



# SUSTAINABILITY TODAY

Issue 426 August 2021

Tel: 0121 550 7510

www.businessandindustrytoday.co.uk

energy | water | waste | recycling | sustainability on LinkedIn

**pulsar**  
MEASUREMENT  
Excellence in flow & level measurement.

Pulsar Measurement is pleased to introduce the **ULTRA 4 & dB3 with double sunshield**

- Achieves the highest level of flow accuracy in the UK
- Independently tested & verified
- Continues data logging even when remote communication failure occurs
- On-screen analysis

Future proof for **UMON3 & UMON4** moving into AMP 7

Contact [europa@pulsarmeasurement.com](mailto:europa@pulsarmeasurement.com), +44 (0) 1684 891371 for more information on the Ultra 4 & its MCERT classification

**Eltek**  
Specialist Data Loggers

Air quality is getting worse and is affecting our health, plus regulations are getting tighter. We've collaborated with UCL to create a monitor which continuously tracks:

- CO
- CO<sub>2</sub>
- PM1, PM2.5, PM10
- Ozone
- NO<sub>2</sub>
- VOCs

Available with wireless or LoRa transmission modes

**Darca Connect**

Now you can access your data on the cloud through Darca Connect:

- Instantly
- From anywhere
- On any device
- With a customisable dashboard

Get in touch now:  
email: [sales@eltekdataloggers.co.uk](mailto:sales@eltekdataloggers.co.uk)  
tel: +44 (0)1223 872 111  
website: [eltekdataloggers.co.uk](http://eltekdataloggers.co.uk)

## Climate Control Baselayers

Snickers Workwear will give your workday working clothes a good foundation. Upgraded, Innovative and Sustainable – Snickers Workwear 'Climate Control' clothing delivers exceptional comfort and performance. There's a range of garments that use socially and environmentally responsible fibre technology such as 100% recycled polyester, as well as others available in high-tech breathable fabrics.



For consistent comfort, the seamless designs are also available in 37.5° ventilating technology for efficient body moisture transport as well as odour-reducing merino wool to suit different types of work, whatever the weather conditions.

These cutting-edge AllroundWork, FLEXIWork and LITEwork designs and fabrics will keep you cool, warm and dry when you need to be. All the garments are made from quick drying, lightweight fabrics that come with special ventilation features to control and regulate the heat from your body.

All in all, Snickers Workwear Baselayer clothing will give you the kind of fresh working comfort you wouldn't have thought possible.

Getting more information on the Snickers Workwear clothing range is easy. You can call the helpline on 01484 854788 or check out: [www.snickersworkwear.co.uk](http://www.snickersworkwear.co.uk) and download a digital catalogue or email: [sales@hultaforsgroup.co.uk](mailto:sales@hultaforsgroup.co.uk)

**MADE IN BRITAIN**

Industrial pumping solutions bespoke to your application designed and built in the UK since 1988

**APEXPUMPS**  
CENTRIFUGAL PUMP MANUFACTURERS

For further information please contact us on:  
0117 9077555 email: [sales@apexpumps.com](mailto:sales@apexpumps.com)

[apexpumps.com](http://apexpumps.com)

**HIGGINS & HEWINS**  
Air and Gas Purification Systems

Specialists in:

- Odour Control
- Biogas H<sub>2</sub>S Removal
- Corrosion Control
- Chemical Dry Scrubbing Media
- Packaged Units for Hire
- Sales/Service

Higgins and Hewins Ltd  
Tel: 01384 397700  
Fax: 01384 397701  
[www.handhltd.co.uk](http://www.handhltd.co.uk)

Titan Works  
Stourbridge  
West Midlands  
DY8 4LR

## New generation FlexFusion™ cabinets

Panduit has launched its new FlexFusion™ cabinets which can be custom configured to meet the specific needs of any ITE environment.



FlexFusion cabinets provide a single universal platform for all types of data centres and enterprise service needs, including Hyperscale, Edge and Multi-Tenant Data Centres. Built with the best-in-class weight load of 3,500 lbs (1.59 tons), and doors with a maximum airflow of 80%, FlexFusion can accommodate the most complex cabinet installations. Whether it's servers, networks, or hybrid applications, FlexFusion enclosures deliver performance that allows optimum operation in any network environment, with sizes from 600mm to 800mm widths, 1,070mm and 1,200mm depths and a range of heights from 42 to 51RU.

A configuration tool to select a standard or pre-configured turnkey bay (including size, colour, number of luggage racks, types of locks and handles, position of the electric rail, type of roof, sensors, PDUs, side panels).

The FlexFusion bay can be custom configured using the configurator tool available via the Panduit website.

[www.panduit.com](http://www.panduit.com)  
[www.youtube.com/watch?v=BA34aInL3BE](https://www.youtube.com/watch?v=BA34aInL3BE)



## Sustainable product design & development

**K**eter – one of the world’s leading manufacturers and marketers of resin-based household and garden consumer products – has set out its future sustainability-led approach towards product design and how they are on track to achieving ambitious 2025 sustainability targets.

The company has committed to a set of design and manufacturing ambitions for future sustainable development and have identified three core pillars as the guiding measures for its sustainability pledge, including:

- ▼ **Better Products for Better Places** – A stated ambition to deliver affordable, innovative lifestyle solutions with recycled content and recyclable designs. Keter is already ahead of its 2025 schedule with zero production of single-use plastic consumer products and on track with achieving 55% of recycled content in total production (with 40% already achieved).
- ▼ **Better Planet** – Wanting to do a part to mitigate climate change risk, Keter has pledged to implement operational efficiencies and environmentally positive actions through the supply chain, including a 25% reduction in greenhouse gas emissions – a 4% reduction in absolute greenhouse gas emissions has been achieved so far – and zero waste to landfill, which is also on track with only 23% sent to landfill in 2020, opposed to 29% in 2019, a reduction of 26%.
- ▼ **Better Business** – Delivering business and social value via ethical conduct and community investment, including more women in executive and management roles and an improved wellbeing programme.

To find out more about Keter’s sustainability ambitions, download Keter’s latest Sustainability Report here: [www.keter.com/sustainability](http://www.keter.com/sustainability)

## Leachate Solutions

Leachate Solutions has designed and developed a more up to date process for the removal of dissolved Methane & CO<sub>2</sub> from water & leachate. Using greener engineering, energy requirements are low due to an efficient design that operates purely ‘on demand’. This results in a small carbon footprint plus reduced sludge production and calcification.



It is an eco-friendly alternative to the traditionally used 24/7 constant aeration systems. Older air stripped systems are now nearing the end of their useful life and are beginning to fail to meet current regulatory and environmental standards, says the firm. They are bulky, costly to operate and require a high level of maintenance. This system has benefited from over 8 years of R&D, using other technologies to provide a greener and more robust solution.

Additional advantages to this process:

- ▼ Built with 316 stainless steel, which is considered to be a 100% environmentally friendly material. Less than 1% of non-recyclable material is used.
- ▼ A cost-effective system with reduction in operational, maintenance and whole of life costs.
- ▼ Built in back-ups/failover systems that ensure the system remains operational and reduces the risk of any possible negative environmental impact.
- ▼ A fully automated system that can standalone in a remote location.

True flexibility is also offered, since the systems are tailor-made to site requirements, and are available as a self-contained unit for permanent installation or as a mobile unit, with scalability to meet a variety of needs. It has a small physical footprint (down to 3m x 1m), and it can be integrated with existing plant and equipment if required. There are already several in use on multiple sites across the Northwest.

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

## Ethos delivers 5GWh reduction in Asda’s energy costs

**E**thos software has been installed in nine of Asda’s CDCs and contributed to a saving of 1,100 tonnes of CO<sub>2</sub> emissions in four years.

One of the UK’s largest supermarket chains has successfully slashed its carbon footprint dramatically by taking steps to optimise energy efficiency across nine chilled distribution centres (CDCs). By installing Star’s Ethos software over the last four and a half years, which monitors refrigeration plant performance 24/7, Asda has saved 5GWh on energy costs and 1,100 tonnes of CO<sub>2</sub>e across the sites optimised with Ethos software.

With the help of Star Refrigeration’s data monitoring business, Star Data Analytics (SDA), and City Facilities Management, Asda has reduced its energy



consumption by 35% since 2010.

Asda has also signed up to the cold chain sector’s

Climate Change Agreement (CCA) – a UK government incentive for business in energy intensive industries.

Andrew Dodson, Energy Bureau Manager at City Facilities Management, said, “This project has highlighted how cross-company collaborations can work successfully. Both Star and City Facilities Management offered specific expertise to Asda to help it achieve its vision of vastly reducing its carbon footprint. By investing in preventative maintenance, data monitoring and energy performance optimisation of its cold stores, Asda is now reaping the financial rewards too.”

To find out more about how Ethos helped Asda achieve significant carbon savings go to: [www.star-ref.co.uk/case-studies/asda/](http://www.star-ref.co.uk/case-studies/asda/)

**renewableos.com**

**ROS RENEWABLE OIL SERVICES ONSHORE AND OFFSHORE**

ROS are the UK’s largest supplier of oil products and oil exchange services to the onshore and offshore wind turbine industry across the UK and Ireland.

We have recently expanded our service offering to cover the Industrial and Marine sectors operating our specialised trucks and equipment to carry out gearbox, hydraulic, glycol coolant and transformer oil exchanges.

Supply of consumable products: oils, grease, filters, cleaning rags, oil absorbent pads, disposable gloves, etc. making us your one stop shop for all your industrial servicing needs.

Renewable Oil Services Ltd Mid Williamshaw Old Glasgow Road  
Stewarton East Ayrshire KA3 5JR

ON SHORE WIND OFF SHORE WIND INDUSTRIAL MARINE

+44 (0) 1560 485 854  
inbox@renewableos.com

**National Sewerage Association**

## Working to Raise Industry Standards

- **N.S.A.** Represents the interests of companies associated with the survey, operation, maintenance and renovation of sewers, drains and pipelines.
- **N.S.A.** Acts as a forum for its members to ensure that technological developments go hand in hand with improved operational efficiency.

**Standards**  
Pro-active in setting and maintaining training standards within the industry. Representation on standards and parliamentary committees and regular consultees on a broad range of Legislative and Regulatory matters.

**Members**  
Our members range from sole proprietors to divisions of public companies providing services such as:

- CCTV Inspections
- Sewer Flow Surveys
- Systems survey and Mapping
- Drain and Sewer Cleaning
- Equipment Manufacture
- Training

For more information visit our website: [www.sewerage.org](http://www.sewerage.org) or call Val Gibbens on 020 8330 0123

# Lycetts

**CELEBRATING 60 YEARS**  
1961 - 2021

We are proud to celebrate 60 years of delivering professional insurance advice and financial services to our clients.

If you're not already a client, contact us to find out how we can help you too.

0191 232 1151  
[www.lycetts.co.uk](http://www.lycetts.co.uk)

Lycetts is a trading name of Lycetts, Browne-Swinburne & Douglass Limited which is authorised and regulated by the Financial Conduct Authority. Lycetts is a trading name of Lycetts Financial Services Limited which is authorised and regulated by the Financial Conduct Authority.

# Sustainability, innovation and our net zero carbon commitment



**O**ur story began in 2002 with a vision of what the future could look like in packaging. We had a sense of purpose to create a more efficient and environmentally friendly way of working. This mission sits at the heart of everything we do.

The Reflex Group offer a complete end-to-end solution for brands, providing sustainable and cost-effective labels and packaging along with an unrivalled print quality.

## Manufacturing a smaller footprint

The biggest contributor to our carbon footprint is the way we make our products, so we identified two areas where we can massively reduce our impact: raw materials production and the electricity used in manufacturing.

Reflex ensure that we complete assessments on energy usage, manufacturing processes and transport every four years as part of the Energy Savings Opportunity Scheme. We also keep

monitor our carbon footprint using the requirements of the Streamlined Energy Carbon Reporting Scheme.

## So, what have we actually done?

The electricity we use in the manufacturing process accounts for 80% of our carbon footprint, so we've made some changes to our systems:

- ▼ Huge investments into state-of-the-art machinery which has reduced the amount of energy needed to produce products and material use
- ▼ Wind turbines have been installed at our Boston site and will be rolling out across our sites this year
- ▼ Solar Panels have been installed at our Mansfield and Leicester Sites which collectively produce 158,000 kW/H annually (enough electricity to power 42 households a year!) The programme, which we started in May 2018, will see solar panels added to sites across our estate
- ▼ LED lighting has been installed at all of our manufacturing sites which reduces energy usage by 75%, on average, versus conventional lighting options
- ▼ Our car fleet is actively assessed against our internal targets and the wider industry targets. As of 27th April, the average emissions are 36.3 grams of CO<sub>2</sub> per km in our fleet.



## Water Management News



# Specialists in Water Boreholes and Ground Source Heating

Dragon Drilling is the largest environmental drilling company in the UK and specialises in water and ground source heating borehole installations.

Their services are ideal for most applications, including rural homes, new build, retro-fit homes, leisure facilities, care homes, caravan parks and farms. A water borehole enables you to become independent of mains water, whilst ground source heating is a sustainable energy which allows your property to have a constant heat whilst receiving payments from the Government's Renewable Heat Incentive scheme.

If you have high water or energy bills why not contact Dragon Drilling today for a free site assessment to see how they can start saving you money!

### WATER BOREHOLES

If you currently use a large volume of water and face costly metered charges a water borehole can save you considerable sums of money. It also offers an excellent alternative if you have poor water quality or an unreliable supply. Sustainable in drought conditions and offering a reliable pressure, water boreholes can deliver safe, clean water direct to your property. Ideal for farms, caravan parks, leisure facilities and rural homes, water boreholes enable you to become independent of mains water.

#### Q&A: Water Boreholes

**How much space do I need?**  
"The actual space required for a water borehole may be as small as a driveway. If you can get a Land Rover with a trailer to the drill location, our drilling rig should be able to gain access."

**Can a water borehole be installed in a town property?**  
"Yes, we have installed water boreholes in many urban locations."

**Do I still have to pay a water company once a water borehole has been installed?**  
"No, once installed your water will be supplied free of charge. You will only be subject to the running cost of the pump. If you are on mains sewage, you are still required to pay for this service."

**What does the borehole look like at the surface?**  
"At the surface, we install an ordinary manhole cover, over which you can safely walk and drive."

**How do you know if there is a sufficient water supply in the ground?**  
"We have an in-house geologist who assesses the underlying geology of the site and provides an anticipated drill depth for your borehole. At an additional cost and if required, the British Geological Survey can carry out a third party assessment. We cannot guarantee the quantity or quality of the water."

**Is ground water safe to drink?**  
"Usually but not always. The water source may contain dissolved minerals that need to be removed. We recommend water quality tests are carried out and, if required, the installation of treatment systems."

**Do I require a licence to install a water borehole?**  
"Anyone is allowed to extract up to 20,000 litres per day without a licence. If you require a greater volume of water, you will need an Abstraction Permit from the Environment Agency. We can assist with all licensing matters."

### GROUND SOURCE HEATING

Extracting energy from the ground to heat a property is a sustainable use of the Earth's natural resources and could reduce your fuel bills. A few metres below the ground, the temperature is constant throughout the year and this energy can be harnessed to heat your home and water.

The benefits of ground source heating systems include:

- On average, 75% free renewable energy
- Government incentives available
- Fixed and stable energy costs
- Lower carbon emissions
- Constant heat 24 hours a day
- Fuels both hot water and heating
- Directly replaces your existing boiler
- Reversible to provide cooler temperatures in summer
- Can add value to property

#### Q&A: Ground Source Heating

**How much space do I need?**  
"The actual space required for a ground source heating borehole may be as small as a driveway. If you can get a Land Rover and trailer to the drill location, our drilling rig should be able to gain access."

**Can I install ground source heating in an old property?**  
"Yes, this is possible."

**How much will I save?**  
"You could save up to 75% of your fuel bill."

**What does the borehole look like at the surface?**  
"Each borehole is covered with a manhole of around 15cm"

**How many boreholes will I need?**  
"This depends on how much heat is naturally lost from your building and the

allow watt capacity of your system. Generally, the bigger the property, the more boreholes you are likely to require. A typical four bedroom property may need two ground source heating boreholes."

**If I need multiple boreholes, how far apart should they be?**  
"Ideally, ground source heating boreholes ought to be situated a minimum of six metres apart to maximise the efficiency of the heating pump system."

**Do I need to gain permission to install a ground source heat borehole?**  
"Not usually. Permission may be required when drilling into an area containing coal. We can assist with all matters relating to permission and licensing."



In addition, all of our electricity is provided by renewable energy sources which translates to us saving over 4,000 tonnes of CO<sub>2</sub> a year.

#### Not only that...

The majority of the waste we produce avoids landfill sites. Due to its low moisture content and high calorific value, it is an ideal source of power in solid recovered fuel (SRF) form. This means that 4,000 tonnes of waste is saved from landfill annually across the Reflex Group. That weight is the approximate equivalent to 317 London double-decker buses!

We're also supporting wildlife – in 2021 Reflex became corporate partners with the Bumblebee Conservation Trust, a charity dedicated to saving bumblebees.

#### Our net zero carbon commitment

Reflex is proudly carbon negative. This means that every time a client makes a purchase with us, they are limiting their carbon footprint.

In 2018 we teamed up with Forest Carbon and began our 'net zero' journey by planting just under 7,000 trees in Cumbria to offset our Scope 1 and 2 carbon emissions. The latest project we've devised in Scotland involves the planting of 43,000 trees which has been estimated to offset the next 3-4 years' worth of emissions.

Many of our sites also take part in the Government backed Climate Change Agreements. These are voluntary commitments on energy usage and carbon dioxide emissions made to the Environment Agency.

Not content with net zero, though, we have made the commitment to capture the entire volume of carbon emitted by Reflex from the day we were founded in 2002, by 2030.

Follow our green story here, as it flourishes: [www.reflexlabels.co.uk/sustainability/](http://www.reflexlabels.co.uk/sustainability/)

For more information about our services, please contact us on 01824 707 777 or [admin@dragondrilling.co.uk](mailto:admin@dragondrilling.co.uk) or visit our website at [www.dragondrilling.co.uk](http://www.dragondrilling.co.uk)

## Waste processing from Donasonic

Donasonic provides bespoke turnkey solutions for a range of waste processing requirements, from single shredders and granulator machines through to 2,000 tons per day MRF Facilities. Working with the client, Donasonic looks to optimise operation efficiency, logistics and job creation requirements. A recent area of success for Donasonic has been in the delivery of Waste Electrical and Electronic Equipment (WEEE) processing lines. The complexity of these lines can vary greatly and Donasonic utilises its experience and partners to meet the client's requirements.



For our WEEE solutions, Donasonic utilises our unique chain crusher – the CROSSFLOW. This robust and versatile machine uses impact to fragment products, giving a clear advantage in reduced running costs and spares with no knives or cutters to keep sharp.

To find out more about how Donasonic can help you, please visit our website at: [www.donasonic.com](http://www.donasonic.com) or email us at: [sales@donasonic.com](mailto:sales@donasonic.com) or call us on +44 (0)1302 247295.

## Taking green strides with J&G Environmental



Leading waste management company J&G Environmental has issued a call to companies across all sectors to consider the many benefits multi-product recycling can offer to their business.

Companies are now under more pressure than ever to ensure they are providing an environmentally friendly service to customers in order to satisfy a growing demand for greener services.

One of the easiest and most effective ways of enhancing your green credentials is to recycle as much waste as possible. This will significantly reduce the amount you are sending to landfill and, as a result, cut your impact on the environment

J&G Environmental is the leading provider of these services, with the ability to help companies of all shapes and sizes recycle their cardboard, plastic and polythene.

Over the past 12 months, an incredible 95.59% of the total waste collected by J&G Environmental was recycled, reused or incinerated to produce new energy. In contrast, just 4.41% of waste went to landfill.

This was made possible by a specialist set-up of equipment and technologies, including an on-site wash plant and weighbridge at the J&G Environmental facility in Blandford Forum, Dorset.

J&G Environmental is able to collect large quantities of waste materials for recycling and also offers a drop-in option for companies located nearby.

After waste has been recycled, it is sent on to be repurposed and given life as a number of new products. For example, some of the plastic recycled by J&G Environmental is used to create wall plugs.

Contact  
T 01258 453445  
[sales@jg-environmental.com](mailto:sales@jg-environmental.com)  
[www.jg-environmental.com](http://www.jg-environmental.com)

## CRJ Services Ltd launches a new parts website

CRJ Services Ltd, a leading material processing equipment solutions provider, has launched a new machinery parts website at: [www.crjservicesparts.com](http://www.crjservicesparts.com)

CRJ is well known within the waste and recycling industries for providing top-quality equipment with exceptional service levels.

Alongside its machinery solutions, CRJ works with a range of specialist manufacturers to offer their customers high-quality after-market parts. Their wear parts have been tried and tested in their own hire fleet of equipment to ensure they are able to offer their customers quality, durability and value.

Thanks to CRJ's experience as both a machine operator



and part supplier, it understands the challenges faced by customers when trying to source parts, especially when that part is holding up production.

It is for this reason CRJ prides itself on its service levels. It holds over £1.4m worth of stock at its Cheshire base, and offers 24 hour delivery on the majority of parts.

Users of the new website can also speak with the CRJ Parts team, in real time, through the instant messenger facility on the site. CRJ's team can advise on the correct part for your machine, as well as offer advice on ways to optimise your machine to get the most out of your parts.

To check out the new website, visit: [www.crjservicesparts.com](http://www.crjservicesparts.com)

**CRJ PARTS**

**REDUCING COSTS & MAXIMISING UPTIME**

**SAME VALUE  
SAME SERVICE  
NOW ONLINE!**

**WWW.CRJSERVICESPARTS.COM**

01413 541 330

[www.crjservices.co.uk](http://www.crjservices.co.uk)

[enquiries@crjservices.co.uk](mailto:enquiries@crjservices.co.uk)

CRJ Services Ltd, Bath Street, Glasgow, G2 4JR

Facebook, LinkedIn, Instagram, YouTube, Twitter

## The M&J F320 is the new powerful flagship in Metso:Outotec Waste Recycling's FineShredder series

The M&J F320 is designed to produce RDF/SRF in homogeneous sizes down to 10mm with throughputs up to 23t/h (at 50mm). It's built to perform with minimum downtime and has several competitive advantages when compared to the industry benchmark:

- ▼ One of the most competitive OPEX in the industry (up to 35% lower)
- ▼ Low total installed power kW (up to 20% less)
- ▼ Low operational energy costs kW/h (approximately 20% less)

Equipped with a unique cutting system The M&J F320 has a unique cutting system that requires minimal daily maintenance and does not require routine adjustment of the knives. The M&J F320 generates a limited amount of heat, avoiding frustrating downtime due to molten plastic. Stable and flexible production are key words for the M&J F320.

"The M&J F320 is the flagship of our new FineShred series. It delivers

towering capacity and is extremely energy efficient. At the same time, you get thoroughly tested quality and a well-thought-out construction that makes servicing and maintenance easier than ever. It will set a new industry standard in the production of alternative fuels such as RDF/SRF."

To find out more, please get in touch with Dan Fairest on +44 (0)7341 885553 or email: [daniel.fairest@mogroup.com](mailto:daniel.fairest@mogroup.com)



## Paving & walling



Tobermore is a world-class manufacturer of paving and walling, supplying both domestic and commercial markets throughout the UK and Ireland.

Recognising the global climate emergency, Tobermore works to mitigate the impact its operations have on the environment.

Care for the environment is at the heart of all of Tobermore's manufacturing processes. It is continually striving to incorporate carbon reducing processes and introduce energy saving initiatives at every opportunity.

Tobermore reduces its Carbon Footprint in the following ways:

- ▼ 100% of electricity produced from its 250kW wind turbine is used during production.
- ▼ 1,250 solar panels produce 38,950.90kWhr per annum.
- ▼ Waste to landfill has been reduced to zero.
- ▼ 100% of manufacturing residue is recycled.
- ▼ 100% of the water used in its manufacturing process is recycled.
- ▼ 100% of the water used in production comes from its rainwater harvesting system and bore hole.

In the last year, Tobermore has invested in more sustainable product packaging. The 100% recyclable polyethylene film contains 30% recycled material. By using recycled material, Tobermore has decreased waste and reduced its packaging-related carbon footprint by 20%.

Choose Tobermore for a sustainable manufacturer of paving and walling at: [www.tobermore.co.uk](http://www.tobermore.co.uk)

## No pipeline, no problem!



Upgraded biogas makes a very efficient source of renewable energy, biomethane. Biogas can be produced from various organic resources of which the most common are agricultural waste, municipal waste, landfills, and wastewater treatment facilities. Some of these sites are in very remote areas that do not have access to a national grid to inject the produced biomethane into. Virtual Pipeline offers the solution.

A virtual pipeline is an alternative method to transport natural gas, or biomethane, to remote places or places that are not connected to the national gas grid network. It replicates the continuous flow of a fixed physical pipeline, working where physical pipelines are not able and to monetise gas in regions with changing supply and demand centres. It offers flexibility to produce biogas and still be able to inject it into the national grid. It can also provide a bridge for injection until new pipelines become available.

A perfect example of a virtual pipeline project is the Cambridge Biopower project at Colony Farm in Cambridgeshire. DMT is currently working on several projects from biogas from agricultural waste that utilise the virtual pipeline approach. All projects use DMT's technology, Carborex®MS, to separate CO<sub>2</sub> from the CH<sub>4</sub> stream.

[info@dm-ct.com](mailto:info@dm-ct.com)  
[www.dm-ct.com](http://www.dm-ct.com)

**M&J F320**  
Expect results

### The sky is no longer the limit

**THE NEW**

The M&J F320 is the powerful big brother in our new M&J F-series of superior FineShredders for high-efficiency production of alternative fuels like RDF/SRF. It can be easily and quickly set for high volumes of qualified material and can fine-shred up to 23 tonnes per hour (90% below 50 mm).  
That puts it in a class of its own.

**THE NEW M&J F-series of superior FineShredders**

[www.metso.com/waste](http://www.metso.com/waste)

## Improving the quality of your waste stream

Impact has engineered successful recovery solutions that greatly improve the separation of valuable recyclable materials while providing the operator with a low maintenance and hassle-free system.

Our material recovery solutions improve the quality of waste streams such as WEEE, MSW, C&D, C&I, RDF/SRF, glass, trommel fines, compost, metals, plastics and many more.

Clever thinking, clear results.

**TRY BEFORE YOU BUY**  
at our centrally located test centre

**impact**  
air systems

Get in touch for your solution...  
Call: 0116 2448855  
Email: [sales@impactairsystems.com](mailto:sales@impactairsystems.com)  
[www.impactairsystems.com](http://www.impactairsystems.com)

**MIDDLETON ENGINEERING** DELIVERING INNOVATIVE BALING SOLUTIONS FOR THE RECYCLING INDUSTRY.

**ME2R TWIN-RAM BALER MODELS**  
Using a robust and versatile design, the ME2R baler models allow our customers to process almost all materials types at a high volume. Available with 80/100/150 tonne press force, these machines are suitable for the baling of kerbside waste, to hard plastics and even car tyres. This flexibility makes this model popular with both councils and private recyclers.

**HB60 CHANNEL BALER MODELS**  
Our most popular baler model, the HB60 has seen great success in the cardboard and logistics industry. The machines small footprint and low overall height allows for installation in locations that would not normally be suitable for channel balers. Available with 22/30/37/45kw motors, this baler range is capable of processing up to 11 tonnes of cardboard per hour.

**ABOUT US**  
Despite COVID Middleton Engineering have had a busy year, continuing to supply clients in the Mediterranean and at home. Everything we produce is all made under one roof, from our design engineers, CNC department and large fabrication facilities. We handle a wide variety of projects ranging from simple refurbishment of balers, to large scale turnkey installations. With over 45 years experience in the recycling industry, We have a reputation for quality of work, excellent service and design innovation, which has helped establish us as a major supplying force within the industry, both nationally and worldwide. We have an extensive stores department ready to supply our service team with what ever they need to get their job done quickly and efficiently. With our wide variety of machines and reputation over the years we have worked successfully with Tesco, Co-op, Ocado, Marks and Spencer's as well as many councils around the UK. Our team will go above and beyond to make sure we provide the best service we can.

Email: [Sales@middletonengineering.co.uk](mailto:Sales@middletonengineering.co.uk)  
Phone: 01458 860264  
Website: [www.middletonengineering.co.uk](http://www.middletonengineering.co.uk)  
Support British Engineering

**NANJGEL GREEN**  
WASTE MANAGEMENT & RECYCLING SOLUTIONS

**Nanjgel Food Composting Machine**  
For Industrial Purposes  
Capacity: 50Kgs to 5 Tonnes

**Biomass Pelletizer**  
50Kgs to 1 Ton

**Nanjgel Food Composting Machine**  
For Domestic Purposes  
Capacity: 2Kgs to 5Kgs

**Tyre Shredder**  
50 to 100Kgs per hour  
Upto 2 Tons per hour

**CONTACT US:** Mr. Jude Pereira | Tel: +447424184268 | Email: [sales@nanjgel.com](mailto:sales@nanjgel.com)  
Website: [www.nanjgelgreen.com](http://www.nanjgelgreen.com)

## Solenoid Valve Operating Magnet



Fridgenius was started in 1995 by its Managing Director David Slydel, based in Wimborne, Dorset, UK. The company is a family business run by his son Chris Slydel. Dedicated to providing excellent products and services to its ever-expanding customer base, Fridgenius has built a fantastic reputation over the last 25 years for quality, reliability, and dedicated customer service.

The company designed its Solenoid Valve Operating Magnet to solve the problem of how to operate Solenoid Valves when a system is not under power. Fridgenius supplies national and international distributors with Solenoid Valve Operating Magnets suitable for use in Refrigeration, Air-conditioning, Water, Oil and Gas installations.

Solenoid valves are electromechanically operated valves used to control the rate of flow in fluid or air powered systems. With automatic operation, solenoid valves are incredibly useful to engineers as they remove the need to manually operate valves. Although they are incredibly versatile, if the system in which the valve is operating loses power, it becomes useless and cannot continue to function. Determined to resolve this issue, Fridgenius has worked hard in creating an ingenious product to solve this problem.

Fridgenius designed the Solenoid Valve Operating Magnet to solve the problem of how to operate solenoid valves when a system is not under power. Essentially the device is designed to convert electrically operated solenoid valves into hand-operated valves in seconds.

This function allows the magnet to operate valves in a plant or system which has yet to be installed or has been decommissioned. In cases of emergency, such as a failure of a solenoid valve coil, it can be used to keep a system operating while a replacement coil is found.

Each Solenoid Valve Operating Magnet is fully customisable. Companies can choose to add their own branded logo onto the magnet, this is useful for companies who are looking to use the magnet within their own workforce and is great for retail sales. The magnet is the same shape and size of a large cotton reel and when placed onto a solenoid valve, it causes the armature to open or close. With an array of colours available to match corporate branding, there is also three sizes of magnets to choose from. Whether the need for a 10mm, 15mm or 18mm magnet is required, Fridgenius customises your magnet to fit all makes of solenoid valves.

For any more information, please see the details below.

T (+44) 02380 323745  
www.fridgenius.co.uk



## MBO announcement

Leading pump manufacturer Apex Pumps is pleased to announce the sale of the business and assets of Apex Fluid Engineering Ltd and Precision Alloys Ltd by founder and main shareholder, Nick Sole, to a management buyout.

Apex Pumps employs 24 staff at its site in Bristol, where it designs and manufactures centrifugal pumping solutions for water, industrial, energy, brewery, aquaculture, chemical process, oil and gas and many other similar demanding applications.

Apex will continue to be led by the existing senior management team and will be headed

by Andrew Simpson, Managing Director and Sam Kemp, Sales Director.

The whole of the Apex Pumps workforce has been retained and the business will continue to operate from the existing Bristol premises.

Apex Pumps is committed to continue building on the relationships built up over the past 33 years with our customers and suppliers and will continue to trade on the same terms as before.

"When I started Apex Pumps 33 years ago, I had modest ambitions for a 5 year project and didn't foresee how we'd go on to build

an international customer base and such a strong reputation in the industry," said Nick Sole. "Our growth over recent years is in no small part due to the leadership and vision of Andrew and Sam as I have gradually stepped back from my day to day role."

The acquisition of the business was completed on 26th February 2021. Nick Sole will remain engaged in the business as an external consultant in an advisory capacity.

Contact  
T 0117 907 7555  
sales@apexpumps.com  
www.apexpumps.com





## ENERGY RAM PISTON AND DIAPHRAGM PUMPS






Situated in the heart of Nottinghamshire's rural outpost and next-door to the famous Southwell Racecourse is Energy Manor, home of Energy Chemical & Equipment Company; Designers, Manufacturers and Suppliers of Energy Ram and Diaphragm Pumps for the Waste Water and Process Industries. Established since 1984, Energy Pumps excel as the preferred Sewage Pumps for the Waste Water Industries.

The heavy-duty, industrial Energy Ram-Piston and Diaphragm Pumps cope with a range of applications including the automatic Pump-desludging of Humus in Primary settlement tanks; Digester Feed; Long-Distance Sludge Transfer; RBC Feed and De-Sludging; Inlet Dosing; Raw Sewage Transfer; Filter-Press Feeds. Energy Pumps also Pump Silt in Quarries; Pulp in Paper Mills; Effluent in the Farming industry; plus Bone, Blood and Offal waste in Abattoirs throughout the United Kingdom.

Competitive, reliable and fully portable for smaller duties Energy Diaphragm and Ram-Piston Pumps have proved their worth time and again through clear, cost-effective, robust and wholly reliable Sludge and Slurry handling on many Sewage sites throughout the UK and beyond. These amazing, cost-effective Pumps are popular with engineers for their ease of maintenance and longevity. Energy Diaphragm Pumps will 'run-dry', never failing to impress on-site Engineers with their unbeatable, block-resistant suction and delivery. Energy Ram Pumps work solidly up-to 20Bar and are highly suited to extreme grit handling and sudden temperature changes.

Energy Pumps are complimented by Energy Chemical & Equipment Company's Patented selection of reinforced, rubber-based Diaphragms and Valves to provide your application with tough, sturdy serious Sludge-handling. Energy Pumps quality bases increase and sustain the overall working effectiveness and reliability of the Energy Pump. Energy Pumps put cost-effective Energy-efficiency into your Sludge-shifting, pumping application.

**FOR OUR FULLRANGE OF IMPRESSIVE BRITISH ENERGY PUMPS PLEASE VISIT OUR WEBSITE AT [WWW.ENERGYPUMPS.CO.UK](http://WWW.ENERGYPUMPS.CO.UK)**






**Energy Chemical & Equipment Company**  
**Energy Manor, Southwell Business Park, Crew Lane, Southwell,**  
**Nottinghamshire NG25 0TX**

**Telephone: 01636 816600; Fax: 01636 816602**

**VAT Number: GB 309538839**

# Our water promise, 'clean water for everyone, everywhere'



Bluewater founder and CEO, Bengt Rittri, with a compact Bluewater Spirit water purifier able to clean 800 litres of water a day

In this issue of Sustainability Today, we are delighted to announce that we have chosen to present our Industry Excellence Award to Bluewater Group for its innovative, forward-thinking approach to sustainable drinking water.

With the current climate crisis making water scarcity all over the planet, it is vital we all do our part to conserve nature to tackle one of the biggest global challenges to date. Bluewater provides the world's most efficient water purifying technologies for home, commercial and public dispensing areas as well as stainless steel and glass bottles. Bluewater believes that water should come from the local community – not bottled in plastic and transported from faraway places.

The beauty of nature is changing, and Bluewater is on a mission to help the planet look at water in new ways. Bluewater is a Swedish company dedicated to bringing fresh, healthy water to people who believe that the best water is purified water. Founded in 2016, in Stockholm, Sweden, by Bengt Rittri, Bluewater also has offices in China, USA, UK and South Africa.

Bengt is a Swedish environmental entrepreneur whose love affair with nature started as a child. Becoming increasingly upset, seeing all the plastic in our oceans, Bengt started the company with a view to protect our oceans and waterways. Through the use of innovative technology that makes fresh, healthy water more accessible to people across the world, Bluewater is slowly and surely helping people to do away with single-use plastic bottles.

Bluewater is a lifechanging ethical water company providing a total sustainable commitment that its clients can rely on.



David Noble

"Traditionally we would be placed in the water category, but really, we see ourselves as a health, lifestyle and sustainability company. What sets us apart is our powerful commitment to protecting the planet for future generations. We have put sustainability at the very core of our business and everything we do is driven by the desire to show that human ingenuity can be used to create sustainable operations that slowly encourage sustainability and health," stated David Noble, PR & Communications Director.

The company has designed its water purification technology to be more efficient at cleaning water. Its water purifiers are designed for people who want safer, healthier water without resorting to single-use plastic bottles. Its purifiers remove virtually all contaminants including lead,



Bluewater water station at The Open



Photo: David Noble

chemicals, heavy metals, bacteria, viruses and microplastics, enabling people to simply turn on the tap with confidence and enjoy directly from their home or office.

"We have designed our water purification technology to be more efficient at cleaning water by creating less waste, using less energy and delivering a high clean water delivery rate from the tap. To be used in the kitchen, throughout the home, in hotels and restaurants, and even public spaces, our water purifiers can be installed anywhere," explained David.

The world's top performing compact water purifier range comes with three choices. The Bluewater Pro, Bluewater Spirit and Bluewater Cleone. The Pro and Spirit both are installed with Superior Osmosis™ technology that cleans water faster and more efficiently than other reverse osmosis systems. This technology is very cost-effective and is designed with Swedish simplicity in mind. With integrated intelligent smart membrane cleaning technology, each purifier is created to help avoid clogging and wear and comes with a clever indicator to alert the user when the filter needs changing.

Each water purifier has three main application areas. From use within the whole home, for



World sailor Dee Caffari using a Bluewater bottle

private wells and for brackish water, each purifier carries the ability to be placed in any environment. The purifiers provide top quality water for drinking, cooking, showering and washing clothes in. With the ever-increasing worry of gut health on the rise, you can be confident that Bluewater's technology will allow for a complete water cleanse whatever the source, keeping you safe from digestive diseases and bacterial infections.



The Bluewater Pro Water purifier that removes practically all know contaminants from water fits snugly under a kitchen sink

"We are a solution for people in their homes as well as businesses such as hotels, restaurants and canteens. Recently, we are very excited as the use of our technology is now being used in business and sporting events and is expanding rapidly," said David.

Bluewater has developed a unique business solution specifically designed for events to help organisers diminish the need for plastic bottles and also alleviate the possible penalisation from a declined sponsorship offer. "The solution has been used by The Open and The Senior Open Presented by Rolex, The Ocean Race by Volvo, The ABB FIA Formula E World Championship and a host of other sporting and musical events worldwide," said David.



A range of Bluewater stainless steel bottles warranted to last a lifetime



Bluewater bottle issued to all the players at The Open

Continuing to shine its sustainable light on the world's top golfing organisations, Bluewater has partnered with the R&A, who are the organisers of The Open 2021 – golf's oldest and most international major championship, to provide sustainable water solutions. "This has helped broaden our involvement to other golf tournaments. It means a lot because we can now help cut the use of tens of thousands of throwaway plastic bottles, which pose a huge threat to our planetary environment," stated David.



Photo: Getty Images

With the unavoidable effects of COVID-19, Bluewater has noticed peoples' outlook on living a more sustainable lifestyle has improved. "The terrible COVID-19 pandemic has made people and businesses more aware of the need to be resourceful in managing their time, their work, their lifestyle and the environment at large," said David. Bluewater is functioning well as a business post COVID-19 and has seen a global growth in interest from businesses and pedestrians searching for an eco-friendlier way of working.

As it looks to the future, Bluewater is keen to do more of the same in terms of business practice and global outreach. Ever the optimist, Bluewater will look to continue its delivery of reliable solutions while building upon its revolutionary product range to bring fresh, clean drinking water to people everywhere, at home, at work, or on the go.

Proud to have been recognised for its achievements, in closing David stated that, "We feel hugely pleased and honoured to have won this award."

M +44 (0)7785 302694  
david.noble@bluewatergroup.com  
www.bluewatergroup.com/uk/



Hydrating with a Bluewater water station at the 2021 Senior Open presented by Rolex

# The National Sewerage Association

**W**e are pleased to announce The National Sewerage Association as the recipient of our Pipe Sewerage Specialist of the Month.

This year, The National Sewerage Association is celebrating 25 years since it was formed in 1996 with the amalgamation of the Association of CCTV Surveyors (established 1980) and Association of Flow Survey Contractors (established 1983). These member companies had laid down a solid foundation in the previous years as key players in the development of model contract documents and industry standards.

The founding Associations had to navigate through the privatisation of the water companies in 1989 and the subsequent changes in contract management as the agencies were rescinded and term contracts awarded. Since The National Sewerage Association's formation, it has had to navigate the changes in the nature of these contracts and the privatisation of private drains and sewers in 2011 for which there is still ongoing issues to resolve in England.

The Association continues to represent the interests of companies associated with the survey, operation, maintenance and renovation of sewers, drains and pipelines. The remit has been extended as specialisms have evolved with improved technology, innovations and stronger health and safety requirements.



As a forum for its members, the Association ensures that technological developments go hand in hand with improved operational efficiency, thereby meeting the ever-increasing standards of service demanded by today's customers. At the same time, the Association actively pursues the identification of the customer's needs, service standards and performance criteria they require, as well as looking at existing and new market opportunities. Members had been involved in the preparation of National Contract Documents

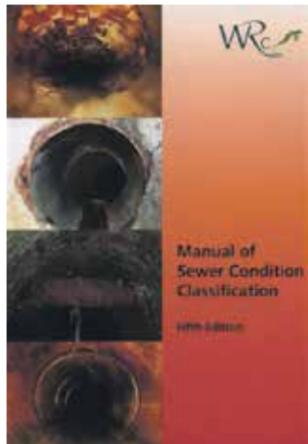


as well as standard operating and reporting systems. Furthermore, technology has been developed to produce consistent, comparable results to meet service requirements.

The Association has been involved in the development of European Standards for Pipe Defect Classification, the result being the publication of BS EN 13508:2 in 2003 and subsequent amendments together with the implementation of the National Equivalent in 2008 and its successor.

Operative standards have been set and, in conjunction with Develop Solutions (previously WTi), team leaders and operatives are trained and accredited to meet the standards required by the Water Services PLCs. The National Sewerage Association were also key players in formulating standards for the TrustMark initiative and Energy and Utility Skills when developing the Competent Drainage Operator Registration Scheme.

To date nearly a thousand people have passed the OS post course examinations in sewer condition classification, therefore, there is no excuse for accepting sub-standard results from non-qualified people. Certificates, including a photograph of the candidate, are issued to successful candidates. The Water PLCs now expect all operatives to hold the OS20X MSCC5 post course certificate which is renewable every five years.



Training standards have also been developed for sewer jetting and cleaning, in an endeavour to meet new codes of practice and a basics skills course for personnel operating in the domestic market has been initiated, leading to City and Guilds Certification.



The high standards of safe working practice and equipment to meet the requirements of working in sewerage and other areas with similar, potentially dangerous locations and atmospheres are a hallmark of the association's members. Those same members are often at the forefront in developing technological and operational improvements.

In addition to setting standards, the Association is responsible for the accreditation of its members and, more particularly, in policing and monitoring their performance for customers. The quality systems developed by members ensure that data is reported to the highest possible standards. Reassessment criteria has been developed both for operatives and contractor members which have been introduced to ensure the high levels presently in place are upheld and improved.

The Association has close liaison with the water industry, other utility companies, local and national government, and public sector organisations. At the same time, the Association serves private industry as well as commercial and domestic customers. Regular liaison is maintained with Water UK the Health and Safety Executive, WRC and other organisations.

The Association allows both existing and potential customers to enquire about the objectives of the association, the performance and standards set that is required of its members, the complaints on non-performance and other general or technical enquiries.

Over the past 40 years there has been five chairmen, the current being Phil Reaney who delivers vast experience to the post. Having started



work with a civil engineering contractor before moving to a consultancy, he then went on to Yorkshire Water before becoming an independent consultant.

Val Gibbens, who is the current secretary, started work in local government doing estate services design before being head hunted to oversee the first ever CCTV term contract. The industry has grown significantly over the succeeding decades with Val positioned at the forefront of the CCTV coding developments. Val ensures there is always a good site practice with a fair balance between the water company and contractor requirements.

The National Sewerage Association is keen to promote a fully trained workforce across the range of activities undertaken to the satisfaction of the client from the smallest to the largest. The website directs all contractors towards the legislation in place and the pertinent standards documents required to meet the criteria.

For more information, please see below.

**T 020 8330 0123**  
**nsa@sewerage.org**  
**www.sewerage.org**



# Waste to value

In this issue of Sustainability Today, we are proud to announce Tana Recycling Machinery (UK) Ltd as our Environmental Technology Waste Management Company of the Month.

'From Waste to Value' Tana creates the most intelligent, efficient technology in waste management. Revolutionary in its IoT, Tana turns robust machines into data-driven business development tools. Tana is one of the world's leading manufacturers of machines and equipment for mechanical processing of solid waste and is a pioneer of using electrical control systems and intelligent solutions in all its equipment.

In 2015, Tana Recycling Machinery (UK) Ltd was established by Shaun Walker and is the authorised Tana distributor in the UK. TANA machines are exported to 50 countries through Tana's comprehensive network of local distributors. Tana Recycling Machinery (UK) Ltd take the best care of its customers by supporting the lifespan of the machines with technical support, after-sale services, and spare parts.

Specialising in machines and equipment for mechanical processing of solid waste, Tana Recycling Machinery (UK) Ltd is the UK



wholesaler for TANA machinery and specifically cater to the shredding and compacting waste sector. Tana Recycling Machinery (UK) Ltd is based in Doncaster, South Yorkshire and is well positioned to support the whole of the UK with all sales, warranty, spares, and service requirements. "Our machines take general waste and shred reusable materials and side streams into profitable goods. Our best sellers are the Shark Shredder, landfill compactors and Unique ProTrack<sup>®</sup>," states Brooklyn Walker, National Sales Manager.

Tana offers the first purpose-built landfill compactor on the market and is a result of a long-term product development of proven solutions that can add real benefits to a business. Its full-width twin-drum construction rigid frame and crushing teeth are among the unique features that set TANA landfill compactors apart from other landfill compactors on the market.

TANA ProTrack<sup>®</sup> is not just a tracking tool for monitoring revenues and expenses but offers the possibility of significantly improving the engagement of personnel to a company. The state-of-the-art information management system allows the user to fine-tune processes in order to get the most out of the TANA machine. TANA ProTrack<sup>®</sup> monitors the process information in real time, whether the need for fuel



consumption, fault codes, uptime information or other vital operational statistics. The machine merges into a coherent system that increases the reliability of the working site, engages personnel, and overall helps improve business processes.

One of Tana's latest products is the TANA Shark 440DTeco shredder which is even more versatile than its predecessor. With a raised frame of over 200mm, it guarantees a better material flow underneath the floor. Complete with a new conveyor system and scale with bolt-on cleaning combs for easier maintenance, the TANA Shark 440DTeco is a revolutionary machine. The machine enables the user to make 20% more profit from better fuel efficiency, lower machine operating costs and improved usability and serviceability.

Designed for shredding the widest range of materials, the new TANA Shark 440DTeco enables full control over the particle size from 50mm to 500mm. Labelled as the 'one pass wonder', it enables time and cost savings due to its ability to perform shredding in just one pass.



Tana Recycling Machinery (UK) Ltd dedication to success was showcased this year at the Tana Dealer Meeting. The event gathered all Tana distributors together for the Tana Dealer of the Year awards, where special recognitions were given to distributors in different countries. For the second year running, Tana Recycling Machinery (UK) Ltd were announced Tana Dealer of the Year.



Looking ahead, Tana Recycling Machinery (UK) Ltd will keep a high emphasis on after sales services and customer care, alongside further expanding its product range. With an aim to win Tana Dealer of the Year a third year running, Tana Recycling Machinery (UK) Ltd has some exciting times ahead.

For more information, see below.

T 01302 872431  
M 07447 404760  
brooklyn.walker@tanauk.com  
www.tanauk.com

## Heating News

# Student heating under control

Adrian Barber looks at how a university has overcome lockdown to forge ahead with updating the control of a heating system in its student village, resulting in annual savings of up to £75,000. The University of the West of England has updated the heating system at its Student Village accommodation with the help of a new control system.

The university has introduced its 'Strategy 2030 – Transforming Futures' programme that outlines their ambition to be carbon neutral with net-zero emissions of greenhouse gases by 2030 along with achieving ISO14001 to set clear targets to reduce water and energy use.

The Student Village was built in 2006, on Frenchay Campus, and is home to 2,000 students. The original heating system was becoming tired and inefficient to manage. Each room needed to be visited to programme the control with a handset, and the heater panels needed replacing. Kirsti Norris, energy manager, explained, "As panels failed, there was a risk of them getting replaced on an ad hoc basis with integrated control heaters, but we had always wanted a better way of controlling the heating and, having to enter students' rooms, even before COVID, was not great. We had a hotch potch of settings in rooms all over the place and no way to re-set them all at once."

Norris and Melissa Clarke, energy projects officer, attended the Association of University Engineers conference in 2019 and stepped onto the Prefect Controls stand. Clarke stated, "When we saw the Prefect offering we thought that this is what we need. It offered more control, shorter running times and reduced energy consumption."

#### Access via internet portal

Irus is a centrally controlled system, accessed via an internet portal. It enables energy managers to set temperatures/times for the three-stage student profile. Setback mode is the default setting



(typically 18°C), but if the student requires more heat, they simply tap the 'up' button triggering boost mode (commonly 23°C). Boost runs for a pre-set time (45 minutes) before reverting to setback. If the student leaves the room during boost, the PIR detects their absence and reverts to Setback, likewise if windows are opened heat input is reduced by a programmed percentage. If rooms are vacant for longer periods (typically 12 hours), Frost mode is activated, maintaining at least 5°C. Irus also monitors humidity, light and decibel levels and there is an option for CO2 monitoring too. "The accommodation team are very keen on the decibel monitoring feature," Clarke added. "When they receive antisocial noise complaints, they will be able to determine exactly when and where the noise occurred."

Being a centrally controlled internet system, universal adjustments can be made from anywhere. Clarke explained, "We are really keen on a reset button for the end of the year so that when students return to site in September all rooms will be back to the standard profile and we won't have various different settings throughout blocks. The main drivers for considering Irus were energy, carbon, and of course cost reduction."

After a survey was commissioned, savings calculated, and quotations submitted. Norris had

to convince colleagues that disruption during installation would be minimal. "The biggest fear we had for this whole project was from the accommodation team," she said "Considering we were planning the install around conference bookings they were really anxious about disruption to residents. No matter how good the product is, it was the installation that could have blown the whole thing. To have the reassurances we received from Bangor and Bristol universities, who have worked with Prefect before, helped to get the accommodation team on board. That good reputation went beyond the product."

Will Mills, project manager at Prefect, commented, "It all happened very quickly, and everything was slotting nicely into place. We were just about to embark on our biggest Irus project – then COVID struck!"

"The project stalled in February last year and, of course, budgets were frozen," added Clarke. "It was very frustrating because we saw all these buildings



that were empty. Usually in the summer we have conferences and we felt this was a real missed opportunity to get on with the job – the quicker we make the projects happen, the quicker we make the financial savings. We are conservatively estimating saving 20-30% – that's over £75,000 per year!"

Mills added, "After lockdown and a return to the office, the university contacted us to say that they had the money, and want to try and do it this summer. So, we rebooted the project and had six weeks to install as many rooms as possible. We managed 75%, the rest have been completed during 2021."

So, what was the COVID-effect? "COVID hasn't really affected the installation process too much," said Clarke. "We have been working in empty blocks, but had to make a lot of considerations for safe-working. Everything that is being done just requires an extra line of thought."

One hidden benefit of the system that Norris has identified, was never even considered in her business case, "If we have students isolating and they have a problem with their heating we can deal with it without even entering the building, which is an added bonus in these COVID-times."

T 01787 320604  
www.prefectcontrols.com

# Wildflowers in Sustainable Drainage Systems



With the UK currently ranking 189th out of 218 countries for nature depletion, addressing biodiversity loss and improving water and air quality is crucial.

Legally binding targets are anticipated within the Government's proposed Environment Bill, and Sustainable Drainage Systems (SuDS) will play a huge role in meeting some of the objectives of the Bill.

Specific aspects of SuDS schemes include Swales, Detention Basins, the margins of Retention Ponds and Green Roofs. These features aim to reduce exceedance flows and all benefit from the inclusion of wildflowers.

The 2012 London Olympic site responded to the need for sustainable drainage systems and Wildflower Turf Ltd was asked to grow a turf that included a mix of wildflowers for this purpose. WFT-SuD-37 was developed as a result.

There are a number of specific benefits provided by wildflowers within a SuDS scheme:

### Attenuation of water

A requirement of SuDS is the management of water as near to the point of accumulation as possible, avoiding exceedance flows. The absorptive nature of a green roof is a good start. Where water builds up, directing it to a swale and a retention pond slows down flow. Establishing and lining these with wildflowers helps to provide a natural barrier to exceedance flows, due to their height & density, and will help attenuate water.

### Improve the permeability of soil

UK native perennial species of wildflowers have a range of root types; fibrous for soil stability and tap roots that go deep and significantly improve permeability and water percolation. It may seem a minor point, but a long-established perennial meadow also encourages worms, enabling better drainage.

### Pollution mitigation

Studies at Portsmouth University and our own Research & Development department have shown that wildflowers are able to filter the pollutants associated with road water run-off without succumbing to the poisons they contain. This is, in part, due to the wide variety of species in a wildflower meadow, and also because they are generally very hardy to all sorts of adverse conditions.

In addition to the above, many broader benefits of wildflowers for SuDS also exist.

The incorporation of wildflowers within a SuDS scheme will improve the general aesthetics of the area and will also dramatically enhance biodiversity and provide a species-rich environment for wildlife. Using wildflowers in a SuDS scheme will also assist with meeting Biodiversity Net Gain (BNG) targets.

In conclusion, the inclusion of wildflowers in SuDS schemes offers many positive contributions and their importance should not be overlooked.

T 01256 771222  
wildflower@wildflowerturf.co.uk  
www.wildflowerturf.co.uk



# Flow measurement devices integral to smart water metering systems

Titan Enterprises reports on a growing demand for precision flow measurement devices from manufacturers of domestic and industrial water-consumption appliances to integrate as part of a smart water meter system.

With year-on-year increases in water usage for domestic and industrial purposes, smart water flow metering solutions – with integrated Titan liquid flow sensors, help to manage end user demand and monitor water consumption, enhancing water conservation. Manufacturers of appliances, such as washing machines, dishwashers and showers, are looking for effective solutions to ensure that water intake is measured and

accurately controlled. Integration of precision flow meters into smart water metering systems to monitor water usage helps to mitigate the growing threats to global water security.

Titan's wide range of water flow metering solutions have proven reliability and longevity, as well as delivering on repeatability and accuracy – highly important features for smart water meter systems.

Global manufacturer of water-use appliances, Miele states, "Water intake is measured and controlled extremely precisely using a precision flowmeter. This helps to save water, making it extremely economical

and environmentally friendly."

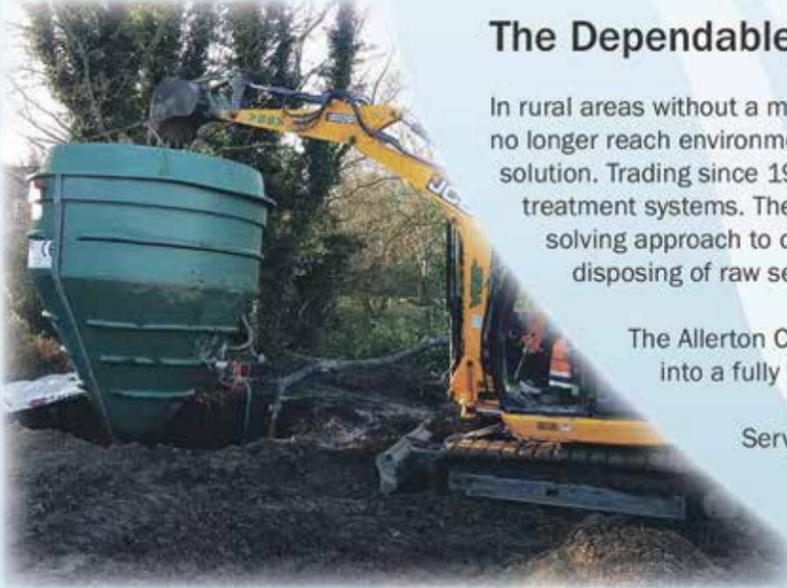
For further information on flow measurement devices for smart water meter systems, please contact Titan Enterprises on +44 (0)1935 812790 or email: sales@flowmeters.co.uk or visit our website at: www.flowmeters.co.uk/atratoultrasonic-flowmeters or www.flowmeters.co.uk/turbine-flowmeters-overview





## Allerton®

SEWAGE & EFFLUENT TREATMENT SYSTEMS



The Diamond Sewage Treatment range is suitable for either individual homes or small population applications

**Freephone: 0800 328 5492**  
**Email: sales@allertonuk.com**  
**Website: www.allertonuk.com**

### The Dependable Choice in Drainage

In rural areas without a mains drainage system, and where septic tanks will no longer reach environmental standards, Allerton can provide the ideal solution. Trading since 1974, Allerton are leading specialists in efficient treatment systems. They pride themselves on their individual, problem solving approach to dealing with alternative means of treating and disposing of raw sewage.

The Allerton ConSept converts your existing Septic Tank or Cesspit into a fully functioning Sewage Treatment Plant.

Servicing & Maintenance on a wide range of Sewage Treatment Plant and Pump Stations by BRITISH WATER ACCREDITED ENGINEERS.



BRITISH WATER  
expertise worldwide  
ACCREDITED ENGINEERS



HAS  
ACCREDITED CONTRACTOR  
www.has.gov.uk



CCAS  
UKAS

## XT220 & XT1700

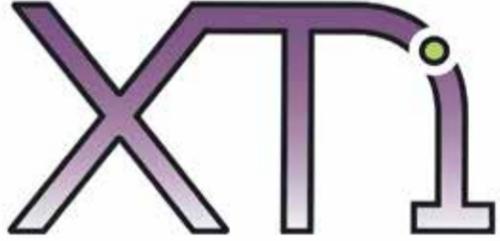
- From £4950 -



**XT220 CONTROL UNIT:**  
 10" high brightness monitor, MPEG capture system  
 12v built in lithium polymer batteries (up to 5 hours)  
 12v and mains power supply, on screen meterage  
 Records to USB memory stick / 120GB solid state drive  
 Integral keyboard, built in 28 page text facility



**XT1700 CABLE REEL:**  
 50m of 12mm Hytrel pushrod  
 Full colour 50mm self-levelling camera head  
 Digital average centre metering  
 Sonde - optional  
 4" and 6" skids. 3 metre link lead



**Drain Camera Sales & Quality Repairs**

**Quality repairs to all drain camera brands including:**  
 XTI, X-Tek, Crusade, Scanprobe, Minicam, Rothenberger

Unit 5A, Elder Road, St Johns Industrial Estate, Lees, Oldham. OL4 3DZ

Call us on 0161 652 1393. Email info@xtitld.co.uk

# Celebrating 50 years of excellence

**S**ustainability Today is delighted to showcase the very best of Businesses that have shown a proactive approach to sustainability. In this issue we have selected Stuart Canvas for its outstanding Commitment to Excellence.

2021 marks the celebration of 50 years of trading and at present, with sustainability representing the biggest investment opportunity in history, Stuart Canvas has revolutionised everything in the bespoke industrial textile industry.

Established in 1971, Stuart Canvas has extensive experience in manufacturing covers out of a variety of materials. These materials are then used to manufacture and design bespoke coverings for a range of sectors, including industrial manufacturing, haulage, sports, schools, military, and home use.

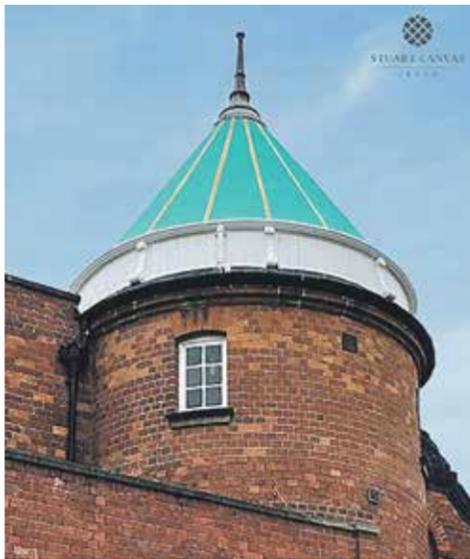
Based in Warrington and Sheffield, Stuart Canvas work with industrial manufacturers to solve clients' problems by designing solutions to address them. Retractable tunnel buildings are ideal for additional storage space and is the perfect solution for creating designated work areas. These can also be adapted to suit any operation including spray paint booths and quarantine areas.

"We manufacture retractable tunnel coverings that are designed to protect raw manufacturing products to help reduce waste. They are used in the manufacturing of masonry, glass, fertilisers, and pottery. The tunnels cover bays of raw product, which reduce waste by up to 30%," stated Steve Ball, Group Marketing Manager.



Another variety of retractable covers Stuart Canvas offer is the retractable aggregate bay cover. This provides an innovative waterproof covering solution to protect all types of bulk products being stored outside.

Besides running its own line of products, Stuart Canvas owns two established brands, JMS Cricket and Mudfords. This has allowed Stuart Canvas to increase capacity and add diversity to the group. Furthermore, this allows more products to be offered to existing customers with the quality and service that has built Stuart Canvas' reputation for the past 50 years.



reputation for the past 50 years.

Of course this year has seen many challenges, but Stuart Canvas has an extensive medical product line which has allowed them to manufacture 100,000 units of PPE for the NHS during COVID-19.

Moreover, Stuart Canvas' products offer an array of benefits that positions them ahead of all competition. The biggest benefit being all its products are 100% bespoke. "We offer a full design and fitting service to ensure the best fit for the client's needs," added Steve.

Using only steel framework, Stuart Canvas has heavily invested in new machines and technology to allow them to design and manufacture all types of covers. The company also has a dedicated research and development team that can solve any unusual covering issues or requirements its clients may have.

Most recently, Stuart Canvas has completed a retractable tunnel for Midwest Formwork in Buckinghamshire. By offering a temporary building solution, Stuart Canvas also offers advise on how to create the best additional workspace both internally and externally. Its tunnels can be produced as mobile or static spaces and can be designed to be easily dismantled or assembled, should the need to relocate the tunnel, arise in the future.

No job is too big or too small as Stuart Canvas works with many blue-chip companies from the UK and exports to over 25 countries. Another



recent addition to its extensive product line is the 6 Bay Motorised Cover System. These essentially are motorised retractable bay tunnels which allow the cover to be retraced over the top of each bay quickly and efficiently with a single push of a button. This system creates a watertight seal to protect the material underneath the tunnel.

2021, a year of celebration for Stuart Canvas claiming 50 years of excellence in the industry. As it looks to push on and grow into 2022, the future looks set to be exciting and successful.

For more information, please see below.

T 01925 814525  
sales@stuartcanvas.co.uk  
www.stuartcanvas.co.uk



## Energy & Power News

### New online shop

Having worked closely with those in the wastewater industry for many years, we're proud to highlight our new online shop, which makes it even easier for the sector to access essential components for half-bridge rotary scrapers and clarifiers.



Over the last ten years, we've witnessed an increased demand in our products, notably from the municipal wastewater companies and utilities requiring slip ring collector column components and brush holders.

We believe the online shop will give those working in this industry a helping hand, particularly for customers looking for a manufacturer to supply, maintain and update products urgently. It provides a huge benefit to our partners, improving both the speed and efficiency at which our products are delivered and fitted.

Currently, BGB is one of the few companies that can still supply slip rings collector columns and brush holders to even the very earliest models of scrapers, so we believe we have carved a niche in this market helping to serve what is rapidly becoming an expanding customer base. Having had over 40 years in the slip ring industry, we also offer a fantastic repair service for units that need a freshen up or refurb.

The online store is now available to our global customers, with our core rapid 48 hour service offered to the UK. Visit the online shop at: [www.bgbinnovation.com/online-shop/](http://www.bgbinnovation.com/online-shop/)

T +44 (0)1476 576280  
sales@bgbinnovation.com  
www.bgbinnovation.com



**Macushla Enterprises**

LIVE SAFELY AND MINDFULLY IN EVERY MOMENT

**Efficient, Cost-effective Renewable Project Support and Development.**

*Smart thinking experts with years of engineering experience*

#### End-to-End Support

Multidisciplinary experts with the specialist knowledge and skills required to ensure projects are completed efficiently and to the highest standard. For all your renewables projects- we can do all the legislative compliance studies and safety case AND all the safety system hardware design and loss prevention. Covering safety, risk, environmental impact, integrity, legislation and due diligence.

#### Services to Match Your Needs

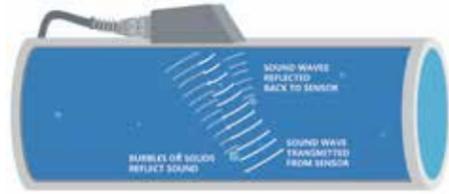
Focused on business goals and project progression. Ensuring a detailed understanding of requirements, planned progression and project risks.

#### Value Driven

Efficient, cost-effective, timely quality; trusted by offshore renewables developers and their investors. Capable of meeting your goals in the rapidly evolving renewables sector.

[www.macushla.uk](http://www.macushla.uk) | [maggie@macushla.uk](mailto:maggie@macushla.uk) | 07803 331811

## Two technologies for flow measurement



Doppler and Transit-Time are two very popular types of flow meter for non-invasive measurement of flow in full pipes. We tend to confuse these technologies because they are both ultrasonic and both measure flow by using sensors clamped onto the outside of a pipe. In the real world, they work best in opposite applications. Success in your installation depends on understanding the differences making the right choice.

Ultrasound is sound generated above the human hearing rate – above 20kHz. Both Doppler and Transit-Time flowmeter technologies are called 'ultrasonic' because they operate far above the frequencies or sound range that we can hear.

At the heart of each ultrasonic transducer is a piezoelectric crystal. They are glass disks about the size of a coin. These crystals are polarised and expand or pulse a minute amount when electrical energy is applied to the surface electrodes. As it pulses the transducer emits an ultrasonic beam approximately 5° wide at an angle designed to efficiently pass through a pipe wall. The returning echo (pressure pulse) impacts a second passive crystal and creates electrical energy. This is the received signal in a Doppler or Transit-Time transducer.

Doppler flowmeters work best in dirty or aerated liquids like wastewater and slurries. Transit-Time flowmeters with clean liquids like water, oils, and chemicals. Contact Pulsar Measurement for specific advice and information on selecting and applying these technologies successfully in your application.

T +44 (0)1684 891371  
 europe@pulsarmeasurement.com  
 www.pulsarmeasurement.com

## LAUDA Technology Ltd

LAUDA – Experts In Thermal Control And Measurement Providing Innovative Solutions For Thermal Process Control, Chilled Water Applications, Water Baths, Freezers, Incubators, Shakers, Stills, Tensiometers, Viscometers And Contact Angle Measurement.



LAUDA continues to provide an expanding range of feature-rich, future proof solutions with energy efficiency and connectivity front of mind, serving a diverse range of industries including automotive, aerospace, chemical, pharmaceutical, biopharmaceutical, food & beverage, brewing, digital printing, laser and beyond.

The new range of water chillers has been designed not only to comply with the new Ecodesign directive, but to surpass it through the innovative use of variable speed modules that automatically reduce their duty cycle in line with the cooling demand hence reducing energy consumption and running costs, giving a tangible return on investment for the user.

Further portfolio expansion delivers the new LAUDA 'Versafreeze' ultra-freezers, (deep-freeze storage down to -85°), and higher power 'Integral' process circulators, (process control from -90 to 320°C with 25kW of cooling @20°C), with pressure overlay options to increase the working range of water / glycol up to 140°C.

Add to this the capability to design and supply custom-built solutions for large scale industrial applications in the range -150 to 550°C, LAUDA provides a diverse portfolio, expertise, and skillset to suit all needs.

T +44 (0)1780 243118  
 info@lauda-technology.co.uk  
 www.lauda-technology.co.uk

## Innovation in heat metering with Sontex

Sontex has been creating innovative energy monitoring equipment for over 30 years and, DMS Metering Solutions are proud to be the UK exclusive distributor.

The Sontex Superstatic 789 Heat Meter is one of the latest editions to the range, offering a composite meter body, providing high accuracy while remaining compact and lightweight. A financially beneficial alternative to the usual brass body.

The lightweight construction and lower costs add to the list of benefits that all Superstatic Meters carry. The 789s use the Fluid Oscillation Measuring Principle and

have been tested to meet the requirements for MID Class 2.

The Sontex Superstatic 789 is suitable for both domestic and commercial installations, and can also be used for RHI and Billing applications.

Sontex is renowned for its Glycol content tolerance, and this meter is no different. The 789 can be calibrated to retain high accuracy.

Power type – Battery-powered as standard, optional lifespan of 6 and 12 years available

- ▼ Sizes – The 789s are available in sizes QP1.5 15mm, QP1.5 20mm, and QP2.5 20mm(15-20mm)
- ▼ Approvals – RHI and Billing
- ▼ Temperature – Heating and Cooling -5°C-90°C
- ▼ Communication Outputs – M-Bus, Pulsed, Radio, Wireless M-Bus

If you need a compact and lightweight heat meter, give DMS a call today and ask about Sontex.

T 01773 534555  
 F 01773 534666  
 www.dmsltd.com



## Does your EVSE kit help you test, or does it just test?

Metrel's charging point test kit is exceptional!

The adapter will simulate a vehicle using the charge point and will complete all the functional tests and load test the installation. Meanwhile, the multi-function tester will automatically do all the electrical safety tests, let you record and store the results. So you can issue the certificate without added hassle. Helping you move on to the next job without delay!

Find out how the Metrel range of EVSE kits can accelerate your business. CALL TODAY 01924 245000 or mail info@metrel.co.uk for more information.

Metrel UK Ltd,  
 Unit 16, 1st Qtr Business Park  
 Blenheim Road Epsom Surrey KT19 9QN  
 Phone: 01924 245000  
 E-mail: info@metrel.co.uk  
 Web: www.metrel.co.uk

Twitter - @MetrelUKLtd

Facebook - @MetrelUK

Instagram - metrelukltd

## Machinery sales & servicing for recycling, biomass & forestry industries

**N**eutron Equipment has been providing machinery sales, service and maintenance to the recycling, biomass, scrap and forestry sectors for many years.

Neutron Equipment is the UK and Ireland dealers for the Astec Industries Peterson Pacific range of Horizontal grinders and Chippers, Taurus scrap Balers, shears and Mills and also the ECOHOG range of scrap processing equipment, Eddy Currents and wind shifters. Neutron Equipment is also the

UK South and Ireland Dealers for the Eggersmann range of TEUTON Single Shaft Shredders, FORUS Twin Shaft shredders and the Terra select range of Trommel and Star Screen Screeners.

Mendip Wood Shavings Ltd (MWSL) has recently invested in a Peterson 5710D Horizontal Grinder in which Neutron Equipment is the exclusive UK & Ireland supplier. MWSL's entire business model revolves around wood recycling with waste wood sourced from sawmills and secondary suppliers that

supply pallets and other items of clean wood.

The Peterson 5710D Horizontal Grinder is a tracked horizontal grinder designed for high-volume producers with very demanding end-product specifications. Motorised by a Tier IV Caterpillar C27 1050HP (772kW) engine, the 5710D provides the highest power to weight ratio of any Peterson grinder. At 88,500 pounds (40,150kg), the 5710D is designed for operations requiring high production and frequent moves between jobs. With a feed



opening of 60 x 40 inches (152 x 102cm) combined with Peterson's high lift feed roll, the 5710D Horizontal Grinder can readily reduce a wide range of material including stumps.

Peterson's three-stage grinding process provides faster reduction, proving better fracturing of material resulting in a more consistent product. Peterson's impact release system has patented air bags providing uniform grinding and protection from contaminated feedstock. The non-grindable objects are detected within the grinding chamber by opening the anvil and first grate section and then ejected to minimise any damage.

The quick-change multiple grate system makes it easy to customise grate configurations to produce a wide variety of finished materials. Peterson's 3-Stage Grinding Process results in more consistently accurate finished products. An up-cutting motor draws material into the grinding chamber and minimises bit wear providing the first stage in material size reduction. An anvil positioned for optimum sizing and production, provides the second stage in the sizing process. The last step in the 3-stage sizing process, is the provision of a large grate area resulting in the high production of a wide variety of wood and green waste materials and end sized products. The machine then returns to normal operation, resulting in more uptime while reducing costly damage from any heavy contamination in the feed material.



System pressure transducers and remote monitoring capabilities simplify set up and provide complete engine and system parameters. The 5710D can be operated by wireless remote from the comfort of the loader. The addition of an optional tow dolly makes highway transportation between jobs easy.

Neutron Equipment holds a certain amount of used machinery, offering the opportunity to trade in old stock with new sales and has other machinery on sale on behalf of other parties, with all prices excluding VAT.

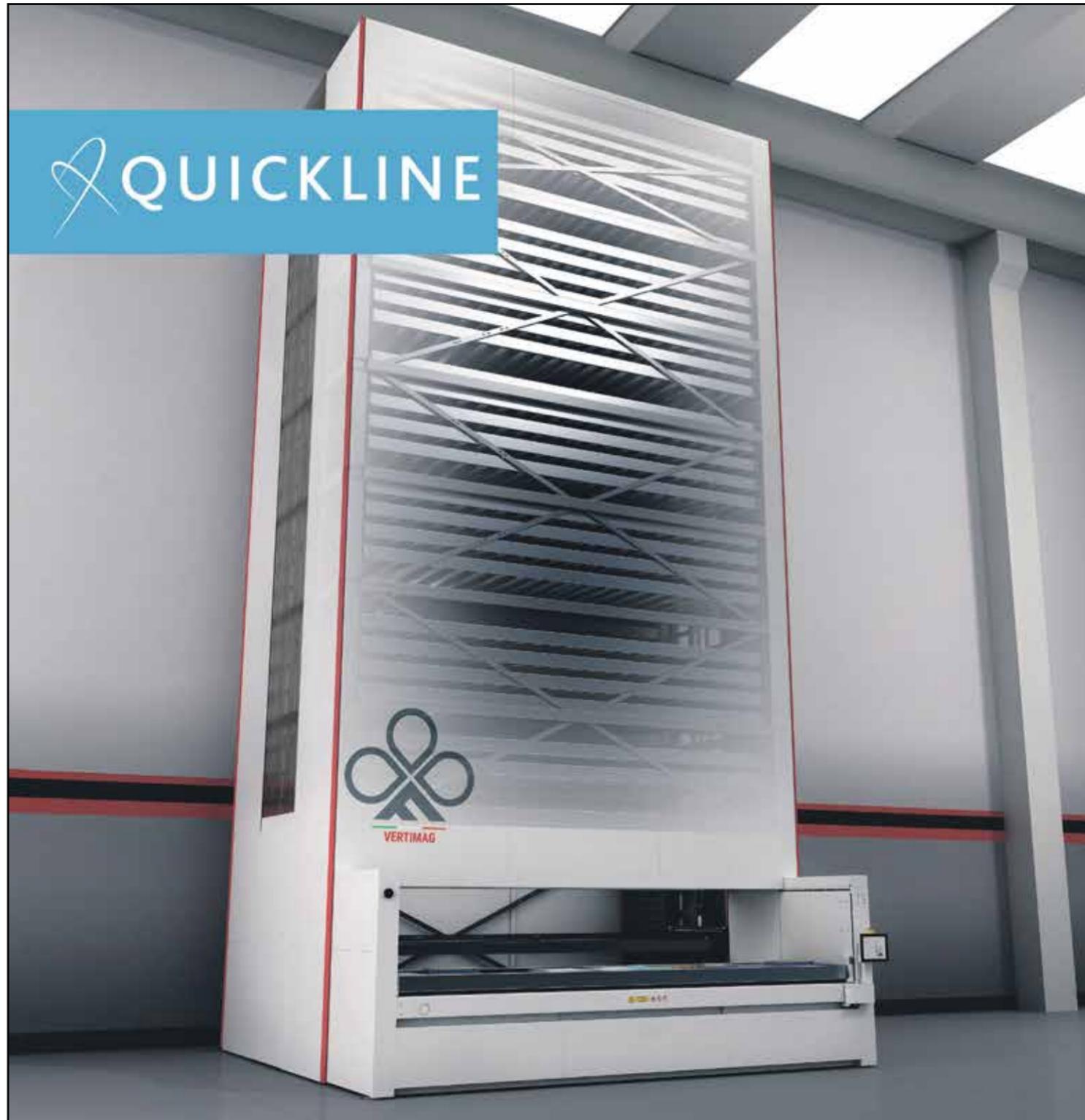


Neutron Equipment's in house service and support teams are factory trained and fully qualified to ensure each customer's specific requirements are met, and a weekly maintenance plan is devised to check through regular reviews and servicing. This process ensures maximum safety and denotes the effort and expertise embedded into all its services, providing an excellent level of performance.

For more information, please see below.

T 01189 712823  
info@neutronequipmentltd.com  
www.neutronequipmentltd.com

## Handling, Storage & Logistics News



### VERTIMAG VLM - Reduce your footprint by 1/10th

The innovative Vertimag Vertical Lift Module (VLM) storage system maximises the height of the warehouse whilst reducing the footprint by 1/10th.

The result? Increased picking productivity, reduced handling errors, maximised product security and improved stock management.

Visit [www.quicklinestorage.co.uk](http://www.quicklinestorage.co.uk) or call 0113 880 0866 to find out more.

Quickline are exclusive UK suppliers of Ferretto systems.





With early engagement and the right team on board, archaeology and heritage can make a significant contribution to the sustainability ambitions of FCERM projects – in working towards zero carbon and by adding substantial value in areas such as community, place-making, and environment.

The dynamic environments threatened by climate change are not only a challenge for design and construction teams; they also contain a complex range of structural, intertidal or buried heritage assets requiring consideration.

Incorporating targeted archaeological works intelligently into the project design at an early stage leads to better outcomes for clients and the environment, reducing carbon, waste, inefficiency, and overall cost.

This is especially valuable on major infrastructure projects like the Lower Thames Crossing. Working with AECOM/Perfect Circle and their ground investigation teams, we were able to collect valuable survey data and samples, which normally would require an additional phase of investigation, at an early enough stage to bring maximum benefits, including lower carbon and ecological impacts and reduced landowner disturbance.

Archaeological specialists are also in a strong position to contextualise the realities of flood risk and coastal change for communities, uncovering dynamics between people of the past and their changing environments. FCERM schemes can effectively maximise the opportunities that heritage can bring in, leaving a positive, sustainable legacy for the communities of the project.

Wessex Archaeology is a leading archaeology specialist and educational charity. We are committed to developing more sustainable practices, helping to reduce carbon emissions and deliver social value within your FCERM supply chain.

Contact  
T +44 (0)1722 326867  
www.wessexarch.co.uk

## Silsoe Odours

Silsoe Odours is a specialist odour consultancy that delivers independent, industry-leading technical expertise helping a wide range of customers to assess, understand and manage odours.



As a leading independent UK odour consultancy and laboratory, Silsoe Odours utilises its highly skilled team which provides an abundance of experience in odour management, measurement and consultancy. As a team of technical experts, they maintain unrivalled experience in the field of odour measurement, quality expertise, education and technical analysis. Notably, the company's odour laboratory was the first in the UK to be UKAS-accredited to BSEN13725.

The main beneficiaries of its services are for those involved in industries where odours are a by-product of their operations. As such, the company works with a variety of industry sectors including intensive farming, biofuels and anaerobic digestion, waste management, composting and landfill, food processing, housing development and planning and much more.

Working closely with each client, Silsoe Odours' services are tailored to specific customer requirements and are used for needs such as to reduce odour emissions, demonstrate regulatory compliance or achieve planning permission. The main ethos of the company is to assist its customer in understanding, managing and providing strategies for change in the field of odour nuisance and pollution.

As a friendly, family-led team, Silsoe Odours is transparent in its operations and maintains an open and honest dialogue with its customer. The team is more than happy to assist in any way it can and will go the extra mile to ensure it delivers exactly what its customer needs, when they need it.

T 01525 860222  
www.silsoeodours.com

## What sustainable issues do all businesses need to know about? – Ask ME

Mitsubishi Electric has launched a series of podcasts which shine a light on the sustainable, zero carbon and legislative issues affecting business today.

The 'Ask ME' podcasts cover a range of important topics, including corporate sustainability, decarbonising buildings, re-opening offices, new innovative HVAC technologies and how to improve indoor air quality, among many others.

The series, which is available to stream via Spotify or Apple Music, features interviews with special

guests and industry experts, including The Building Engineering Services Association (BESA) Chairman, Nathan Wood discussing the importance of indoor air quality. Listeners will hear first-hand about common problems that guests have experienced in their sectors and any changes they have had to make.

"We have a great line-up for our series and are thrilled to share these with the industry as we believe that open discussion around major topics can help increase understanding for everyone," said Sharon Oliver, Marketing Manager at Mitsubishi Electric. "We will cover a broad range of the major issues

with guests providing advice and support on how businesses can maximise efficiency and carbon reduction while minimising costs."

The first Ask ME podcasts can be streamed via Spotify <https://spoti.fi/3bTJCwX> or Apple <https://apple.co/3fkij0P>



**Air Quality Limited**  
Turbo Visor DTMV 1001 MV with 8HR waist belt mounted battery pack

FOR THE ULTIMATE PROTECTION IN INDUSTRIAL OPERATIONS AND PHARMACEUTICAL SECTORS

- ◆ Orbital sanding of paint on vehicle body panels
- ◆ Orbital sanding of body filler on vehicle panels
- ◆ Brush application of paints
- ◆ Wiping & cleaning vehicle panels with panel wipe (thinners)
- ◆ 6 hour head mounted battery option available

**SPECIAL PRICE OF £350.20**  
(was £553.63) inc. vat & carriage

1 The Courtyard, Dunnings Lane, Rochester, Kent ME1 1YB  
Tel: 01634 832895 • Email: [info@airq.co.uk](mailto:info@airq.co.uk)  
[www.airq.co.uk](http://www.airq.co.uk)

**CPL ACTIVATED CARBONS**

The Active Force in Carbon & Service

- Filtracarb® - Activated Carbons
- Clean-Flo® - Mobile Carbon Filters
- Regen-Sys® - Spent Carbon Reactivation

Engineering & Site Services Support  
UK-based R&D/QA Labs

[activated-carbon.com](http://activated-carbon.com)  
01942 824 240  
[info@activated-carbon.com](mailto:info@activated-carbon.com)

ISO 9001  
ISO 14001  
BUREAU VERITAS  
Certification

RE A THE ASSOCIATION FOR RENEWABLE ENERGY & CLEAN TECHNOLOGY

**IMS (Industrial & Marine Silencers Ltd) is the UK's leading manufacturer and supplier of exhaust gas silencers, emission control technology, acoustic enclosures, air inlet & extract attenuators and acoustic doors**

**IMS** Industrial & Marine Silencers +44 (0)1509 506792  
[www.silencers.co.uk](http://www.silencers.co.uk)

**SILSOE ODOURS**

01525 860222 | [silsoeodours.com](http://silsoeodours.com)

UKAS-accredited odour sampling and odour testing  
Covid compliant laboratory

**SKCLTD.COM**

SKC Europe

**NEW FOR 2021**

## SKC Flite4 High Flow Pump

Portable, versatile and fully programmable for high volume air sampling, the SKC Flite4 is ideal for static asbestos sampling and long term background monitoring.

- Flow range: 2000 to 20,000 ml/min
- Robust steel casing
- High Capacity (7ah) battery for longer run times
- 6 HOURS AT 12L/MIN  
14 HOURS AT 8L/MIN  
30 HOURS AT 4L/MIN

How to buy: T: 01258 480188 E: enquiries@skcltd.com W: skcltd.com

## Engineered for a Cleaner Environment

Total solutions for separation of airborne dusts and fume control. Dry sorption technology for the removal of acid gases such as SO<sub>2</sub> and HCl, dioxins and heavy metals. Vast experience within Waste to Energy Plants, Biomass Installations, Gasification Systems and Clinical Waste Incineration.

**Lührfilter Ltd.**  
Air Pollution Control Technology

Unit 1 Crompton Court | Burntwood Business Park | Attwood Road  
Burntwood | Staffordshire | WS7 3GG  
Tel: 0121 353 0176 | Mail: info@luhrgb.co.uk | www.luhrfiltergb.com

## Advanced range weather sensors

OTT Hydromet has launched a suite of weather monitoring sensors that are suitable for the construction and building management sectors. "Our latest Lufft sensors, the WS Series, deliver professional-grade weather data with instruments that are extremely compact, rugged and reliable" says OTT managing director Nigel Grimsley. "In the past, customers would have had to purchase multiple sensors to monitor outdoor conditions effectively, but this can now be achieved with substantially less costly devices: many of which would fit in the palm of your hand"



Weather monitors are routinely employed at construction sites to check that conditions are suitable for work such as pouring concrete or crane operation, but with facility managers looking for more sustainable solutions, Grimsley believes the big market is now building management.

OTT Hydromet is a specialist manufacturer of smart weather instruments for environmental monitoring and building automation purpose. With no moving parts, OTT's comprehensive range of compact, low-energy multi-parameter sensors offer long-term reliability for almost any weather parameter with easy integration into building control and HVAC systems.

The WS range offers the ability to select from parameters including temperature, relative humidity, air pressure, wind velocity/direction and precipitation.

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

## Classifieds

### Turnkey Solutions

**CECO + EIS** Environmental Solutions

**TURNKEY SOLUTIONS**

Design, Manufacture and Installation of VOC Abatement and Odour Control Systems

- Thermal Oxidisers
- Carbon Adsorption
- Biofiltration
- Chemical Scrubbers
- Dust Filters and Cyclones
- Distillate and Capture Systems
- Binary Concentrators
- Heat Recovery
- Catalytic Oxidisers

Phone: +44(0)121 550 7079 - Email: eis@onececo.com  
Website: www.eisuk.co.uk

### Crusher Spare Parts

**KEEPING YOUR CRUSHER CRUSHING**

We stock a full range of wear and spares to suit all major crusher brands

+44 (0)1443 228329  
info@crushersparesltd.co.uk  
www.crushersparesltd.co.uk

**CRUSHER SPARES LTD**

### Finance

**Cash neutral asset finance for your energy needs**

For over 30 years AFM Solutions has been offering long and medium term finance for all your sustainable energy needs.

- LED Lighting & Controls
- Solar Photovoltaic
- Solar Thermal
- Voltage Optimisation
- Biomass Boilers
- Wind Turbines (small)
- Heat Pumps
- Building Management Systems

**afm. SOLUTIONS**  
FOR TECHNOLOGY FINANCE

Call or email Mike Baker on 01268 572587  
mbaker@afmgroup-solutions.co.uk  
www.afmgroup-solutions.co.uk

### Drainage Solutions

**Allerton**  
Drainage & Groundwater Solutions

The Dependable Choice in Drainage

0800 328 5492  
sales@allertonuk.com  
www.allertonuk.com

### Water Solutions

**control water solutions**

Project Design  
Installation  
Service & Support

Monitoring, Dosing & Control Equipment for Industrial Water Treatment Applications

Tel: 01562 743656  
www.controlwatersolutions.co.uk

### Waste Management

**From Food Waste To Fertilizer In Hours**

The Nanjgel Food Composting Machine (capacity 2-5kg) reduces the weight and volume of domestic food waste by 90% - creating a sterile, odorless, and nutrient-rich soil amendment for your plants or garden.

Contact: Jude Pereira  
+44 (0)7424 184268  
sales@nanjgelgreen.com  
www.nanjgelgreen.com

**NANJGEL GREEN**

### Energy Metering

**TURNKEY aM&T**  
Meter and monitor any utility. In house designed hardware and software.

Mbus, SMEs, City Wide Projects, Pulse, Modbus, Large Organisations.

Energy Metering Technology Ltd

www.energymeteringtechnology.com  
enquiries@energymeteringtechnology.com  
Tel: 01628 664056

### Drilling Contractors

**Ground Source & Water Borehole specialists**

**DRAGON DRILLING**

01824 707777 www.dragondrilling.co.uk

### Energy Metering

**METERING DOCTORS**  
LET US SOLVE YOUR METERING PROBLEMS

EMT resolves issues with meters and aM&T systems that have been badly fitted or wrongly installed.

Energy Metering Technology Ltd

Tel: 01628 664056  
Email: enquiries@meteringtech.com  
www.energymeteringtechnology.com

### Building Services Consultants

**CUBIC APPLE**  
UK No. 1 Independent TM44 Air Conditioning Energy Assessment Specialists

UK WIDE BUILDING SERVICES CONSULTANTS  
TM44 - EPC - DEC - BRULKE - ESOS  
AIR CONDITIONING - DESIGN - INSTALL - MAINTAIN

Telephone: 01427 713 870 - Email: sales@cubicapple.co.uk  
CUBICAPPLE.CO.UK

### Waterless Wheel Cleaning

The DriveOn V-Tech Dry Wheel Cleaning System from Ecogreen Plant Hire Ltd

0800 1303437  
www.ecogreenplanthire.co.uk  
info@ecogreenplanthire.co.uk

Ecogreen Plant Hire Ltd

### Industrial Plastics

**Hygrade Industrial Plastics Ltd**  
Over 40 Years Experience

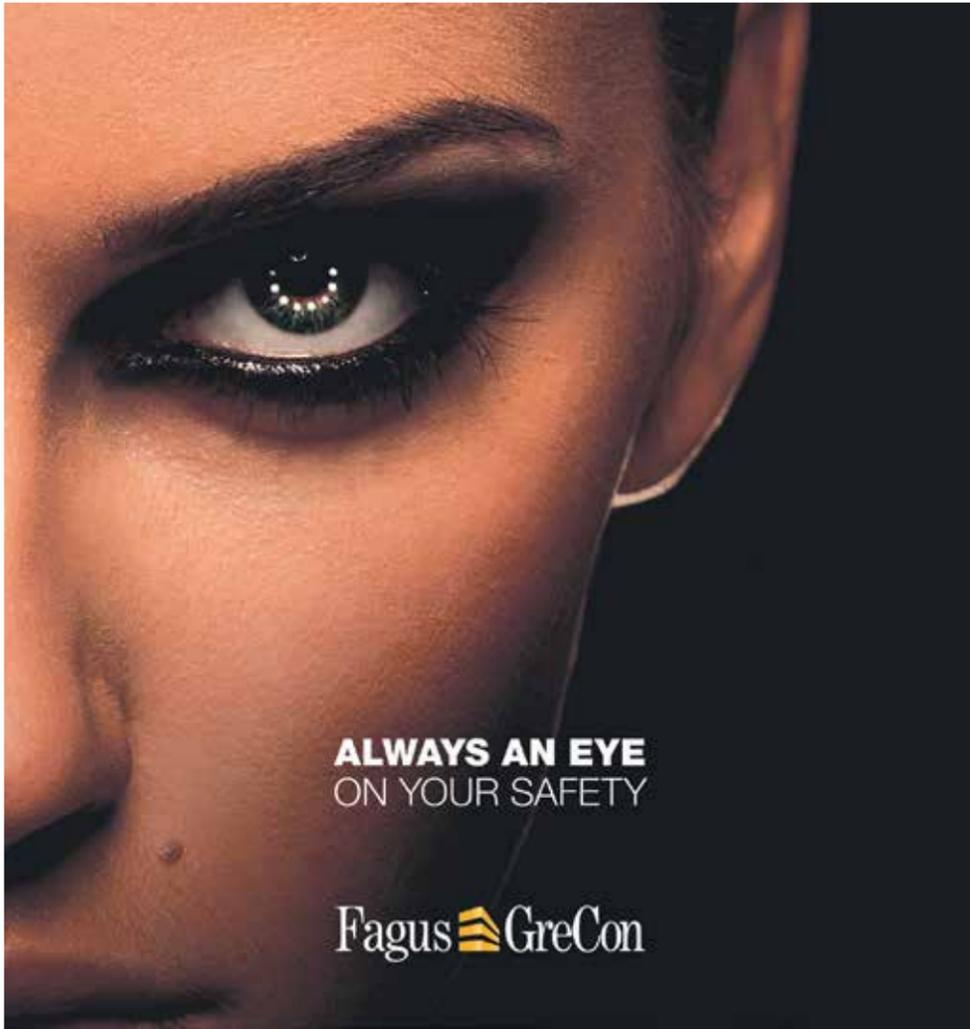
COMPLETE RANGE OF ODOUR CONTROL & SCRUBBING PLANT TURNKEY CAPABILITY

- Packed Tower Scrubbers
- Venturi Scrubbers
- Ductwork & Pipework
- Carbon Filters
- Bio-Trickling & Bio-Filters
- ODORGARD® & HYDECAT®

+44 (0)1788 571316  
techsales@hygradeplastics.com  
www.hygradeplastics.com

UVDS

# Safer people and places, and smarter factories across UK & Ireland



**S**ustainability Today is pleased to announce that we have selected GreCon Limited as our Fire Prevention Company of the Year for its innovative development of fire prevention and measuring technology solutions.

GreCon Limited is a member of the Fagus-GreCon Group and provides a wealth of experience as a global market leader. The company demonstrates a strong understanding of customer needs by providing turnkey solutions for a wide variety of industries including wood manufacturing, recycling, biomass, pharmaceutical, food, hygiene and many more.

Located just outside of Newcastle upon Tyne, GreCon Limited is the leading provider of innovative Fire Prevention and Measuring Technology solutions. We spoke with Jonathan Hamill, Managing Director of GreCon Limited, who explained, "GreCon's fire prevention technology protects industrial premises, processes and people, detecting



DLD 1/9 – the best detection performance in any environment



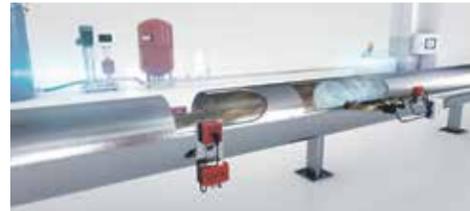
Regular maintenance to ensure continued production

and extinguishing ignition sources, making workplaces safer and enabling uninterrupted production. In addition, GreCon's measuring technology solutions help customers improve product quality in their production processes, using proven German engineering to reduce material and energy costs, ultimately maximising operational efficiency."

Having been established for many years, GreCon Limited knows safety comes first in all aspects of the working environment. Every employer must protect their people and premises against the dangers and effects of fire. With significant costs attributed to industrial fires, fire prevention is a topic of utmost importance for businesses. As the market leader, GreCon ensures effective fire prevention solutions for its customers, supported by a broad product portfolio and a wealth of systems engineering experience, resulting in an appropriate protection concept for each circumstance.

GreCon's fire prevention system detects ignition sources wherever material is pneumatically or mechanically extracted or transported. It is designed so that sparks or glowing embers are eliminated before damage is caused.

GreCon protects plant and machinery from fire. With advanced extinguishing nozzles, all areas of high risk can be robustly covered by a fine water



The principle of fire prevention

mist when an ignition source is detected, and the system requires extinguishment.

GreCon is renowned for providing excellent customer service, which has been maintained throughout the COVID-19 pandemic. GreCon is unique amongst its competitors, having invested in a significant presence in the UK & Ireland, including a local service organisation. GreCon Ltd can refer to an impressive track record in the market by continuing to providing excellent service.



A range of Water Pressurisation Systems

Here is what Jonathan had to say, "We have a solid track record of providing a first-class service to our customers, who rely on GreCon to provide fire prevention and measuring technology solutions and to help protect and optimise their manufacturing process. We are looking forward to our significant milestone with a 30th anniversary next year, and we hope to be able to celebrate it in more normal circumstances."

In recent light of COVID-19, in the last 12 months, GreCon has supported customers in critical industries and has also been able to travel to their sites when necessary. Supporting these customers in industries such as power generation, recycling, food, hygiene, and many more has been a rewarding experience as the company has been able to keep industries functioning throughout a challenging time. Many of its staff can work remotely from their homes and have only travelled when needed. Many adaptations have occurred, which goes for all businesses; however, GreCon has considered the implications of the pandemic at an early stage, and this allowed the company to adapt swiftly to the changing circumstances. "The COVID-19 pandemic presents a significant global challenge, but we're proud to have played our small part throughout," states Jonathan.

GreCon understands its services are heavily relied upon by its customers. The GreCon fire prevention system is considered a vital service in customer operations, ensuring their businesses are protected while enabling productivity and safety.



Contact inline thickness measurement



Fire prevention in the recycling sector

A recent advancement during the early stages of COVID-19, saw the introduction of SATELLITE, an online support for customers using the GreCon fire prevention system. This safe, simple to use platform was already deployed for customers using GreCon's measuring technology solutions.

"This digital service platform was already well known to our Measuring Technology customers. It allows customers to request remote access to their control console and a GreCon engineer to investigate faults or errors, giving the fastest service response time and the highest capability to provide maintenance and repair advice," noted Jonathan.

"To maintain the reliability and functionality of such a critical system, regular service and a preventative maintenance schedule is essential. It is also needed to ensure compliance with insurance requirements. Recently, customers have asked if we could help spread the cost of their service contract, enabling them to avail of Opex budgets and smooth their payments. That's why we introduced our Service Plan, and partnered with GoCardless, who are trusted by over 50,000 businesses, big and small," stated Jonathan.

2020 inevitably saw some projects delayed for the company, but in comparison to the forecast, the beginning of 2021 has seen a positive increase in sales with a strong order intake and a fully booked calendar. "We anticipated this turn of events and planned to manufacture stock of our popular Water Pressurisation Units and increase our stockholding," explained Jonathan.

Moving forward, GreCon is investing in new products and has expanded its workforce to add more capability, welcoming people who can make a significant contribution to its customers.

Jonathan described how he felt about receiving the award, "Our group Vision 2030 features a strong statement regarding sustainability. We think and act sustainably, with the long-term in mind. We are, therefore, delighted to receive this award, which celebrates our whole team focus on making people and places safer and enabling the 'smart factory' as the leading provider of innovative industrial fire prevention and process measurement solutions."

**Contact**  
T 0191 414 7200  
<https://uk.fagus-grecon.com/>



SATELLITE – Online Support: Safe, Simple and Fast