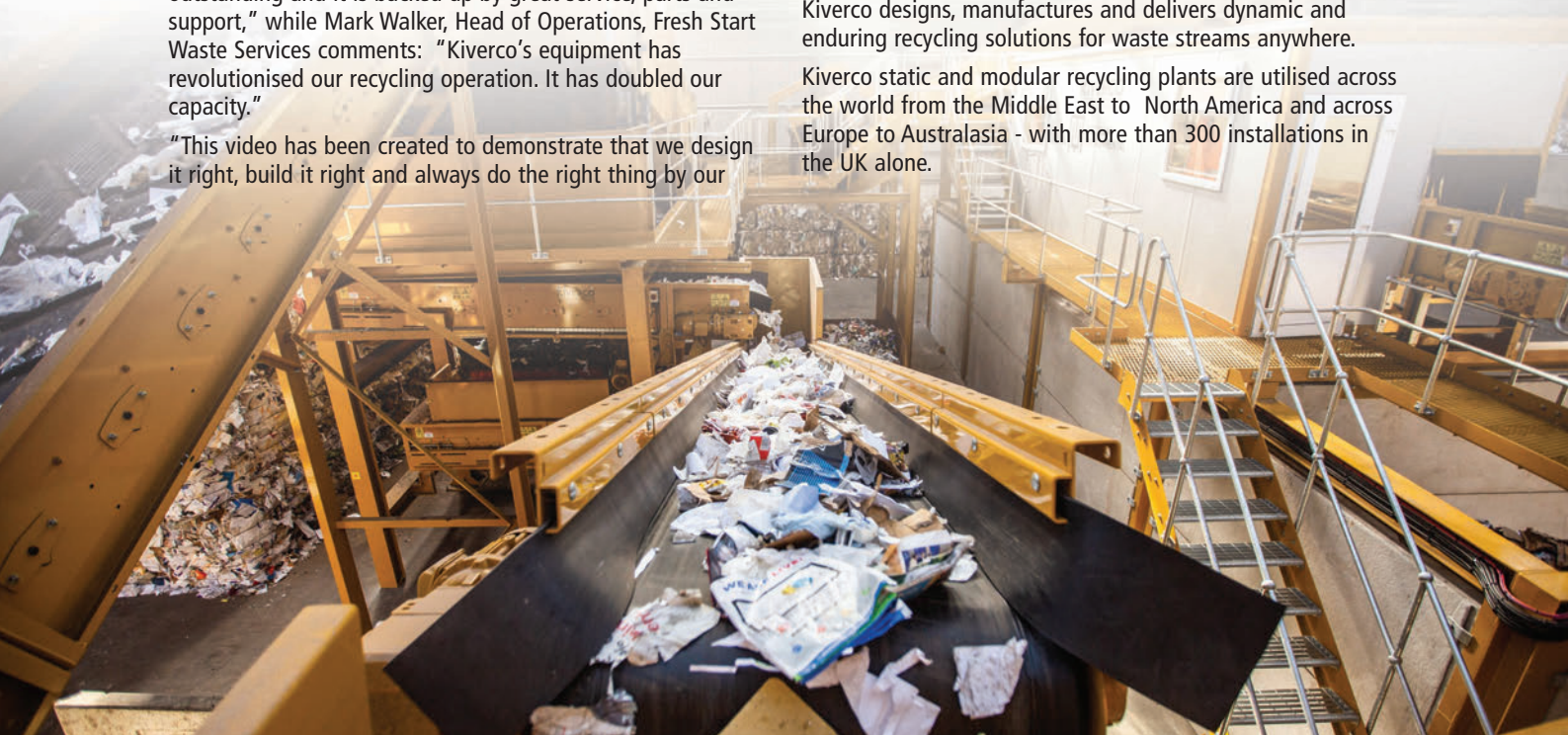
customers," explained Angela Madden, Head of Marketing and PR at Kiverco. "We thought it would be more meaningful for those people thinking about making an investment at this time to hear directly from customers how we have transformed their businesses and always been there at all aspects of the process and continue to be there for them long after the plant is installed."

She added: "While the company is renowned globally as the leader in the area of construction and demolition waste plants, we wanted to highlight that we design and build plants for a vast array of waste streams as diverse as commercial and industrial; municipal solid waste; energy-from-waste; incinerator bottom ash; dry mixed recyclables; RDF/SRF fuel preparation; glass; compost; plastics and fines treatment.

"Fact is we have been engineering solutions for customers for almost 30 years and so are best placed in the market to provide plants that are tailored to specific needs. We work hand-in-hand with customers to understand their needs and then use our experience to create the best plant for them. So, whatever the waste stream we will find a solution."

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

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





WORLD LEADERS IN RECYCLING SOLUTIONS



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

Turmec's state of the art Mobile Eddy Current Separator is just 3m wide and 3m high, yet it can process 300m<sup>3</sup> per hour of material.

Developed with Turmec's long-standing partner IFE, the design is focused on providing operators with an unmatched combination of flexibility and robust performance from a mobile plant, with the option of jacking legs to give an extra 2m stockpiling height, and still, maintain the machine's compact footprint.

Designed to bolt onto the back of mobile shredders for the wood industry, or for post-processing, the plant separates ferrous and non-ferrous materials.

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

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## The HAAS Tyron 2500 gets an upgrade



**The HAAS Tyron 2500 2.0 is a powerful, twin-shaft, slow-speed shredder. Renowned in the waste and material processing industries for its versatility, low running costs and ease of maintenance. The Tyron offers a range of tooling configurations, shedding programs and options to customise the machine to specific materials and operational requirements.**

The twin shafts are independently driven, which allows them to gain better grip on the input material. It also greatly decreases the occurrence of material wrapping around the shafts and enables the shafts to self-clean. This unique HAAS twin shaft system reduces wear and downtime in comparison to pre-shredders with synchronised shafts.

Being the largest pre-shredder in the HAAS range, it runs a Scania DC16 engine, producing an impressive 770HP. As with the previous generations of the Tyron, the 2500 2.0 boasts impressive throughputs across a range of input material. Depending on the tooling and configuration of the machine, the Tyron 2500 2.0 can shred up to 100tph.

The Tyron comes with three default shredding programs tailored to wood, organic waste, and general waste. There is a fourth bespoke program that can be tailored to suit an operator's specific material.

HAAS has recently updated the Tyron 2500 to a new generation machine. This upgrade has included a new shredding chamber design, which has increased the efficiency of the machine whilst reducing the amount of wear seen in the shredding chamber.

Another part of this upgrade has seen the addition of foldable side panels, that allow direct ground access to the shredding chamber. Side access mitigates the risk of someone having to enter the shredding chamber for maintenance and hard facing. This also allows for more efficient maintenance, meaning less machine downtime.



HAAS has also improved access to the hydraulic and engine compartment of the machine, making it easier and safer to conduct maintenance and servicing.

Another benefit of the new generation machine is the hydraulically positioned overband magnet, making it safer and quicker for operators to adjust the height of the magnet over the outfeed belt, via the remote control.

As with all HAAS machinery, the Tyron 2500 2.0 comes equipped with a telematics system. This system is an online platform whereby users can see various data sets from the machinery in real time, allowing for remote diagnostics of potential issues with the shredder, as well as monitoring efficiencies and performance.

CRJ Services Ltd is the sole distributor of HAAS machinery within the UK and Ireland. Offering both the hire and sale of the HAAS Tyron pre-shredder, backed up by their market leading service support and spare parts offering.





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# SYNETIQ turn green with Sennebogen

**When reliability is key, choosing a Sennebogen is a must. SYNETIQ, the largest salvage and vehicle recycling company in the UK, has invested in a new Sennebogen 830 E scrap handler supplied by Molson Green.**

SYNETIQ has been on a remarkable growth trajectory since it launched last year, following the merger of four well-established businesses from the salvage and vehicle recycling industry. Now arguably the largest business of its kind in Europe, SYNETIQ has sites positioned throughout the UK, including the impressive 27-acre site on Bentley Moor Lane in Doncaster that is home to their new Sennebogen 830E.

We visited the flagship Doncaster site to meet with SYNETIQ Operations Director, Ray Curry, to understand how the business operates and why they have chosen to go with a Sennebogen 830E supplied by Molson Green.

There are several avenues a vehicle can go down once it arrives through the gates at SYNETIQ. Vehicles which are listed as Category S or N write-offs have been deemed as suitable for repair, so these are prepared and sold on the SYNETIQ's own online salvage auction. This market-leading platform is typically used by vehicle traders and repairers worldwide.





Category B vehicles are not suitable for repair, but some may contain non-safety-related parts which are perfectly suitable for reuse - such as doors, lights and engines. These are cleaned, prepared and quality-controlled, before being sold to a wide range of customers, including fleets, repairers or the general public. SYNETIQ crushes the shells of these vehicles on site, ensuring they can never return to the road. After this process, Category B and other ELVs (End of Life Vehicles) can begin the compliant recycling process. Once an ELV has been de-polluted and harvested of any undamaged or reusable parts, the remainder of the vehicle is transported to the baling plant to be recycled.

Ray describes the baling plant at the flagship Doncaster site as the "beating heart of the business", with approximately 80% of the vehicles being handled by the Sennebogen as they are put into the bailer and subsequently loaded into articulated wagons. Ray went on to say; "On a busy week the bailing plant can process around 700 vehicles. With that sort of throughput, the reliability of our plant and machinery is key. With lorries constantly delivering new stock and taking away processed vehicles, a breakdown can easily cause our operation significant problems".

"Although we had previously been purchasing scrap handlers manufactured by another brand, we have had experience of the Sennebogen products at one of our legacy businesses prior to the merger. The big green machines had proven to be a dependable member of the team, so after looking at the huge range available we decided to speak to Molson Green about a potential new machine."

"I have to say that the team at Molson Green were very knowledgeable and easy to deal with. Following a few conversations and a visit to our facility, we established which machine would best suit our requirements and a demo machine was on its way for our operators to put it to the

test... a test that it passed with flying colours. The Sennebogen delivered on all the things we knew it would from the spec sheet; such as reach, capacity and power, but it was the operator feedback on comfort of the cab, visibility and smoothness of control that made it an easy choice to make. Our operators were such a fan of the machine it never left the yard".

The Sennebogen 830E that SYNETIQ decided to go with, offers an impressive 17m reach (measured from centre of slew ring to stick pin) from the K17 boom and stick. Using the four stabilisers to raise the wheeled undercarriage off the ground, the operator can remain in one location and take the stripped vehicles, load them into the bailer, stockpile them once processed and even load incoming waggons without having to move.

To assist operators in completing tasks more efficiently, this 830E has a high-rise cab, with additional screen and roof protection allowing the operator's eye level to raise up to approx. 5.65m. The operator can then see clearly into trailers when loading ensuring the load is filled to maximum capacity and with a greater degree of accuracy.

Inside the cab, the operator has an uninterrupted forward view thanks to the Sennebogen's joystick steering. The benefit with joystick steering is there is no bulky steering column blocking the operators view to the ground where the majority of sorting is completed in this application.

Machine access and operator daily checks are also very straightforward. The factory fitted 3-point access steps and ladders along with the upper carriage "boxing ring" giving the operator a safe and secure area to work in. The daily checks can be done from ground level and the centrally mounted grease points for the undercarriage, autolube on upper carriage mean there is no requirement to crawl under the machine.





Molson Green Sales Manager, Dave Peacock said; "Ray and his team were very clear from the outset on what the machine had to do and made it very clear to me how we had to support them as a dealer. Any concerns about the after-sales backup support from Molson were quickly addressed when we discussed our 10 service locations, significant stock holding of spare parts and the network of over 75 service engineers.

Dave went on to say; "When you are dealing with machinery, a problem at some point down the line is inevitable, but it is the way you deal with it that counts. The Sennebogen product is well known in all of their key industries as one of high quality and reliability, and Molson have backed this up with recent investments in our back-end IT structure and additional service locations. We are now a true nationwide service provider which means that we are incredibly well placed to support all customers from a one site operation, through to a business on the scale of SYNETIQ".

Ray continued this point by saying; "As you would expect we haven't had a problem with the Sennebogen yet and I have faith in the machines build quality to think that we won't for some time to come, but having the support of a business like Molson means that we can be sure that our business won't grind to a halt in the event of a breakdown. The fact that Molson continued to support their customers working in key industries such as waste and recycling throughout lockdown shows me that they are as committed as we are".

During the Coronavirus pandemic, SYNETIQ received key worker classification from DEFRA. The business put a proportion of its workforce on furlough to reflect the initial downturn in demand at the start of lockdown, as well as to ensure a safe (socially distant) working environment could be provided for those workers who remained.

This period of time offered opportunity for SYNETIQ to consolidate some of their satellite sites' operations and make major improvements to their facilities, as well as having a good clear out of older stock.



Ray went on to say; "The biggest change to our business driven by the COVID crisis has been in our Green Parts operation. We took the decision to close our customer counters, reducing the risk for our colleagues and walk in customers alike. This left us with MyGreenFleet (a green parts procurement platform), our eBay shop and our website to generate all the sales of parts. With a reduction in employees in our call centre, we turned to technology to help us meet customer demand. We have introduced webchat and been able to increase the sales from our website, whilst operating with approximately 50% of the usual team dealing with enquiries".





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## Storing, Transferring and Disposing Hazardous Waste



**The Environmental Agency (EA) and waste legislation state that all operational waste sites must maintain a good standard of housekeeping which includes the proper management, storage and disposal of waste and the required qualified personnel onsite.**

There are many things you must decide at an early stage on any waste site with 2 key factors being highlighted by the HSE which include:

1. How are waste streams produced managed from storing to disposing?
2. Who is responsible for collecting and disposing of the waste onsite?

A lot of waste onsite can be seen as highly hazardous or 'special' and here we will discuss how to store, transfer and dispose this kind of waste correctly.



Working with our waste and recycling assessors who deliver waste and recycling qualifications throughout the UK, we understand the importance of ensuring hazardous waste is dealt with correctly in order to maintain safety within your waste environment. Any materials or chemicals on site must be accompanied by a safety data sheet or a suitable analysis of your waste product. The information on the safety data sheet/analysis can help you decide if your waste is hazardous/special. Your waste must also be managed and controlled by a suitably trained person on site who has the required knowledge and experience to get the waste safely removed to an authorised facility.

If you are unsure whether your waste is hazardous/special, you should contact the EA, or a specialist waste management contractor.

### Storing of Waste

All hazardous waste can be stored on site for up to 12 months with no waste management license needed. If you intend on storing waste on your site for a longer time period, you must hold a waste management license and control permit to legally obtain this waste. When storing waste on your site you must ensure that all staff are correctly trained on wearing the appropriate PPE,

how to deal with hazardous spillages and how to dispose of any contaminated materials. All information on storing hazardous waste must be outlined in an in-depth Risk Assessment and Safe System of Work (SSoW) but you must also be asking yourself the following questions:

- Is my waste packaged and labelled correctly?
- Is my hazardous and non-hazardous waste stored separately?
- Who is checking the storage area for any leaks or damages?

### Transferring of Waste

Under the HSE guidelines, if you are carrying or transferring waste, all businesses must register as a waste carrier and fill out the required consignment notes. It is crucial that you keep copies of the consignment notes and any related documents or records of rejected loads for a minimum of 3 years. Each consignment note must include a unique EWC code that is applicable to your particular waste; more specific information on this can found directly through the gov website.

Your waste must be sent to a facility that holds suitable prevention measures and a required permit or waste management license.

### Disposing of Waste

Disposing of hazardous/special waste on your site is the most crucial step to maintaining a safe working environment for your employees but do you understand the appropriate measures to carry this out correctly?

Unless you are authorised to do so, you must not treat your waste ready for disposal; only a registered facility or required personnel are allowed to legally carry this out. For each load of hazardous waste that you move off your premises, you must have a hazardous waste consignment note – you can fill in your waste transfer note, again, through the gov website.

One thing you must always remember and try to do is to reduce and recycle as much of your waste as possible before you choose to remove it from your site; this can be done with minimum cost and time implications and may even save some of your waste management costs.

Many businesses moving forward are now generating a more in-depth and efficient SSoW when it comes to waste disposal within an operational site, this includes reducing the number of defective products being thrown away and recovering materials that have been potentially discarded as and only where applicable.

### Maintaining a Safe Site

Complying with your legal responsibilities is key to maintaining a safe site that hold hazardous waste, however, in a fast-paced environment that is constantly producing new materials, it is always important to try and reduce the amount of waste you produce and the impact you are having on the environment.

Working with our waste and recycling qualifications team, we are currently delivering a number of waste-specific qualifications in order to qualify more people for the industry. If you would like to find out more about managing your waste site or begin your qualification, then please get in touch with our training team today – 01246 386900.



# TOMRA Sorting Recycling technology maximises sorting efficiency and increases scrap aluminium quality

**The quality control of aluminium scrap used as secondary raw material in aluminium production is becoming increasingly stringent. As such, having the highest quality material is essential. This is not always guaranteed for those aluminium manufacturers who often depend on buying in recycled aluminium materials. TOMRA Sorting Recycling's X-Ray Transmission (XRT) technology, which includes its X-TRACT and X-TRACT X6 FINES units, is highly recommended for efficiently separating aluminium and aluminium alloys from heavy metals, consistently delivering high quality input for the resulting raw materials and products.**

"Aluminium is a light metal with a bright future, and its production is increasing as it is increasingly used as a replacement for steel in many applications thanks to its strength and low weight. The automotive sector is a good example, particularly in electric vehicles where weight reduction is crucial," says Brian Gist, TOMRA Sorting Recycling's Sales Director Metals and Head of TOMRA UK.

Quality control is therefore essential when using recycled material. This process starts with the scrap aluminium recyclers as they supply raw materials to the aluminium producers. However, the latter must verify that the materials they have purchased meet the respective quality requirements. Both recyclers and producers must, therefore, play their part in improving the classification of materials.

## **TOMRA's XRT technology, quality assurance and other benefits for scrap processors and secondary smelters**

TOMRA Sorting Recycling's XRT technology optimises the efficiency of sorting secondary aluminium raw material. This applies to those who use aluminium scrap consisting of several alloys and heavy metals, including Copper (Cu), Zinc (Zn), Iron (Fe), Magnesium (Mg), Silicon (Si), etc.

"Prior to melting the secondary aluminium, our XRT technology separates the heavy metals from aluminium alloys containing more than 2% heavy metals before the aluminium alloys enter the furnace. Each aluminium alloy contains a certain percentage of other metals, which must be constantly controlled to ensure that the chemical composition of the product meets the required specifications. In this way, aluminium producers control the material's quality before it enters the furnace and avoid the loss of castings due to heavy metal peaks exceeding the maximum allowable content of these elements," Gist points out. "In short, TOMRA's technology becomes a second control barrier after the materials have been processed by the recyclers."

Using recovered aluminium in secondary aluminium production plays a fundamental role in the recycling economy as it is an infinitely recyclable product. It increases recovery rates and delivers a high quality end product with a lower carbon footprint as it requires less energy and has lower raw material

costs compared to the primary aluminium smelting process. The latter uses bauxite ore as a raw material and requires high energy consumption and complicated physico-chemical processes.

The advantages of TOMRA's XRT technology are even greater when used by refiners and remelters. Using the sorting technology in the process can lead to a reduction in the purchase costs of the raw materials (scrap), firstly because the materials do not require an excessively strict composition and secondly because less material is processed. Thus, a lower quality scrap can be bought at a lower price and subsequently cleaned by the X-TRACT technology. "Secondary smelters who are particularly interested in separating scrap to achieve cleaner fractions can now buy raw materials at a lower price and use TOMRA's XRT technology to sort them to achieve the desired quality for their furnace requirements," clarifies Gist.

In addition to cleaning the scrap, the XRT technology can also produce new fractions, for example, by separating the crankcase from the profile.

Gist explains: "We believe the trend today is for aluminium ingot producers to continue to develop their processes for separating raw materials. The use of XRT technology has even partially replaced the work of the recyclers in terms of material differentiation, creating new qualities that can always be adapted to meet aluminium ingot producers' furnace needs."

There are several risks associated with not using a technology such as TOMRA's XRT. The material might not meet the required specifications in terms of composition and grain size. The final product may not achieve the desired properties. Furthermore, in order to compensate for this quality deviation, other types of materials may have to be added during the refining process. For example, a process of dilution and/or addition of various additives may be required, which results in very high costs per tonne for producing the final product. In short, significant economic losses, as well as greater instability and lack of control at the kiln entrance are to be expected if XRT equipment is not used.

## **What XRT technology means for remelters and refiners**

Today, there are a variety of systems used by the aluminium industry or by the supplying scrap companies to process the material: XRT technology, dense media separation, densimetric tables and even manual separation. This range of systems leads to the creation of materials of very different origins and of very varying qualities. In fact, many scrap processors have their own quality laboratories with melting furnaces, with results often sent to the scrap customers to prove both traceability and compliance with the required quality standards. In this regard, TOMRA's XRT technology is a fundamental tool to achieve consistent product quality and to generate new fractions with higher added value, allowing recyclers to sell their products at a much higher price per tonne.





## **X-TRACT and X-TRACT X6 FINES from TOMRA, efficient sorting for aluminium producers and recyclers**

TOMRA has developed two units that incorporate XRT technology: the X-TRACT and the X-TRACT X6 FINES. Firstly, the TOMRA X-TRACT enables sorting by recovering ready-to-melt aluminium fractions with a purity of 99%. XRT technology also enables substances to be separated according to their atomic density, regardless of their colour and surface impurities. TOMRA's X-TRACT X6 FINES identifies and classifies grain sizes that are almost half the size of those that could previously be processed (as low as 5mm). In addition, the heavy metals separated using this device can be further separated by colour, brightness and shape using TOMRA's COMBISENSE system.



The operating costs of TOMRA's sensor-based sorting systems are significantly lower compared to a system with dense media that uses water and additives. Additionally, sensor-based sorting removes the need for water treatment.

"In short, these flexible devices (easy, fast and simple sorting program changes from the control panel) and agile operation (on-off without waiting time) are ideally suited to addressing the new challenges and needs of the market. In addition, they enable the control of the percentage of heavy metals entering the melting process. In this way, they control the final quality of the product and therefore avoid exceeding the permitted limits of the heavy metals, which, if not controlled, could cause 'non-conformity' of the casting, with significant economic consequences," concludes Gist.



For more information on TOMRA Sorting Recycling visit [www.tomra.com/recycling](http://www.tomra.com/recycling) or follow us on LinkedIn, Twitter or Facebook.

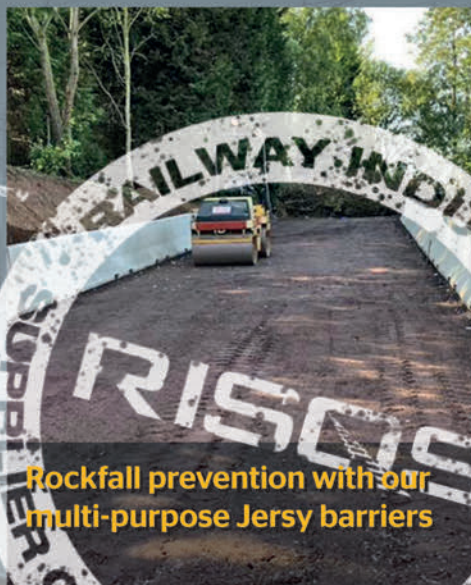




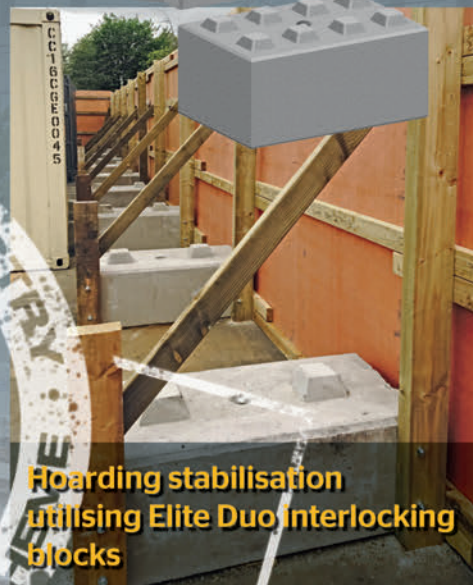
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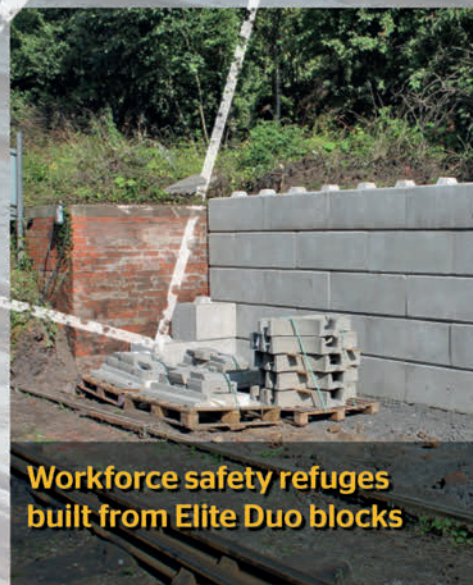
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# Bespoke upgrade completed amid Covid constraints

**Recyclable materials from across Ireland are now being processed at a revamped recovery facility in Tullamore, County Offaly, recently upgraded by Turmec.**

The upgrade for Turmec's long-standing client AES Bórd na Mona was completed recently, despite the constraints of the coronavirus controls, in under four weeks.

Using high-tech mechanical and manual sorting processes, more than 40,000 tonnes of materials can be segregated yearly at the facility. These recovered materials are then baled and sent to secondary processors and pulp and paper mills.

Part of the semi-state Bórd na Mona group, AES is a national waste management contractor operating collection services and depots across the Republic of Ireland. AES serves more than 130,000 domestic and 5,500 commercial customers.



Dry mixed recyclables are delivered to Tullamore in walking-floor trailers.

The highly efficient sorting process employs a series of ballistic separator, disc and ONP (office and newspaper) screens to separate plastic film, paper, cardboard, plastic bottles, cans, stone, wood, and other materials.

Metals are extracted by a ferrous metal magnet, while an eddy current is used to separate non-ferrous and aluminium metals. A vibrating screen spreads materials passing on the conveyor so that plastic tubs and trays, HDPE and PET bottles and mixed paper can be removed by a triple eject optical sorter. Another optical sorter then identifies and separates the HDPE and PET bottles.



The plant is fully operational and Ciaran Brady, Head of Resource Recovery Bórd na Mona, thanked Turmec and the AES team for their hard work during Covid-19 to finish the upgrade.

"Our latest bespoke plant upgrade has allowed AES to significantly improve its processing capabilities at Tullamore," said Turmec Service and Support Manager, Robert Thornton. "The plant efficiently recovers high-quality materials – from plastic film and bottles to metals, corrugated cardboard, and hard and soft mixed paper. It has been a pleasure working with the AES team to finalise this project for our long-term client."

Turmec is known worldwide for offering bespoke plant upgrades and full-service turnkey facility solutions, working around any existing operation to minimise disruption.

"Waste is an ever-changing industry, which means Turmec must innovate to offer its clients the best solutions, keeping them ahead of legislation and marketplace driven needs; every Turmec plant is custom designed to address specific needs and waste streams, and is planned with future growth in mind," says Brian Thornton, Turmec's CEO. "We can adapt to any budget, floor plan or stage of the project, whether that means a completely new plant design or an insert into an existing plant."

<https://youtu.be/netTaEfUTds>





# Need Assistance?

Liebherr is at the forefront of the fast-growing shift to assistance systems that make everyday tasks safer, convenient, and more productive.

Just as the technology is used for voice assistant Apps at home, industrial automation programs and intelligent driving aids, Liebherr installs assistance features in its construction and industrial material handling machines to safely move heavy loads to height, often on rough ground.

The T 46-7s, T 55-7s and T 60-9s telescopic handlers from the Telfs plant in Austria were introduced in 2019 specifically for industrial applications. They are prime examples of how assistance systems and safety initiatives contribute to machine performance.

## Auto Power

Moving materials with a telehandler demands power and speed, particularly when several movements of the operating hydraulics are being executed simultaneously. As the speed of the operating hydraulics is linked to engine speed, the driver has to press down the accelerator pedal while reducing the speed of the drive using the inch-brake pedal.

However, with Auto Power – activated via a toggle switch in the cabin – Liebherr models automatically adjust engine speed to the total power requirement when the operating hydraulics joystick is deflected. The system takes driving speed into account so that it remains constant and the accelerator pedal is reserved for operating the drive.



Telescopic handler cab

## Fine Control

Certain applications in industrial materials handling require a light touch and one example is when loading high racking shelves using forks. To precisely set up a Liebherr telehandler for such applications, Fine Control is used with the operating hydraulics, again activated via a toggle switch. It reduces the speed of the operating hydraulics by 50 per cent, meaning the operator can call on all the machine's reserves for speed and power or fine control for more exacting manoeuvres.

## Programmable Bucket Return

For frequently recurring movements such as skip loading, the operator can save any specific tipping angle and return to it simply by pushing a button on the joystick. The ideal angle of the loading bucket is always achieved without constant readjustment, meaning smoother loading cycles and an operator who is less tired.

## Load Moment Plus

Customers who frequently handle heavy loads with the telescopic boom extended and thus need more stability, often opt for Load Moment Plus, particularly on the T 46-7s which

have a load capacity of 4.6 tonnes and seven metres lifting height. Although this does not change the maximum load when the telescope is retracted, the machine provides a full 25 per cent of load capacity when the boom is fully extended. Result? Power is used to the maximum when in the maximum position.



T41-7 Telehandler

## Inner and outer values

In industrial applications the telescopic boom is in constant motion under heavy load and inside, all service lines and hoses are routed together in one load carrier and bound to each other, free from chafing.

To absorb shocks and impacts, when loading hard, recycled materials for example, and to prevent premature component fatigue, the boom cylinders are fitted with end position dampening. And despite a soft approach that just "kisses" the end position, a vibration function gives assistance to allow the bucket to be emptied safely, even with binding material.

## Overload Warning Device

If electronic stability control intervenes in your car, you probably will not notice it. But it is different in a Liebherr telehandler. Here, the overload warning device continuously measures current load situation and indicates output via an LED display in the cab. The device is constantly in standby mode and ready to intervene if the normal situation (green display) changes. The speed of the hydraulics is reduced in the yellow zone to increase dynamic stability and if the red zone is reached, only those movements that return the load into the safe zone, i.e. closer to the base machine, can be made.

The function can be temporarily deactivated to use full power when digging at the edge of trenches or for the last few centimetres when placing a pallet.

## Eco Motion

Eco Motion is an additional option for smaller Liebherr



T46-7 Telehandler



handlers – those with a payload up to 4.1 tonnes – that enables the boom to be lowered load-free. The system is already familiar to users of Liebherr's mobile and crawler excavators and uses gravity to return part of the hydraulic fluid in the cylinders. It is a preferred option for customers who carry out large numbers of loading cycles.

### Comfort Drive

This feature can be regarded as a transition as technically, the option is on the telescopic boom, but the results take effect when driving. The boom is compensated by an automatic hydraulic counter-movement under uneven driving conditions. The option is activated automatically from 7 kph, but a toggle switch can be used for slower movements. Anti-vibration damping prevents rocking and is recommended for machines that will often be driven at speeds above 30 kph.

### Sit in, drive off

Hydrostatic drive has been a feature of Liebherr's construction machines for more than 50 years and allows operation to start immediately without disengaging the clutch, changing gears or braking. So that machines can always be manoeuvred safely on any terrain, there are various comfort functions: differential lock, disengage all-wheel drive (less wear and tear) and electronic selection of the four different steering modes.

### Auto Hill Assist

This feature acts as a drive-off aid to improve safety on steep slopes, especially useful when taking loads off-road or towing a trailer. On inclines, the driver has only to take his foot off the accelerator pedal for the machine to stop and the automatic parking brake to activate. It releases again as soon as the vehicle restarts.

The parking brake is always electronically controlled via a switch in the cabin - there is no handbrake lever, like other manufacturers' machines.

### Manual Control Package

On the right-hand cabin console are two mini joysticks that control driving and operating hydraulics. They allow vehicle and engine speed to be set, as well as the appropriate litre capacity of the hydraulics, for setting continuous operation of, say, a sweeper attachment or concrete mixing bucket.

T46-7 Telehandler





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## RSG Structures and Elite Concrete provide 'the solution' for a new metal recycling facility

**RSG Structures and Elite Precast Concrete Ltd recently undertook a full design and build of a new 120m long x 3.2m high perimeter push wall for a new metal recycling facility in East London.**

The wall was constructed using an RSG proven method of in-situ foundation/plinth with Elite Precast Legato blocks installed onto it. The logistics of this project involved 441 blocks (equivalent of 400m<sup>3</sup> of ready mix or 67 wagons) from Elite Precast Concrete being delivered and installed with just two men in four days with it being ready for use as soon the blocks were in position.

An in-situ wall of similar size and strength would have taken weeks longer to construct and then it needs to cure before being out to use.

Gareth Neale, Managing Director of RSG commented: "We use many different methods of construction in our day to day business, but when it comes to constructing a wall of this size, to take the design loads specified and with a fast build time, there is nothing that comes close to the Legato block.

"The fact that we can alter the layout by use of the "bendi" blocks which allow us to follow any change of direction and design the strength of the wall by the addition of a "soldier course" at the bottom and buttresses added is why we often favour the block system over more "traditional" methods.

"L walls, T walls and other precast systems are great, but a 3m L wall, will always be a 3m L wall and that's all it can be. I can build a 3m high block wall that is purely designed for wind loading and then by a quick change of design, it becomes a 3m wall that can take scrap metal to full height with a surcharge and the impact of a 20t shovel. By the same token, if the height wants to be increased or decreased a simple design check and it is done. That simply cannot be achieved with other standard precast units.

"We always use Elite Precast for our large blocks (Legato) as we need to count on the quality and supply of product. All of our projects are fully designed as I want to be able to sleep at night when I am building walls that I know are going to get a hammering. There are cheaper block suppliers, but I want to use a manufacturer that I know will always deliver. Any rejected product or delayed deliveries when we are on-site will end up costing a lot more than



any money, I might have saved from one of the "cheap" suppliers."

For further information about the Legato blocks please contact [sales@eliteprecast.co.uk](mailto:sales@eliteprecast.co.uk) or call 01952 588555

For further information about the wide range of services offered by specialist contractor RSG Structures Ltd please contact [gneale@rsgstructures.co.uk](mailto:gneale@rsgstructures.co.uk) or call Gareth on 08452 997597





# CASE helps keep the Isle of Man connected in £25 million landmark promenade project

The Isle of Man Government has embarked on a £25 million investment project in its capital Douglas. The project, code-named MyProm, will see a complete overhaul of the popular promenade and the first reconstruction of the highway since 1935. The initial stages are already underway by groundworks company Stephen Christian & Sons, involving the installation of a new utility system of electric, water, gas, telecoms, and street lighting. At the heart of this activity is a CASE Construction Equipment TR270 Compact Track Loader with CASE T450 Rock Wheel attachment.

"This is a landmark project for the Douglas community," explains Richard Christian, Director of Stephen Christian & Sons. "We're trusted with a project that means a lot to the people who live here. It will drive additional tourism to this area and improve the livelihoods of those who work in our island's capital. We've worked with Manx Utilities for many years and a big part of this longstanding relationship is the quality of our work and the reliability of our equipment."



Stephen Christian & Sons has been a CASE customer for over 30 years with a current fleet of ten CASE machines. CASE dealer Dennis Barnfield Ltd recommended the CASE TR270 Compact Track Loader and the CASE T450 Rock Wheel attachment.

"The CASE Compact Track Loader is unrivalled when it comes to utilities work," explains Graham Barnfield, Managing Director, Dennis Barnfield Ltd. "It may be compact, but it packs a punch when it comes to power and torque and it delivers consistent performance in the most demanding conditions. We supplied a high-flow hydraulics package with this machine to deliver as much power as possible to the rock wheel. This package supplies 55% more flow than the standard hydraulics package and comes with a 14-pin electric plug socket to operate the attachment. This genuine CASE Rock Wheel attachment gives the operator complete control while digging trenches with ease."

"Trenching is demanding on our operators," continues Richard Christian. "They have to work fast against tight deadlines and that means long days. The CASE Compact Track Loader performs consistently and reliably in these challenging conditions. The cab is quiet, spacious and comfortable, with

full air conditioning and radio, so operators can work the long hours needed to get the job done without fatigue.

"There is nothing else on the market quite like the CASE T450 Rock Wheel attachment. It is a great tool for our utility contracts and cuts through the road with ease. On the Douglas promenade job, we are cutting through 200mm of reinforced concrete and 50mm of asphalt with no problems. The tool creates a consistent trench every time, cutting to the exact width of the wheel, which is perfect for the micro-trenching needed for telecom jobs. When you are creating kilometres of trenching, the time savings add up. Put simply, the rock wheel saves us time and money while ensuring that we deliver a consistently high standard of work."

The CASE T450 Rock Wheel is also available for the new CASE B-series range of Skid Steer Loader, launched in March 2020.

"Attachments only increase the versatility of CASE compact machines," said Joseph O'Grady, Business Director Northern Europe, CASE Construction Equipment. "A landmark project like the redevelopment on the promenade in Douglas offers the ideal arena to showcase the power and flexibility the machines offer. We are delighted that it has been such a success and look forward to seeing how the works progress."



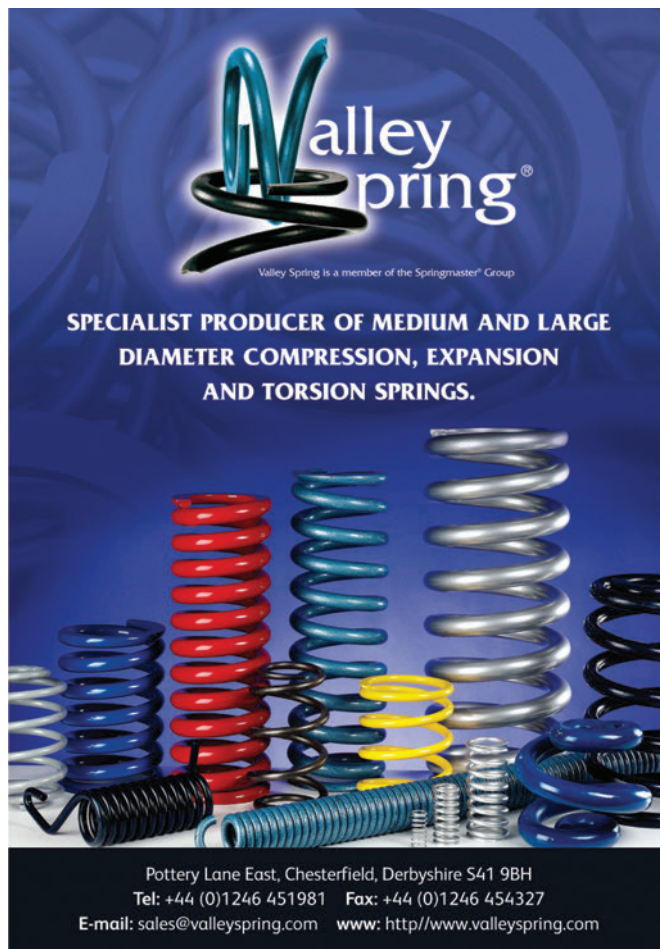


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