

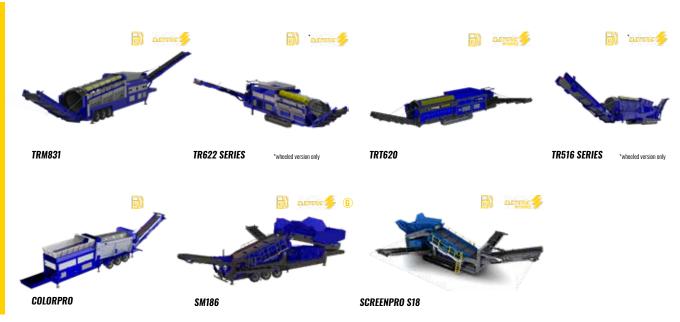


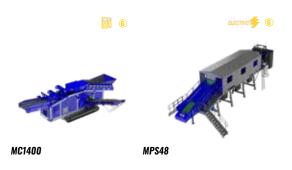
# INNOVATION AT WORK

Over 30 years experience in the design, manufacturing and exporting of Material Handling & Recycling Solutions

VS420 SLAYER XL (T) SLAYER XL (W) SLAYER XL (HL)















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WATCH VIDEO







Director Insight

2023 A YEAR IN REVIEW

It's that time again where we communicate to all our stakeholders how we've made progress this year. 2023 has been a year of continued success in line with our long-term strategy of controlled growth.

New product development and continuously improving everything that we do right across all aspects of our business continues to be an important focus for us. In May and in line with our plans, we completed further expansion of the factory floor with a 50,000ft<sup>2</sup> factory to be used for final assembly and quality control department.

We have continued to invest heavily in equipment and the latest manufacturing technology. In February 2023, we added a new paint booth and production lines which is a sign of our increased investment and commitment to growing the business in a controlled fashion for the long term. In the summer we will begin the construction of our new offices and customer reception centre.

EDGE is totally committed to apprenticeships: and as part of the MEGA network we've invested heavily in the degree apprenticeship programme at Ulster University which focuses specifically on mechanical engineering and design. We will continue to recruit apprenticeships across our entire business. The future of EDGE is directly connected to investing in our young people in this locality and we are ambitious in our plans to bring more young people into our company.

As a manufacturer of equipment used in the environmental and recycling industries we realise that we need to show a commitment to reducing our own carbon footprint. To this end, we have embarked on a number of investment initiatives. This year we installed over 600 new solar plans at our headquarters offsetting over 70,000kg of CO2 yearly. In combination with our previous installations, we can now generate over half a million kw / hours of green electricity. As the world struggles to deal with the onset of global warming it's important that we do our bit, and this particular investment is part of a continued commitment to improve the environmental impact of the manufacturing of EDGE products.

In the last few years manufacturers were all faced with huge levels of component shortages as well as increasing costs. We're happy to say that many of many of these challenges have decreased and we have seen more stability with regard to costs and availability of components. EDGE Innovate is very confident that in 2024 we will again be able to increase sales. In order to achieve this, we've committed even more heavily to product development. 2024 will see the launch of a number of exciting new products that will complement our existing portfolio offering. We are focused on controlled growth within this organisation. The new products that we will bring to the market will fit in with our product development strategy as we continue along the journey off growing and securing the future for the long term.

I want to thank all our stakeholders for working with us so positively throughout the year including our distribution partners, our team here at EDGE and our suppliers.

We look forward to 2024 with excitement and confidence and working closely with you all.

del

Darragh Cullen, EDGE Innovate Managing Director



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## SATISFYING NEW PRODUCTION DEMANDS

## WITH AN EDGE VS420

When Berkshire headquartered Shorts Group, who provide a variety of waste management services, recently secured a new contract they needed to invest in a new versatile waste shredder.

Shorts Group have been in business now for over 65 years offering customers not only solutions in terms of waste management and recycling, but also plant & tool hire and demolition. With a core operating area of the Thames Valley but often operating far farther afield, Shorts Group aim to provide cost effective and sustainable options every time.

"Service is central to everything we do and has been embedded into the culture of the business, the longer term plan is to continue to grow whilst remaining focused on the core values of the business," says Commercial Manager Andrew Brady, "which is why we only invest in the best available machinery on the market and the EDGE VS420 ticks all the boxes. At the risk of being cliché it does exactly what it says it should do."

The Group's business strategy is certainly paying dividends. Just recently they picked up a top award at the prestigious Thames Valley SME Growth 100 awards, winning the Resilience category against particularly strong competition. "Our business like many others have faced challenges over the past few years, the biggest being the pandemic and the impact this has had on not only the economy but supply chains alike. As a business we pride ourselves on being diverse and touching many different types of customers across various different sectors," said Managing Director Gary Short.

"It is a huge credit to all those that work with us, so we are pleased to celebrate this with everyone, all the hard work does not go unnoticed. Without the individual hard work and determination of everyone we would not have the business that we do today."

As a business, Shorts have experience running shredders for a number of years across various brands, but the new contract set out specific requirements on waste size and classification, so a shredder solution that satisfied those specifications was required. The EDGE VS420 gave us the ability to meet those contractual requirements.

#### **VS420 EASY TO MAINTAIN AND OPERATE**

"Our primary use of the machine is to shred black bag waste to sub 300mm," says Andrew. "The operators are very complimentary of the EDGE VS420 production capacity. It is very easy to operate and maintain. As with all new equipment, however, it took a few days working with Red Knight 6 to find the optimum control parameters and loading techniques for our application but once that had been ironed out, we haven't looked back."





Red Knight 6's Managing Director Paul Donnelly, who has been involved in the crushing, screening and recycling business for over 20 years, across parts of Europe and Australia, says since they were appointed by Northern Ireland based EDGE Innovate just less than a year ago, the EDGE VS420 has become one of their most popular machines, not least because of its versatility and the fact it can be used in processing a variety of different materials.

"It is the first slow speed shredder Shorts Group have acquired from us. They had looked at other machines, but decided the high capacity EDGE VS420 was the most suitable for their requirements. The machine was supplied with a full repair and maintenance contract."

Powered via a Caterpillar C9.3B STAGE V 310Kw (420HP) engine, the VS420 has been designed around the operator to make it as user friendly as possible. All major machine functionality can be controlled remotely from the cab, essentially making it a one man operation. The twin shaft chamber design and control system ensure against downtime and material entanglement around the rotors. By keeping the rotors free of wrap round, Shorts are finding that the VS420 throughout is much more consistent whilst using much less fuel, so it is very efficient.

#### **WASTE SHREDDER VERSATILITY**

Featuring the latest EDGE Operating System with on-board load sensing diagnostics, an intelligent self-protecting control system, and



an eco-power fuel saving functionality, the machine's versatility and efficiency has proven to be an added bonus for Shorts. Comments Andrew Brady: "Due to the versatility of the machine we also have the option of moving it onto our wood shredding operation for biomass chip production. It is also easy to move across different applications. The footprint and manoeuvrability of the machine is also excellent, making it very easy to move around the yard as and when needed."

With easy access to the engine compartment and ground level access to all the filters, routine daily maintenance checks can be carried out quickly, resulting in minimal downtime and Andrew adds: "We have a long standing relationship with Red Knight and they have provided many machines to us over the years. They offer excellent support and back up should there be any issues and they always go above and beyond in terms of familiarisation training and guidance."









Offering waste producers cost effective and environmentally friendly recycling solutions, SED Services have expanded its operations with the acquisition of a state-of-the-art composting site at Kirkby, bringing to four the number of sites it now operates in the Merseyside region, the others located in Wigan, Formby and Hightown, employing a total of 180 staff.

The 10-hectare Kirkby facility is now supporting SED Services to deliver contracts secured within the Greater Manchester Waste Authority and five of the six Merseyside Authorities. The site will save some 280,000 tonnes of waste from entering landfill and has also created new jobs across the business, including plant and weighbridge operators, as well as account staff and transport personnel.

Its rapid expansion in recent times has been fuelled by growing demand for its products, not least its top quality 10mm sustainable peat free PASS100 compost, and its recent partnership with Evergreen Garden Care, the firm behind the Miracle-Gro brand in the UK. To meet that demand it has invested in what is the largest trommel of its kind, a 37 tonne TRM831 from EDGE Innovate. The TRM831 encompasses a 1500mm (60") wide, variable speed feed conveyor complete with load sensing and automatic feeder shut down to ensure maximum uptime.

With extensive stockpiling capabilities thanks to its end discharge conveyor design, screening material at 400 metres per hour, the TRM831 design prevents product cross-contamination and reduces the double handling of material. This is complimented by a remote operated,  $180^{\circ}$  radial fines conveyor which has the capacity to stockpile up to  $1030 \, \mathrm{m}^3$  ( $1347 \, \mathrm{yrd}^3$ ).

By all accounts, it has been a game-changing investment for SED Services. Comments Managing Director Stuart Baldwin: "Since going into partnership with Evergreen, who operates a substantial bagging plant, demand for our products has increased significantly, so we needed a machine that could handle bigger tonnages at a higher rate. We are very good at making the products, while Evergreen excel at marketing the product, so it made sense to join forces."

"The EDGE TRM831 does the work of two six metre trommels, with a bigger screening surface giving us the option to process more tonnage per hour..."

"The 10 metre EDGE TRM831 does the work of two six metre trommels. The screening drum is taller and has a bigger screening surface giving us the option to process more tonnage per hour. It is so much more cost effective; rather than running two trommels, we are now running just the one."

#### INTELLIGENT LOAD MANAGEMENT

The EDGE trommel's high production rate is maintained thanks to EDGE's intelligent load management system which prevents drum overload and ensures that the trommel screen is always operating at optimum performance with minimal supervision. Enhanced trommel screening results are achieved thanks to a variable drum screening angle.





Stuart says he also likes the fact it is mounted on wheels. "A static unit which is usually tailor-made for a customer would invariably be scrapped once it outgrows its use, so the fact this new trommel is on wheels gives us the option to move it from one site to another – and it always has a second-hand value, meaning you have something to trade in if you want to upgrade".

"We are also impressed by the machine as it is extremely user friendly, easy to operate, and very accessible; everything you need to get to is at hand when you open up the guards making servicing and maintenance so easy."

A large canopy and uplifting drum bin doors give easy access to the power unit and trommel drum. A quick drum exchange is facilitated via a hydraulic sliding feeder and hydraulic raising drum cleaning brushes. This allows the operator to simply lift out the existing drum to be replaced with the various drum types available.

#### **POWER AND EFFICIENCY**

Powered by a 188hp (140kw) Caterpillar C4.4 Tier 4 Final / STAGE V engine, resulting in extremely low engine and noise emissions, the EDGE TRM831 incorporates a host of other impressive design features such as an eco-power saving functionality which reduces unnecessary running costs and a user-friendly HMI control panel for the easy adjustment of machine parameters.

With an impressive screening area of  $57m^2$  (613.5yds<sup>2</sup>), it is fitted with a variable speed 2.3m x 9.3m (8'x31') long screening drum, powered via an efficient hydrostatic drive system.



Screening efficiency is ensured thanks to a 9.3m (31ft) long drum with hydraulically adjustable drum cleaning brushes.

The wireless remote with an operating distance of up to 100m (328') gives the operator control over engine and feeder speed, screening angle, tipping grid cycles and full control of the radial fines conveyor including radial functionality and discharge height adjustment.

Before making the investment in the TRM831 trommel, Stuart met up with the team at EDGE Innovate and says he has been impressed by the manufacturer's high level of service and support, and he adds: "Acquiring the TRM831 trommel has already brought us many benefits. With demand for our peat free product only going to grow, it will quickly pay for itself. If EDGE Innovate made an even bigger machine, we would have it!







There is a school of thought that it could be foolhardy starting up a new business in the middle of a serious recession, but that didn't stop the team behind the formation of EDGE Innovate back in 2008, and today this family owned County Tyrone, Northern Ireland based company has grown to become one of the world's biggest manufacturers and exporters of sophisticated equipment for the quarrying, material handling and recycling sectors.

Today, as it increasingly focuses on the growing environmental sector, EDGE Innovate employs around 170 people directly, and currently exports more than 99% of its products from its state-of-the-art manufacturing facility, having developed a strong presence throughout overseas markets such as North America, Australia and the Middle East.

With an ever developing product portfolio, EDGE Innovate now offers an extensive range of products including, mobile stockpilers, tracked stackers, tracked and mobile feeders, trommels, slow speed waste shredders, and picking stations. All of which allow their customers to shred, screen, separate and stack a vast array of materials

"There are many things that have come together to make the company what it is today, not least our staff and employees – from the shop floor to our sales people, to our marketing department and to our management team," says Managing Director Darragh Cullen.

"We have some excellent managers here, some have been with us for a long time, others are relatively new, providing us with an excellent mix of management skills; it is good to bring in new people with expertise in different sectors who can provide a fresh outlook.

# EDGE Innovate relies on its global customer base as a sounding board in terms of new ideas and new products...

"Our workforce is very loyal and everyone is proud to work here; we have a lot of committed people who believe strongly in the company and the brand we have created. They will go the extra mile for us and for our customers. We are not afraid of change. We don't stand still, we are always moving forward, questioning our processes and procedures, always open to fresh ideas and suggestions, always flexible in our approach. We have a strong marketing team both locally and internationally and consequently our brand is known and respected in many countries."

EDGE Innovate relies on its vast global customer base as a sounding board in terms of new ideas and new products. "We are customer driven in everything we do," says Darragh. "We develop products to meet individual customer requirements. Sometimes it can be challenging but we view it as an opportunity to help our customers. We are problem solvers with a 'can do' attitude, which is why we are constantly developing products and solutions to meet the needs of our diverse customer base. What suits one client in one country may not necessarily do so in another, so being able to 'tweak' our equipment designs makes it a lot more efficient and cost effective for both us and the customer."

Indeed, one of the big selling points for EDGE is the versatility of the machines it has in its portfolio, with the ability to focus on a wide range of applications, especially in the waste and recycling sector – from small operations to multi-nationals, it offers equipment that can perform in a variety of different environments and tasks and meet different regional levels of legislation and standards.

EDGE Innovate has successfully increased its sales volume year on year which in turn has led to significant expansions within the company. "With increase sales volumes comes an enhanced capability to carry out research and development to suit the needs of our customers throughout the world. Different markets require different types of equipment, which means that the demand for our machines is very diverse. It is evident that waste regulations are becoming more and more stringent, which encourages the EDGE brand to innovate more advanced technology and create more technically challenging and complicated machines for the global market demands."







In 2022, the company was presented with the Queens Award for Enterprise recognising its excellence in International Trade for the second time, having won its first Queen's Award in 2019, becoming only one of seven companies to achieve two such Queen's Awards. "Given the sad passing of Her Majesty the Queen, the awards will always be treasured," says Darragh. "We view them as recognition of the hard work and resilience of all our stakeholders, especially during the time of the pandemic."

**PRESTIGIOUS AWARDS** 

More recently, EDGE Innovate won the "Technology of the Year" award at the MEWAR awards which recognise outstanding individuals and organisations that have demonstrated leadership and innovation in their respective fields and have significantly contributed to environmental sustainability along with economic viability, ultimately contributing to a greener future.

Capturing the judging panel's eye in the "Technology of the Year" category was EDGE Innovate's electric powered twin shaft high torque waste shredder. The judging panel was hugely impressed with its remarkable environmental benefits, energy efficiency, noise reduction, versatility whilst noting its significant contribution to the waste management sector in the region. Its positive impact on sustainability and the environment positions it as a game-changer in various industries, making it an outstanding choice for recognition and accolades.

The EDGE electric shredder has the ability to finely shred difficult materials allowing for better recycling and waste reduction, contributing to circular economy principles.

Steven Conway, EDGE Innovate's Middle Eastern Territory Sales Manager, commented: "It is a great honour to receive this prestigious award. EDGE Innovate stands out as a uniquely innovative and environmentally conscious brand that continues to serve the ever-growing waste recycling industry in the Middle East and further afield. The company has demonstrated an unwavering commitment to leveraging cutting-edge environmental technology that addresses specific environmental challenges."

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# Focusing on integrating telematics and GPS technology into the company's products and on the electrification of equipment..

This new product, like all the equipment manufactured by EDGE Innovate, is the result of having a very proactive R&D department, which is constantly working on new designs and innovations, utilising latest technologies to do so.

At the moment, there is a big focus not only on integrating telematics and GPS technology into the company's products, but on the electrification of equipment. "Requirements differ from one country to another in terms of recycling needs and demand for carbon neutral products, so it is always a balancing act. Ultimately, I look forward to the day when there is no diesel powered equipment leaving our facilities," says Darragh.

Recently named as one of Ireland's Best Managed companies for the sixth year running, in the Deloitte Best Managed Companies Awards programme, EDGE Innovate's dealer network is recognised as the lifeblood of the business. It has over 70 dealers and partners around the world and it maintains and fosters a strong positive relationship with all of them, working as a team to ensure continued success.

#### **CONTROLLED GROWTH**

Several years ago EDGE Innovate embarked on an £8m investment plan to cope with growing demand for its products. A new paint shop and stores facilities have been added, increasing production capacity by 30% and a new Customer Welcome Centre is being established to house its ever-expanding sales, marketing and aftersales departments.

The new centre will be well utilised as the company is constantly welcoming customers to the County Tyrone facility from all over the world, sometimes for product training, other times to let them see the production processes and to get to know them on a more personal basis.

So, what does the future hold for EDGE Innovate? "We are an ambitious company, and we want to continue to grow at a controlled level, placing strong focus on product development, product support and service excellence. We have a growth strategy in place, to further expand our facilities to enable us to double our current turnover."





EDGE Innovate has taken decades of experience from designing, manufacturing and commissioning of industrial waste shredders to create their next generation waste shredder. The EDGE VS420 is a high capacity, high torque twin shaft shredder that is ideal for the processing of a large array of materials including; green waste, MSW, C&D waste, biomass and end of life tyres.



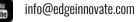




















Few people will venture to Omarunui. It's a private dump site, that's not open to the public. Jointly owned by Hastings District Council and Napier City Council, but it's here that many of the public's belongings damaged from Cyclone Gabrielle are being stored.

Buried deep and out of sight at the very top of the mountain so that a city and its inhabitants can forget what they have been through and move on. If only it were that easy. The rebuild of the region will take months, likely even years. The removal of household waste affected by the floods is just the start. It's early March in 2023 and public bric-a-brac litters the roadsides in affected areas of Hawkes Bay. Piles upon piles of contaminated and broken household possessions line the pavements awaiting collection by the region's waste removal services.

The slick gravel track winding to the top of the landfill site is now more mud than gravel. Churned into sludge from the recent wet weather and the consistent flow of waste removal trucks. Their wet loads drip onto the track creating a welcoming carpet of mud and stench that's reflective of what the populace has had to endure. Truck after truck arrives. Forty or fifty trucks a day. Once at the top, they wait patiently to dump their loads, before being waved on by the landfill staff, who are heavily kitted from head to toe in PPE and waterproof gear.

#### FIRST STAGE OF RECOVERY - VOLUME REDUCTION

Waiting to greet them amongst the sights and smells of all the debris is Tony Prosser, Machine Operator for Composting New Zealand. His company typically works in the lower North Island from sites in Kapiti, Wairarapa, and Wellington. Their specialty is producing premium organic compost, mulches, and soils from green waste. At council request they have been asked to also process Construction and Demolition (C&D) waste to assist with the Hawkes Bay clean-up. The recent diversification has seen the company purchase a new EDGE Slayer XL from Equip2.

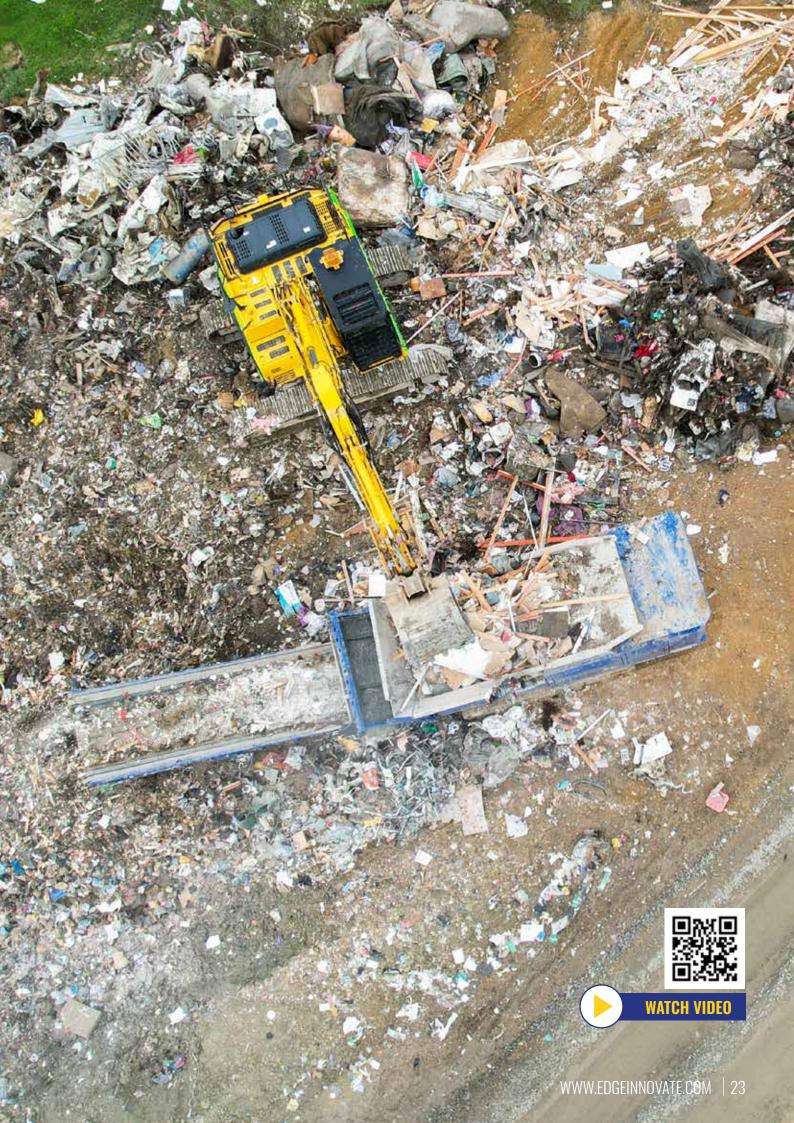


The Waste Shredder is a specialist machine that breaks down C&D material into smaller sizes so that the absolute maximum amount of waste can be packed into a landfill site. It's an efficient way to process material and it allows waste to break down more quickly too. The EDGE waste shredder sits at the highest point of the Omarunui Landfill site. The key piece of equipment helping to erase the memories of what people have been through. To the rear of the Shredder are the piles of household items that the trucks have delivered.

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Tony sorts through the debris with a grab bucket attached to his 20-tonne Excavator. Using the giant claw he continually feeds the Slayer's shredding chamber. It's here that the rubble meets two turning shafts with intermeshed teeth that do all the work – breaking the material down into chunks that barely resemble what they were previously. The newly processed material is much smaller and compactable. Using onsite compacters, the debris can now be tightly packed down allowing Tony to fit even more into the excavation site.

Knowing there are stories behind every item, isn't lost on him and the strain is evident by his tight set jaw. "It's not very pleasant. You see the possessions that are coming in. Kids' teddies. Cots. Mattresses. Everything you see in your house. It's just gone. It's horrendous and hard to believe until you actually see it." Someone has to do the work though, and Tony is thankful he can help. The Slayer is a big help to him too. "There's another shredder being used on site, but the EDGE Slayer is way more powerful. It can get through four to five times the amount of material."

"What I like about the Slayer is it's a very simple machine that's really easy to use. And it can fly through the material too. In ten minutes, I can easily clear a bulk forty-foot walking floor trailer."

#### **BREAKING FROM TRADITION**

The machine has different settings for different types of waste. There's a mixed waste mode for general C&D waste, a compost and green waste mode, and one for mattresses and carpets too. All of these are useful and can be operated from a remote, allowing Tony to be a one-man band and operate the Slayer as he feeds it from the cab of his digger. Seeing the gains from the Slayer XL has given Tony a new perspective on how landfill sites across New Zealand should be processing waste material.

"Once different landfills see what we are doing here it will change the way they deal with waste. Reducing, recycling, and screening rubbish the way we are doing it with the Slayer is something the industry needs to embrace."



Tony Prosser, Machine Operator for Composting New Zealand



With unmatched production rates and high efficiency; the EDGE ColorPRO offers operators the highest return of any coloring system available on the market. A self-contained portable coloring system, the EDGE ColorPRO is ideal for those operators seeking a large capacity, coloring solution.











# NEW POSSIBILITIES WITH AN EDGE MULCH MASTER





Matt Bakke, founder and CEO, started the company in 1988 primarily as a harvesting and trucking company, but over time he developed and adapted the business and in 2015 diversified into a highly successful composting operation.

Today, taking a hands-on approach in the business, Bakke Ag Services has become a one-stop shop providing high-quantity silage, manure, compost, dairy cleanout, and soil amendments to a wide customer base from its location in Tulare County.

"Composting has become our main bread and butter," says the company's lan Bakke. "We now run two different composting facilities in Tulare, handling raw input of materials from diaries including separated manure, and we have an offshoot operation processing agricultural green waste of different varieties, and different densities and moisture levels, combining all of those into one high quality, consistent compost product.

# "A rough estimate on space saved by utilising the FTS75 Mulch Master is around 60%".

"There was a need in our operation to consolidate space to provide us with a more effective and efficient operation, and it was that which led us to invest in the EDGE FTS75 Mulch Master. What appealed to us about the machine was its efficiency on fuel consumption, its ease of use for the operator and its space saving technology – and we can do more in much less time. A rough estimate on space saved by utilising the FTS75 Mulch Master is around 60%".

The EDGE FTS75 Mulch Master was supplied by official dealers for California & Hawaii, GreenRock Equipment, a specialized Recycling Equipment provider. With locations in Southern and Northern California, its co-founders Shea McKiver and John Connolly, are former employees of EDGE Innovate, so they have a winning combination of field and factory experience, giving them a wealth of knowledge of the EDGE Innovate product portfolio – knowledge that Bakke Ag Services have successfully been able to tap into.



The EDGE FTS75 Mulch Master portable feed stacker is setting new standards in the turning and blending of organic material. It has been designed specifically for the processing of lower density, bulky materials such as mulch, compost and soils. It boasts a huge hopper capacity of 19.6yrds<sup>3</sup> and combines traditional flipping and rotation with constant material flow to overcome issues of compaction, contamination, material bridging and risk of combustion.

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The variable high speed feeder conveyor enables an even spread of material and is further regulated via the double screwed forward/reverse auger. The auger fulfils two roles: it conditions material by flipping and rotation allowing the material to separate, aerate and untangle as well as regulating the flow of material and preventing material bridging at the transfer point.

"The EDGE FTS75 Mulch Master is a low cost machine that gives us a high rate of return – you are not going to find a better, more efficient and productive machine anywhere..."

Adds lan Bakke: "This piece of equipment is extremely versatile in that not only can you handle raw product with ease – it never jams, never holds up – the power it has is unreal and unmatched. We do various operations with it – from blending materials, bringing in fertilisers and gypsum and material from other mining operations to create one soil blend for our growers. You can do all that with this equipment, that's not going to happen with other machines – with this machine you can blend and create a nice, homogenised product. It is so straightforward for the operator to use compared to other machines in its class.

"As far as composting goes, moisture is critical in the process: we always want to stay within a consistent moisture rating and luckily for us, the EDGE FTS75 gives us the opportunity to add moisture as we go, we can fine tune the moisture during the process. The machine's spray bar is super effective and easy to use, you can adjust it accordingly. It is a simple system and is really easy to maintain – we have been running 2,000 plus hours and never had an issue with the spray bar".

"With bulk storage of compost, you are always concerned about fire hazards. That is the main concern with raw material, so when we get raw material in, our process is pretty simple. We take the raw material in and process it using the Mulch Master. This process helps to break down the raw material and kick starts that initial compost phase".

"Its stacking capability is very good, creating a tidy tepee-shaped pile that drastically diminishes the fire risk," says lan. "We have yet to see any major issue with this machine in that regard, so we can sleep easy at night knowing we have not only done everything we possibly can to prevent combustion, but with the EDGE FTS75, we have gone above and beyond what is needed as far as fire prevention goes."





lan is also very complimentary about the support and service they receive from GreenRock Equipment. "It's phenomenal. John and Shea and their team are just incredible people to work with. Their team is incredible. Their parts and availability are second to none. They are experts in their field and only ever a phone call away. They know the machines in and out. They understand what potential problems can arise and know how to quickly solve them.

"They visit us on site at least once a month to ensure the machine is running as it should, which is very reassuring and the availability of parts is second to none. If we ever need a wear part, it is just a matter of making the call, knowing they keep good stocks".

"The EDGE FTS75 Mulch Master is a low cost machine that gives us a high rate of return. Its space saving technology, reliability and efficiencies are, in my opinion, unmatched and I firmly believe that this machine will never become obsolete in our industry – you are not going to find a better more efficient and productive machine anywhere. If we are not using this technology as an industry, then we probably are not doing it right".



Matt Bakke, founder and CEO Bakke Ag Services and Ian Bakke Operations Director

"If we are not using this technology as an industry, then we probably are not doing it right".





## SAUDI ARABIA'S FIRST

# **C&D WASTE PROCESSING FACILITY**

EDGE Innovate has supplied vital material handling and processing equipment to Saudi Arabia's first construction and demolition recycling facility.

Saudi Arabia produces about 53 million tonnes of waste every year. By 2035, this is expected to grow to 106 million tonnes, due to rapid industrialisation, population growth, and urbanisation.

Developing a more efficient waste management strategy and infrastructure was a major objective of Crown Prince Mohammed bin Salman's economic overhaul plan announced in 2016. The Kingdom recycles no more than 10% of the 50 million tons of recyclable materials it produces each year, studies commissioned by the sovereign fund show. Under Vision 2030, the Kingdom has accorded top priority to waste management and is keen on building a circular economy for a sustainable future.

Saudi Arabia's first recycling facility for construction debris in the capital, Riyadh began operation in July 2021 as the Kingdom targets an overhaul of a landfill-dominated waste-management industry. The effort has been led by Akam Materials Recycling Company for Environmental Services, wholly owned by the Saudi Investment Recycling Company "SIRC Group".

"The new waste-sorting and recycling facility is only the beginning of a series of similar facilities to be launched within the next three years, with a broader goal of recycling all kinds of waste, such as fertilizers, paper, plastic and metals," Jeroen Vincent, the company's chief executive.

#### PROJECT SCOPE

Located in Al Khair, north district of Riyadh, Akam's new plant spans an area of 1.3 million square meters for the Construction Demolition Waste (CDW) facility and has been designed to achieve recycling rates of more than 90%. The recycling company wants the new facility to recycle the 20 million ton of CDW dumped and accumulated every year in vacant plots, as well as 5 million ton of annually recurring CDW disposed of in illegal landfills or old sites by 2035. The debris will be turned into materials for use in road construction and housing projects, including a 35,000-unit housing project, the company said.

In 2023, 20 million tons of waste was processed, sorted and recycled by SIRC, the largest of its kind in the region. The company receives a large number of trucks per day ranging from 3,200 to 3,600 trucks, The incoming waste is processed at a rate of up to 180 tons per hour. Using advanced equipment on a large scale, SIRC extracts key materials of high value such as metal, plastic and wood. A large percentage of the material recovered is then used in the production of at least 1600 cubic meters of green ready-mixed concrete, and 150,000 of green cement blocks on a daily basis in cooperation with partners.





The facility utilises innovative mobile equipment from leading European brands that can be moved between recycling sites and retrofitted to deal with various absorptive capacities according to local needs. To ensure the best quality end product and to achieve the lowest operational cost possible for the project, a fleet of track stockpilers and a mobile picking station have been purchased from Northern Ireland based manufacturer, EDGE Innovate. The EDGE brand name is intrinsically linked to the manufacturing of mobile bulk material handling and recycling solutions, all of which have been designed to improve productivity and mobility whilst minimising operator costs. Their equipment has been trusted throughout the world and is recognised for its' built quality and reliability.

# CONSTRUCTION AND DEMOLITION WASTE CLEAN UP EQUIPMENT

With the vast volume of CDW expected to pass through the new Al Khair facility, SIRC made the decision to purchase an EDGE MPS48 sorting station to support the recovery of a greater volume of material whilst ensuring the safety of their staff from the ever-increasing volume of traffic on the site.

Fitted with heating and air conditioning modules, the EDGE MPS48 picking station provides a safe and comfortable working environment for the picking team. By improving the presentation of the waste stream, pickers work to remove contaminants from the construction and demolition waste ensuring a superior recycled aggregate product that is free from contaminants. The picking station also provides the opportunity to recover additional commodities such as ferrous metal.



The EDGE MPS48 is designed specifically for multiple sized separation of mixed waste or single stream recyclable materials. Screened construction and demolition waste material is delivered onto the heavy duty feed hopper of the EDGE MPS48 sorting station. The material is then conveyed to a 4 bay double sided picking station which can accommodate up to 16 people. The pickers drop the different materials into the relevant bays below. The clean aggregate material then passes under a high-powered over-band magnet ensuring maximum recovery of the ferrous metal. The final step is a high velocity blower with chute work; allowing any light contaminants to be separated by air flow from the clean brick and concrete.



The now clean, heavy aggregates transfers over a series of crushers and screeners for the creation of different grade recycled aggregates. A series of EDGE TS-Series track stackers are utilised as linking conveyors between the mobile crushers and screeners and for the efficient stockpiling of recycled aggregates.

By utilising a fleet of 5 EDGE track mounted stockpilers, Riyadh municipality have eliminated the double handling of material and reduced the over reliance of wheel loaders on the site. Using only a small percentage of the fuel burnt in comparison of a wheel loader, an EDGE track conveyor can move up to 7000 tonnes of crushed aggregate, using only half of the fuel a wheel loader would consume in an average day. The utilisation of conveyors also cuts down on the required labour, reduces the number of moving vehicles, improves health and safety concerns and cuts down on the volume of dust created by the overall project. Mounted on hydraulic driven crawler tracks, operators can easily and quickly reposition the units, allowing the conveyors to be positioned close to the waste material at all times.

Faisal Al Qahtani, Operations Manager, SIRC, said on the partnership with EDGE Innovate, "SIRC is among the leading companies in the Kingdom of Saudi Arabia that is focused on achieving a circular economy. We are constantly looking at the best technologies and

solutions to secure the right infrastructure for the waste management sector. The equipment supplied and manufactured by EDGE Innovate perfectly aligns to those requirements".

The EDGE TS-Series track stackers purchased by SIRC boast an array of design features including a highly efficient hydraulic drive system with variable belt speed, low fuel consumption, a hydraulic adjustable feed and working angle. The ability to adjust the feed point and discharge height helps to reduce material impact, dust creation and eliminates material segregation thus ensuring the quality of the processed products. A discharge height of up to 10.8m facilitates the creation of conical stockpiles of up to 742m³.

The new CDW facility at Riyadh is aligned with SIRC's strategic plan to implement a world-class waste management system and position the Kingdom at the forefront of innovative recycling. It has provided employment opportunities to more than 160 people.

In addition to complying with the latest global practices in waste treatment, the Al Khair CDW plant is fitted with state-of-the-art systems and technologies that will allow SIRC to recycle large volumes of construction and demolition waste in future, Jeroen concluded.





INNOVATIVE MATERIAL HANDLING

& RECYCLING SOLUTIONS.

Over 30 years experience in the design and manufacturing of Material Handling and Recycling equipment. Our products can be seen working in over 70 countries in a wide range of different industries with the brand being supported via a 50 plus strong distributor network.

Shred, Screen, Separate, Stockpile & Size a vast array of materials with the help of EDGE Innovate.







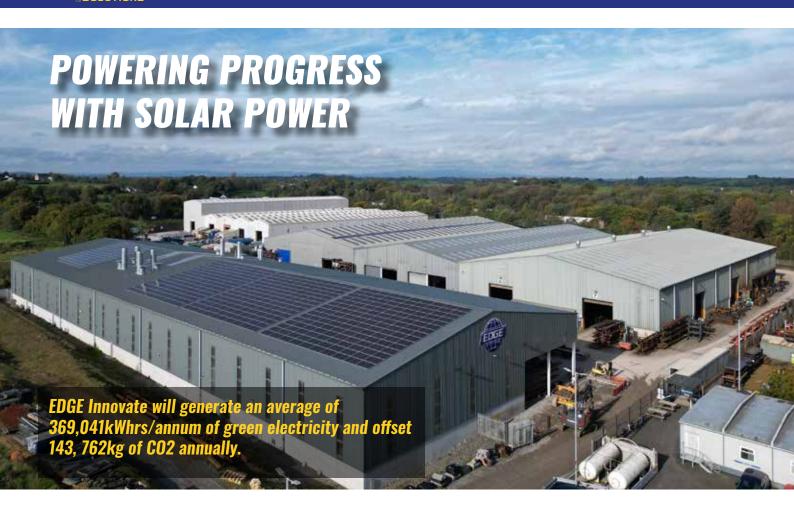












EDGE Innovate is one of the world's leading manufacturers of mobile recycling equipment. The brand has become synonymous with recycling, having helped to divert millions of tonnes of waste destined for landfill. The company has worked closely with municipalities and communities all over the globe as they endeavour to create a circular economy. It is not surprising then, that the company tries to emulate their client's aspirations by designing and manufacturing their product solutions efficiently as possible whilst minimising the environmental impact of their operations.

As part of EDGE's drive towards resource efficiency, whilst minimising the environmental impact of equipment used during their manufacturing processes, the company has invested heavily in the replacement and installation of various new pieces of equipment including the installation of a new state of art rooftop Solar PV system supplied and fitted by Monaghan based, ACEL Energy. Installed in June 2023, this latest Solar PV system consists of 578 solar panels which will generate an annual average output of 228,290kWhrs whilst offsetting 70,962kg of CO2 each year.

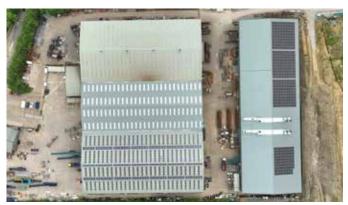
This is EDGE Innovate's second rooftop solar PV System, with their first system being installed in February 2017. Between the two systems, EDGE Innovate will generate an average of 369,041kWhrs/annum of green electricity and offset a whopping 143,762kg of CO2 annually.

In addition of using green electricity in their manufacturing headquarters, EDGE Innovate have continued to development our product line, introducing more environmentally friendly electric

powered products. The company have also invested in their infrastructure having opened a new 37,500ft<sup>2</sup> paint shop facility with several environmental benefits including shorter dying cycles, superior heat retention, reduced material wastage and a greatly reduced level of organic substance emissions.

#### REDUCED CARBON FOOTPRINT

Darragh Cullen commenting on the installation of EDGE's second Solar PV system "Our corporate and social responsibilities help guide our decision making here at EDGE. Our employees live and work in the surrounding area, so it is important to us that we contribute positively to the community we are located in. That is why, we have consistently moved to improve the environmental impact of our operations. The installation of a second Solar PV system is a continuation of that process and will allow EDGE Innovate to vastly reduce our carbon footprint and improve the impact our company has on the environment".





Discover unparalleled screening efficiency with the EDGE SCREENPRO S18 Heavy Duty, Mobile Scalping Screen. With a dynamic 18'X6' (5.4X1.75m) two-deck screen featuring interchangeable flip flow and conventional scalper screens, the EDGE S18 Mobile Scalper offers flexibility like never before.



VISIT US AT STAND C20



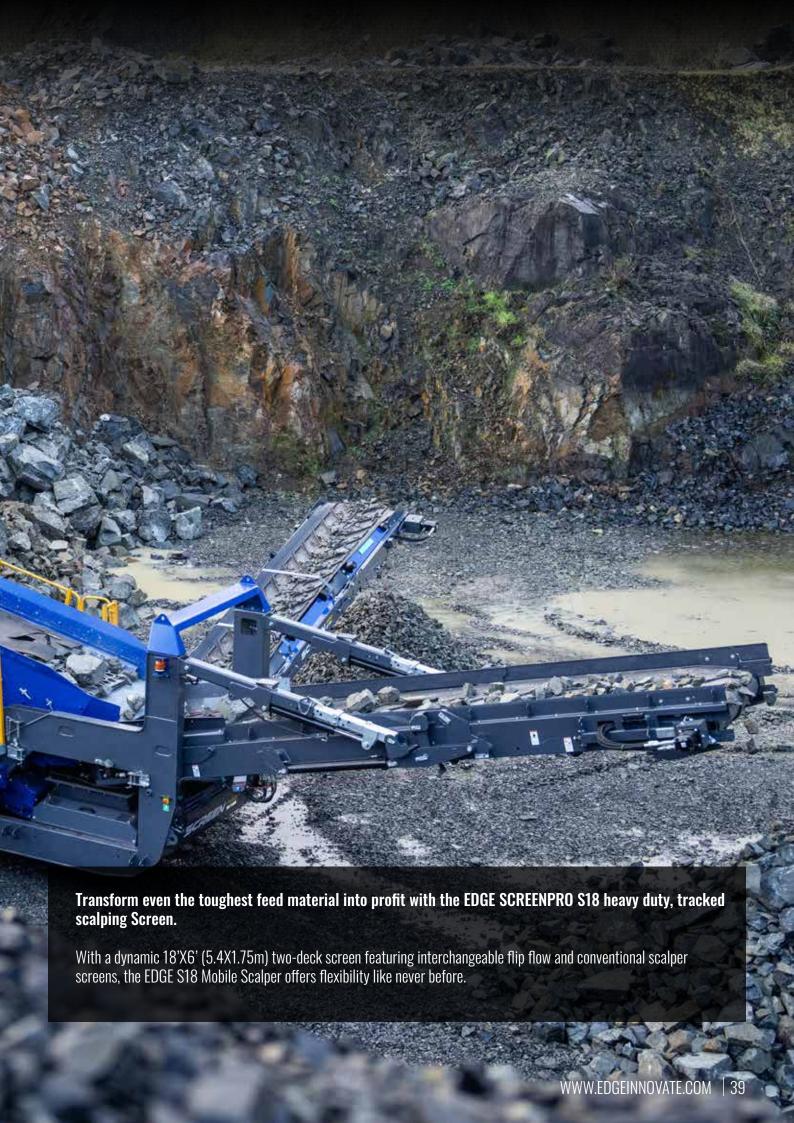
#UNMATCHEDVERSATILITY
SCREENPRO \$18
TRACKED SCALPING SCREEN











# Transform even the toughest feed material into profit with the EDGE SCREENPRO S18 heavy duty, tracked scalping Screen.

EDGE Innovate, a global leader in the design and distribution of a range of equipment used in the quarrying, port handling and recycling industries has expanded it's offering with a product that delivers high production rates and precision screening. The dynamic 18'x6' (5.4x1.75m) two-deck screen of the EDGE SCREENPRO S18 features interchangeable flip flow and conventional scalper screens, providing unprecedented flexibility. A highly versatile screening solution, the new SCREENPRO S18 is designed to process the most difficult and demanding of applications, including aggregate, construction waste, sand and gravel, soils and organic materials. With numerous screen media options and configurations available, the EDGE S18 can be utilised as a stand-alone unit or if needed, placed before or after a primary crusher.

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

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

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









### CONTINUED

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

Adding to the versatility of this new SCREENPRO range is its ability to interchange the highly aggressive scalping screen with EDGE Innovate's award winning flip flow screen. This flexibility combined with numerous screen media options and configurations allows the EDGE SCREENPRO \$18 to process a wide range of materials and to tackle screening applications that other conventional screens cannot, such as incinerator slag or wet, damp and sticky material.

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

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

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

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





The EDGE TR622 Trommel Series combines high production rates with ease of use in a robust, portable and versatile screening plant that is ideal for applications such as top soil, recycling, composting and is proven in construction and demolition waste.

Available as a track, wheel or static chassis configuration.



















EDGE Innovate is honoured to be awarded "Technology of the Year" at the most recent MEWAR awards. Launched in 2018, the MEWAR Awards celebrates the success for adopting best practices in the environmental management business. The fifth edition recognised outstanding individuals and organisations that have demonstrated leadership and innovation in their respective fields and have significantly contributed to environmental sustainability along with economic viability, ultimately contributing to a greener future.

Held on the 9th November at Waldrof Astoria, Palm Jumeirah, Dubai, the evening brought together representatives from the waste management, recycling, packaging and other environmental industries. The awards were judged by a panel of prominent and respected experts, advocates and spokes people in the focus area of environmental sustainability.

Capturing the judging panel's eye for "Technology of the Year" category was EDGE Innovate's electric powered, twin shaft, high torque waste shredder. Naming the EDGE waste shredder as the winning entry, the judging panel were hugely impressed with its remarkable environmental benefits, energy efficiency, noise reduction, versatility whilst noting its significant contribution to the waste management sector in the region. Its positive impact on sustainability and the environment positions it as a game-changer in various industries, making it an outstanding choice for recognition and accolades.



Steven Conway, EDGE Innovate's Middle Eastern Territory Sales Manager commenting on the award "It is a great honour to receive this prestigious award. EDGE Innovate stands out as a uniquely innovative and environmentally conscious brand that continues to serve the ever-growing waste recycling industry in the Middle East and further afield. The company has demonstrated an unwavering commitment to leveraging cutting-edge environmental technology that addresses specific environmental challenges. Whether it's reducing landfill waste, conserving energy, or promoting sustainable material management, EDGE's product line up offers comprehensive solutions tailored to clients' exacting requirements".

The EDGE Electric Shredder selected by the MEWAR Awards represents a product that has been continually evolved to perfectly match environmental and application challenges. Its ability to finely shred difficult materials allowing for better recycling and waste reduction, contributing to circular economy principles. This innovative product from EDGE has the potential to support the reform of waste management practices and set new standards for environmental responsibility in the region.





# ELECTRIC DRIVE WITH MOBILITY

All the advantages of a diesel driven VS420 shredder in an electric hybrid format.



## REDUCED OPERATING COSTS

Electric-powered equipment can significantly reduce operating costs.



### POWER

The VS420E is powered by twin 132Kw motors providing the same production capacity and torque levels of a diesel / hydraulic driven unit.



Features a quick plug and go set up functionality for safe and simple operation.



With reduced servicing and time required for refuelling, electric powered units provide unbeatable dependability and uptime.



### FLEXIBLE SFT 11P

All set up functions available in both electric or diesel / hydraulic mode.



# JUMP TO ELECTRIC WITH THE

# EDGE VS420E HYBRID



The new VS420E Hybrid from EDGE Innovate offers significantly reduced CO2 production, reduced operating costs, reduced servicing and a higher percentage uptime for its operators.

The EDGE VS420E packages all the advantages of a mobile diesel driven unit and that of a stationary electric shredder into one self-contained unit. For the operator, it means minimal operating costs, maximum performance, and enormous flexibility. EDGE Innovate has been pioneering the use of electric drives in their products for over 20 years. This experience and knowledge have spearheaded their move to the electrification of their popular VS420 slow speed, high torque shredder.

EDGE Innovate's VS420E Hybrid model replaces the traditional 310Kw CATERPILLAR engine with two 132KW motors that provide the exact same production capacity and torque levels to that of a diesel/hydraulic drive unit. A small 55Kw diesel engine provides the flexibility of tracking, and use of all set up functions. An additional 11Kw auxiliary motor allows for all set up functionality to be available in both "Electric" and "Diesel / Hydraulic" modes.

### **DESIGN FEATURES**

The VS420E offers a host of design features as standard. For instance, to shred, EDGE's safe and simple "Plug and Shred" function enables operators to connect and disconnect the shredder to the grid in the matter of minutes. As like the diesel hydraulic version, the VS420E combines EDGE's Intelligent Load Management and the VS Status Alert System. The two systems work in tandem to ensure the efficient loading of the shredder. This in turn, allows the operator to achieve consistently high throughputs and most importantly, experience minimal downtime. Unlike other hybrid shredder versions, the VS420E can adjust set up functions such as conveyor discharge angle in "Electric Mode" whilst also having the ability to track small distances to form new material stockpiles. Again, reducing operational downtime.

### **PERFORMANCE**

The high material throughputs achievable by the VS420E is made possible thanks to a set of 2m long, high torque shredder shafts that can be customised to suit a customer's exact application and to create a designated final product piece size.

EDGE Innovate offer a wide range of tooling options and chamber configurations to ensure that the VS420 is set up to achieve the best results for its operators. With decades of experience, the EDGE team are in the perfect position to advise on the best set up for their clients so that their unit creates the right tonnage at the desired piece size.

### ADVANTAGES OF ELECTIC HYBRID

The advantages of an electric hybrid powered unit over diesel models extend well beyond the obvious savings on diesel fuel. Electric hybrid powered equipment can significantly reduce operating and maintenance costs, while providing unbeatable dependability and uptime. For example, electric systems are much more efficient and more reliable in extreme climates than that of traditional diesel / hydraulic power trains. Due to their emission free operation, electric powered units can also be deployed indoors or moved between indoor and outdoor applications. With no engine noise produced when shredding, the VS420E is the ideal shredding partner in built up areas or in markets where stringent environmental, legislative or noise constraints are enforced.



# BREAKING FROM TRADITION WITH AN EDGE FTS RADIAL





Drawing from their expertise in the industry, the operation based in Morwell, provides reliable and effective rehabilitation, revegetation, soil rejuvenation and dust suppression solutions for the mining, construction, agricultural and civil industries. Blended soils such as those created by Gippsland Soil Solutions use a mixture of different soil types and can offer several benefits that can improve plant growth, soil health, and the overall productivity of agricultural systems.

### MARKET LEADING TOP SOIL PROCESSING EQUIPMENT

Backed by some of the most experienced agronomists, soil science and technical support in the industry, Gippsland Soils Solutions is at the forefront of the manufacture and distribution of premium top soils. The utilization of new, innovative equipment such as the EDGE FTS Radial secures this market position. The new EDGE FTS Radial or "The Hippo" as is fondly known as by the operating crew at the Morwell site due it's high production rates; is utilized for the blending of premium soils. Since it's installation the FTS Radial has vastly improved the production capacity of the site. Operators on the site can now achieve the same production in the matter of hours using the FTS Radial on what would have taken them a full day to achieve. Their old process utilised a PTO driven windrow turner and wheel loader.

The new process is a lot less labour intensive and much easier on the machinery they are using which has seen a reduction in associated wear costs. During the blending of their premium topsoil, organic matter



and recycled paper compost are added for improved water and nutrient holding capabilities, which is then screened to 16-millimetre minus for product consistency and conformance to AS4419-2018.

The FTS-R both aerates the feed material and ensures an efficient blending of the feedstock, all achievable by a high-speed turner located in the hopper. This set up ensures that 100% of feed stock sees the turner: a process FOCUS enviro says is not possible with traditional windrow turner.







### LEADING THE WAY - THE EDGE ORGANIC FEED STACKER

The FTS Radial was released to the market by Irish manufacturers EDGE Innovate in January 2022 with many units already performing well in North America. The unit purchased by Gippsland Soil Solutions was the first unit to be installed in the Australian market.

The FTS Radial is a portable feed stacker which incorporates a large feeder hopper, a high-speed auger and 180° radial discharge conveyor for impressive stockpiling of processed material. EDGE Innovate specifically designed the unit for the processing and blending of low density, organic materials such as mulch, compost, and soils.

"We took delivery of the EDGE FTS Radial in June 2022 and it has quickly become a vital piece of equipment for our operation, it has been utilised every week since it was installed. It is a great success story for Gippsland Soil". Jamie Marsden, CEO of Gippsland Soil Solutions.

"The EDGE FTS Radial is perfectly suited to the requirements and objectives of Gippsland Soil Solutions. The new installation has quickly become an integral part of their business as we believed it would".

"It is always a pleasure to work with a company that has a history of pushing the boundaries of traditional processes. The new FTS Radial modernizes a traditional process, and the company is reaping the rewards". Gabriel Coary, Area Sales Manager, FOCUS enviro.





# NE T LEVEL SOLUTIONS







