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PUMPSTOR - COMPLETE WASTE WATER AND SURFACE WATER PUMPING SOLUTIONS

The logo features the word "Kingspan" in blue and "Klargester" in red, both in a sans-serif font. The text is positioned over a blue, stylized wave graphic that is part of a larger water splash design. The splash is a large, dynamic splash of water that originates from the center and spreads outwards, creating a sense of movement and energy. The water droplets are captured in mid-air, giving the splash a textured, crystalline appearance. The background is a light, neutral color with a subtle gradient, and the overall composition is clean and professional.

Kingspan **Klargester**

- › DOMESTIC AND COMMERCIAL SOLUTIONS
- › FREE NATIONAL SITE VISIT

The logo consists of a stylized golden horse head icon above the text "Kingspan" in blue and "Environmental" in green. The horse head is depicted in profile, facing right, with its mane flowing. The text is in a clean, sans-serif font. The overall design is modern and professional, reflecting the company's focus on environmental solutions.

Kingspan
Environmental

Kingspan Klargester have been leading specialists in the design and manufacture of complete off-mains solutions for over 50 years, we not only manufacture our own products but also work closely with regulatory authorities and industry bodies to ensure total compliance in every component design and installation practice. Our dedicated technical team has successfully pioneered a complete off-mains solution featuring industry-leading products across the spectrum, from sewage treatment plants to oil/water separators, attenuation and packaged pump systems suitable for all building projects.

Our highly qualified professional advisors provide free, expert on-site assessment as well as advice on product selection and specification.

WHY CHOOSE A KLARGESTER PUMPSTOR SYSTEM?

State of the art technology. Expert advice at every stage.

Klargester pump systems are known and trusted across the industry for more reasons than one. Installed in thousands of domestic and commercial applications, they provide simple, economical pumping solutions where gravity is not an option. They are used in connection with sewage treatment plants, septic tanks, rainwater harvesting systems and surface water attenuation. They are made with the highest-quality materials and fittings and all are manufactured under the quality procedures of BS ISO 9001:2000 and HS ISO 18001. Require little or no maintenance. And, importantly, comply with Building Regulations Document H1 Foul Drainage and British Standards BS EN752, including options for 24-hour waste storage.

This booklet will give you an overview of the systems available. But to find out more or to arrange a free site visit, please contact us and we'll be happy to help.

100%

compliant with and British Standards building regulations.

200- 79,000

litre chambers capacities.

FREE

national site visit - just call
01296 633033, or email
helpingyou@klargester.com

COMPREHENSIVE SOLUTIONS FOR EVERY PROJECT



DOMESTIC

From basements to caravans, extensions to courtyards. If your property isn't connected to the sewer, or if it's below the sewer line, our pump systems will take care of all your water, sewage and effluent.

The system size depends on the type of waste you need to manage, your distance from the sewer and the difference in levels. They're easy to install and maintain. And they can be used in properties both on and off the mains. Prior to installation, there is a legal requirement to obtain permission from the appropriate agencies (including connection to a public sewer).

To help you find the right system for your property, our specialist team will visit to carry out a FREE site assessment. Full commissioning and service plans are available pre and post purchase from our service business, Kingspan Environmental Services.

PUMPSTOR COMPACT PUMPS

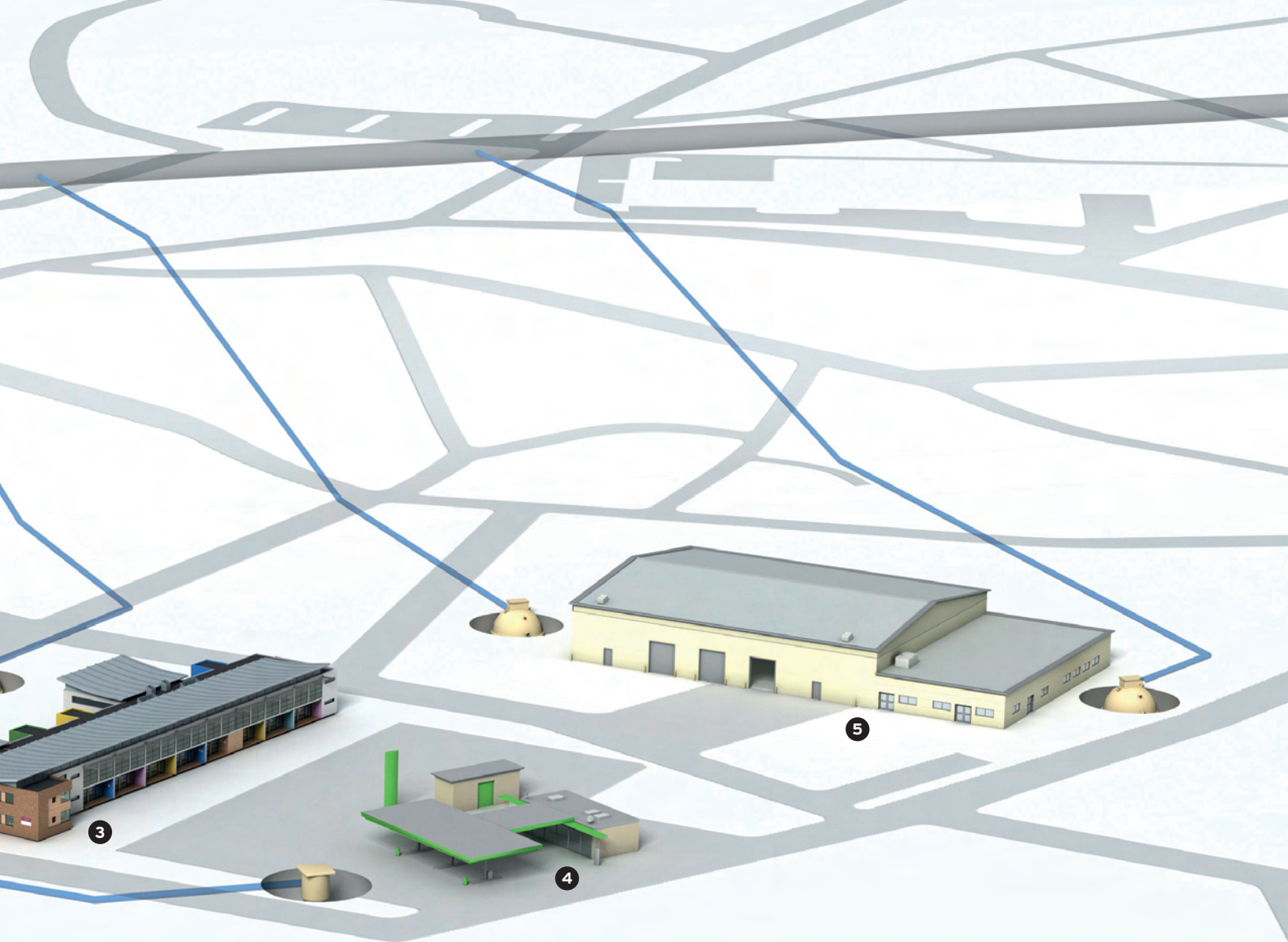
- › Outbuildings
- › House extensions
- › Site offices (portacabins)
- › Pool houses
- › Small holiday lets and caravans
- › Cellar/basement drainage
- › Courtyards and lightwells
- › Small commercial washdowns

See page 5 for details

PUMPSTOR DOMESTIC RANGE

- › Domestic properties
- › Small commercial offices
- › Remote classrooms
- › Roof and surface water

See page 6 for details



- 1 Housing development
- 2 Single domestic dwelling
- 3 School
- 4 Petrol forecourt
- 5 Office/Factory

COMMERCIAL

Whether you run a pub, shop or hotel, our range of commercial pump systems makes it easy to manage your sewage and waste water. Safely and efficiently.

The system size depends on the type of waste you need to manage, your distance from the sewer and the difference in levels. They require less craneage and shallower excavations than concrete pumping systems and there is no need for anyone to enter the tank during excavation and installation. Prior to installation, there is a legal requirement to obtain permission from the appropriate agencies (including connection to a public sewer).

To help you find the right system for your development or premises, our specialist team will carry out a FREE full site assessment. Full commissioning and service plans are available pre and post purchase from our service business, Kingspan Environmental Services.

PUMPSTOR COMMERCIAL RANGE

- » Housing developments
- » Large commercial developments
- » Industrial developments
- » Caravan/camping sites
- » Schools
- » Hotels and restaurants
- » Nursing homes
- » Surface water run-off
- » Attenuated water

See pages 9 and 10 for details

UP TO

10000

METRES

of pumping distance with our
domestic systems.

All our domestic pump systems are suitable for pumping waste water effluent and sewage in accordance with BS 756-2. They're also designed in line with Building Regulations for Foul Drainage. So the system size depends on the type of waste you need to manage, your distance from the sewer and the difference in levels.

To help you select the right system, our pump experts will visit carry out a FREE site assessment. Installation is simple and full commissioning and service plans are available from our service business, Kingspan Environmental Services.

PUMPSTOR COMPACT PUMP SYSTEMS

Our proven range now includes a series of compact pump systems. Quick to install and easy to maintain, they're the ideal solution for outbuildings and extensions, cellars, pool houses and external WCs. They can be used for effluent or sewage, depending on the pump, distance and height.



Chamber Size (mm)	Capacity (ltrs)	Tank Material	Control Panel	Alarm	Pump Type
610 x 700	200	GRP	N/A	Optional	Single
560 x 1,650	400	GRP	N/A	Optional	Single

DESIGN AND FEATURES

Both compact systems consist of a GRP chamber fitted with a high quality pump, float switch, non-return valves, pedestrian duty cover and frame.

FEATURES

- 】 Non-return valves and outlet pipe compression coupling as standard
- 】 3 pump options; effluent low head, effluent high head and sewage vortex
- 】 Service and maintenance plans available to prolong the life of the pump systems
- 】 Complete pre-fabricated solution ready for installation
- 】 Fully automatic

KEY FACTORS TO SIZE YOUR SYSTEM

- 】 Application: domestic, residential or commercial?
- 】 Material application: sewage, effluent or surface water?
- 】 Inlet depth? (below ground level)
- 】 Pumping distance and lift?
- 】 Electrical supply?

Please contact Kingspan Klargester's pump team on 01296 633033 email info@klargest.com or download our Package Pump Enquiry Form from our website www.klargester.com/products/pump-stations.htm

PUMPSTOR DOMESTIC & DOMESTIC+

Our domestic pumping stations are ideal for homes or properties with up to 13 people. Quick and simple to install, they require minimal maintenance. They come with single or twin pumps, and are suitable for sewage, surface water and effluent. Appropriate for 24 Hour storage requirements.



DOMESTIC



DOMESTIC+

DOMESTIC

Chamber Size (mm)	Capacity (ltrs)	Tank Material	Control Panel	Alarm	Pump Type
900 x 2,080	1,250	GRP	Included	Optional	Single/Twin
900 x 2,580	1,600	GRP	Included	Optional	Single/Twin

DOMESTIC+

Chamber Size (mm)	Capacity (ltrs)	Tank Material	Control Panel	Alarm	Pump Type
1,000 x 2,000	1,450	Polyethylene	Included	Standard	Single/Twin
1,000 x 2,500	2,200	Polyethylene	Included	Standard	Single/Twin

DESIGN AND FEATURES

Our domestic pumping stations are made with super-tough, low-maintenance GRP and high quality polyethylene. All systems are engineered with the highest quality parts and fittings and come with options of monitoring systems.

FEATURES

- › Quick connection outlet couplings
- › 110mm or 160mm inlet connections
- › Lockable covers
- › Easy access for maintenance
- › Service and maintenance plans available to prolong the life of the pump systems

PUMPSTOR DOMESTIC

- › Inlet depths of 1.3m and 1.8m
- › Optional inlet pipe orientation

PUMPSTOR DOMESTIC+

- › Inlet depths of 1.0m and 1.5m
- › Optional inlet pipe orientation
- › Visual and audible alarms as standard

KEY FACTORS TO SIZE YOUR SYSTEM

- › Application: domestic, residential or commercial?
- › Material application: sewage, effluent or surface water?
- › Inlet depth? (below ground level)
- › Pumping distance and lift?
- › Electrical supply?

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URBAN DOMESTIC CASE STUDY

A COMPLEX SEWAGE AND SURFACE WATER SYSTEM FOR A NEW BLOCK OF FLATS

When Solid Links Ltd were asked to design a sewage system for a new block of flats in London, they immediately turned to Klargest. Although the site was close to the sewer, the layout meant they couldn't rely on gravity to remove waste and they also needed to dispose of roof water.

After considering the architecture of the block, the team realised there wouldn't be room for one large pump system to dispose - and potentially store - the whole building's waste and water. So they created a complex three connection system.

The first two would be installed in light wells and would take care of sewage. The third would be smaller, solely for rainwater not requiring 24 hour storage. Solid Links fitted the systems very early in the project's build, meaning they were all up and running long before the new residents moved in.

3

separate systems forming an efficient, robust solution.

8

high end flats.

2,400

litres of total site storage.



EMERGENCY 24 HOUR

storage with Pumpstor Commercial pump systems.

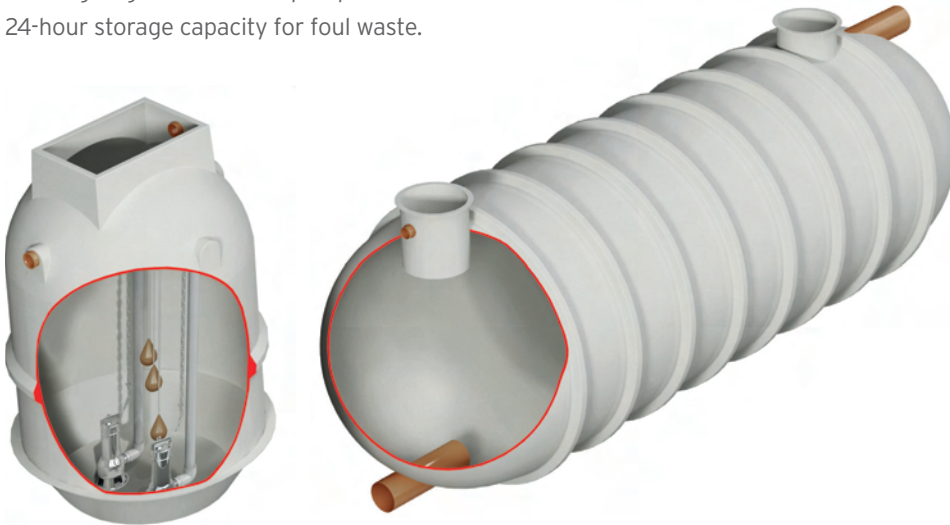
What would happen if your power supply failed and the pump stopped working? Building Regulation requirements means preparing for such an eventuality is no longer an afterthought - it's essential. Our Pumpstor high capacity series has the ability to hold waste for 24 hours. So you can comply with guidelines, safe in the knowledge that your premises are protected from overflow in an emergency.

To make sure you use the right system for your premises, our Klargester team will carry out a FREE site assessment and advise on the design and structure. Full commissioning and service plans are available from our service business, Kingspan Environmental Services.

PUMPSTOR COMMERCIAL PUMP SYSTEMS

Our Pumpstor Commercial pumping systems are ideal for developments and premises where drainage by gravity isn't an option. The range includes solutions for sewage treatment plants, surface water and septic tanks. Tanks and pumps come in a range of sizes and dimensions. And to comply with Building Regulations these pumps have a 24-hour storage capacity for foul waste.

Also speak to our expert team about your attenuated surface water application. We have a vast range of bespoke prefabricated systems available.



Vertical Chamber Size (mm)	Capacity Up To (Itrs)	Tank Material	Control Panel	Alarm	Pump Type
1,250 Dia	4,200	GRP	Included	Standard	Single/Twin
1,800 Dia	9,500	GRP	Included	Standard	Single/Twin
2,600 Dia	21,000	GRP	Included	Standard	Single/Twin

DESIGN AND FEATURES

All our pump systems are pre-fabricated with a variety of single and twin pump options, pre-set automatic level control, high-level alarms, non-return valves, discharge pipes and all connections.

FEATURES

- 】 High-level alarm
- 】 Internal lifting chains and guiderails (as specified)
- 】 Wide range of pump options including macerators/solids handling/vortex
- 】 Range of emergency overflow tanks
- 】 Inlet connection sizes to suit site
- 】 Various invert depths and positions
- 】 GRP chambers with internal pipework in plastic, galvanised or cast iron
- 】 Optional kiosks with warning beacons and optional telemetry systems
- 】 Service and maintenance plans available to prolong the life of the pump systems

KEY FACTORS TO SIZE YOUR SYSTEM

- 】 Application: domestic, residential or commercial?
- 】 Material application: sewage, effluent or surface water?
- 】 Inlet depth? (below ground level)
- 】 Pumping distance and lift?
- 】 Electrical supply?

Please contact Kingspan Klargest's pump team on 01296 633033 email info@klargest.com

or download our Package Pump Enquiry Form from our website www.klargester.com/products/pump-stations.htm

PUMPSTOR HORIZONTAL COMMERCIAL PUMP SYSTEMS

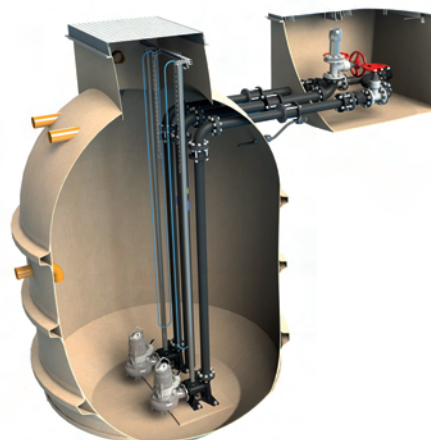
If power supplies fail, Pumpstor Commercial responds instantly, separating liquids and solids into a separate chamber and storing waste for up to 24 hours. Once power is restored, the pumps will work normally again without further maintenance.



Chamber Size (mm)	Capacity Up To (ltrs)	Tank Material	Control Panel	Alarm	Pump Type
2,600 Dia	79,000	GRP	Included	Standard	Single/Twin

ADOPTABLE AND HIGH SPECIFICATION PUMP SYSTEMS

The adoptable and high specification pump stations are designed to meet the requirements of 'Sewers for Adoption 7th Edition' and the 'Water Industry Standard' (WIS): On the 1st of October 2016, all pumping stations serving two or more domestic properties in England and Wales will become the responsibility of the Water Companies. Our adoptable pumping stations are completely prefabricated.



DESIGN AND FEATURES

Pumpstor Commercial pump systems are made from robust GRP. It's designed as a single-piece chamber with two separate sections, one for normal operation and one for emergency storage.

FEATURES

- 】 Single-tank installation up to 79m³ (multiple tank systems available)
- 】 Multiple valve chamber location and invert options
- 】 Weir screen features innovative removable filters, so there's no need to access the chamber during maintenance
- 】 High-level alarm
- 】 Totally sealed system

INSTALLATION & OPERATION

- 】 One-piece tank chamber for easy installation
- 】 Minimal on-site assembly
- 】 Less craning and shallower excavation than concrete pumping stations
- 】 On-site Health & Safety issues are minimised - no requirement for personnel to enter the tank

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COMMERCIAL CASE STUDY

HELPING A GREENHOUSE DEVELOPMENT MANAGE ITS WATER

Thanet Earth in Kent is the UK's largest and most technically complex greenhouse development. Norfolk-based Bingham Hall Associates (BHA) were commissioned to manage the development's water, and they asked us to help find a solution.

After much consultation with Klargester specialists, BHA designed a system using four Klargester vertical pump stations. They also included a 79,000 litre Pumpstor tank linked to two inter-connecting 65,000 litre tanks, meaning waste could be stored for 24 hours in an emergency.

We delivered the tanks to the site all ready for installation, saving time and money in comparison with concrete chambers. All BHA had to do was connect the pumping station to the sewer - through over 2.5km of piping - and the system was ready to go.

67ha

development with seven glasshouses, an on-site pack house and a visitors centre.

210,000

litres of waste water can now be stored for 24 hours.

"We chose Kingspan Klargester pumps and storage chambers as they provided a cost effective and simple means of achieving the large storage volumes required for the waste water system. Furthermore... Kingspan Environmental's technical engineering expertise is excellent, so they were able to provide valuable advice to support the project."

Andrew Bingham, Principal at BHA



SERVICE CONTINUES

**A SERVICE PLAN WILL ENSURE THE SMOOTH RUNNING
OF YOUR PUMP STATION YEAR AFTER YEAR**

Our service doesn't stop once the installation checklist is signed off. Whilst our products are designed and produced with longevity, easy and low maintenance in mind, we're on hand once a system is up and running to ensure it continues to run as efficiently as possible. Preventative maintenance is essential to ensuring that your pump station operates effectively with the minimum amount of hassle.

With a Service Plan you can:

- › **Relax:** we look after it so you don't have to
- › **Save money:** experience fewer breakdowns with planned maintenance
- › **Be priority:** for repair or upgrade
- › **Reduce:** the call-out charges



98%

of call-outs resolved on the first visit.

FREE

Love2Shop vouchers for homeowners when they recommend up to 5 friends.

24/7

call-out, national coverage for commercial customers.

Contact the service team for further information:

UK 0844 846 0500

IRL 048 3025 4077

info@kingspanenvservice.com



TOTALLY INTEGRATED ENVIRONMENTAL SOLUTIONS

Kingspan Environmental has been at the forefront of innovation for more than fifty years. Thought leaders in sustainability for the built environment, our 'gold standard' products feature in the world's most sustainable buildings and are tried and tested in more than 60 countries. And because we design and manufacture our own world-class components, delivery is quick and reliable.

Design integrity is backed by exemplary service. Our professional designers tailor systems to any site specification while our technical experts study building plans to create a 'best-fit' solution, which maximises effectiveness and meets the latest environmental standards and building codes.

Our bespoke systems are installed quickly, run easily and are covered by market-leading warranties while on-the-road support, sales teams and accredited installers give local help and advice when you need it.

In our unique one-stop shop for sustainable building, products fall into three easy-to-browse categories.



WATER MANAGEMENT SOLUTIONS

Our pioneering brands, Klargester, for waste water and storm water attenuation, and Kingspan Water for rainwater harvesting offer a portfolio of proven and ground breaking water management technologies.

Kingspan Klargester's portfolio includes the following off-mains drainage solutions:

- ▶ Sewage treatment plants
- ▶ Oil/water separators
- ▶ Stormwater attenuation
- ▶ Pump systems

RENEWABLE ENERGY SOLUTIONS

Inspired thinking is at the heart of our renewable energy offer. High-performing wind turbines, solar thermal tubes and panels, hot water systems and heat pumps capture, store and transform natural energy from the sun and wind into reliable and highly effective heating and cooling for water and buildings.

ENVIRONMENTAL MANAGEMENT SOLUTIONS

Our high-performance environmental containers are at the forefront of plastics technology while our award-winning telemetry solutions offer affordable level measurement gauges and integrated energy management systems. As well as remarkable products, we offer world-class consultancy and environmental services, whether it is a Kingspan system or not.



Kingspan Klargestester is part of
Kingspan Environmental.

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