Wastewater **Solutions**

BioDisc®

WASTEWATER SOLUTIONS

PREMIUM SEWAGE TREATMENT PLANT FOR DOMESTIC USE
FROM THE MARKET LEADERS IN WASTEWATER TREATMENT.



Kingspan Klargester

60 YEARS OF EXPERTISE

Kingspan Klargester
For over 60 years, Kingspan Klargester has designed and manufactured innovative ways to treat, pump, separate and recycle wastewater. We pioneered the world's first GRP septic tank and the patented RBC (Rotational Biological Contactor) BioDisc® wastewater treatment system – leading change in our sector and setting industry standards around the world.

As established global market leaders, we offer a diverse range of innovative and 100% compliant wastewater treatment solutions for domestic, commercial and industrial applications. We give you relevant advice and support throughout the wastewater treatment purchasing process based on our in-depth local knowledge and expertise.

WORLD LEADER
in quality wastewater management solutions

The Wastewater Management Experts
Kingspan Klargester are the wastewater management experts with over 60 years of innovation and knowledge. Our mission is to design and manufacture premium tried and tested wastewater management solutions on a global scale whilst offering one of the largest and most technologically advanced wastewater ranges available.

Operating in 85 countries worldwide, we offer a global distribution network backed by experienced sales and technical teams. Our support teams provide focused customer service from delivery scheduling to consultancy and installation guidance. We give you the confidence of support over the lifetime of the product and beyond.



85
COUNTRIES
WORLDWIDE

BioDisc®



Kingspan Klargester BioDisc® wastewater treatment plant
Our Kingspan Klargester BioDisc® sewage treatment range benefits from a wealth of industry experience and knowledge that allowed us to bring to market the first Rotational Biological Contactor treatment system over 40 years ago.

The patented BioDisc® is engineered to treat wastewater to the highest level of standards. In terms of ongoing service and maintenance, it offers one of the best returns on investment compared to other treatment processes. Each BioDisc® is designed to ensure 100% compliance with industry requirements, including national and international regulations such as BS EN12256.

The aim of BioDisc® is simple – quality product and quality customer service for total peace of mind.



EXPERTISE

- With over 60 years' experience delivering high performance and reliable wastewater treatment systems worldwide, you can trust Kingspan Klargester.

PREMIUM

- BioDisc® is one of the only premium sewage treatment systems in the world to use the patented Rotating Biological Contactor technology. This ensures continued high performance and hassle-free sewage treatment.

SERVICE

- We pride ourselves on a quality customer experience from comprehensive on-site assessments to professional installation options and expert after sales care.

REQUEST A FREE SITE VISIT FROM OUR EXPERT TEAM.
klargester@kingspan.com
01 296 633 000

BioDisc®

PROTECTING YOUR HOME AND THE ENVIRONMENT

ULTIMATE RELIABILITY
GUARANTEEING LONG TERM PERFORMANCE

4 EASY STEPS TO THE PERFECT WASTEWATER TREATMENT SOLUTION

Step 1
Contact us and we'll arrange for a local Kingspan Klargester expert to visit your home for a full site assessment, should you need it.

Step 2
Our professional team will work with you to help choose the correct BioDisc® model.

Step 3
A Kingspan professional can be arranged to commission and activate your tank.

Step 4
We offer tailored service and maintenance packages for your BioDisc® treatment plant.

OVER 60 YEARS OF EXPERTISE

Kingspan Klargester

KEY BENEFITS

FREE NATIONWIDE HI-AB DELIVERY WITHIN 3 WORKING DAYS*
*Mainland UK only

In an increasingly regulated world with new Environment Agency and SEPA standards, it's more important than ever to choose a sewage treatment plant that delivers peace of mind by guaranteeing safe and reliable treatment of wastewater.

BioDisc® from Kingspan Klargester is built on the back of 60 years' experience and offers the following benefits:

LOW RUNNING COSTS
The robust patented design of the BioDisc® treatment plant offers complete peace of mind. With low running costs and minimal servicing and maintenance required, the BioDisc® is a high-quality lifetime investment that helps safeguard the health of you and your family.

FULLY COMPLIANT SOLUTION
BioDisc® is tested and certified to European standard EN 12566, the European standard for small treatment plants and was awarded its Performance Certificate by delivering high levels of pollution removal (up to 97.5%).
As a homeowner you can rest assured that the BioDisc® will operate optimally at all times, saving you time, money and hassle.

EXPERTISE AND KNOWLEDGE
BioDisc® is backed by 60 years' of expertise and technical knowledge. Our expert team is on hand to guide you on the best choice of sewage treatment system for your home.

60

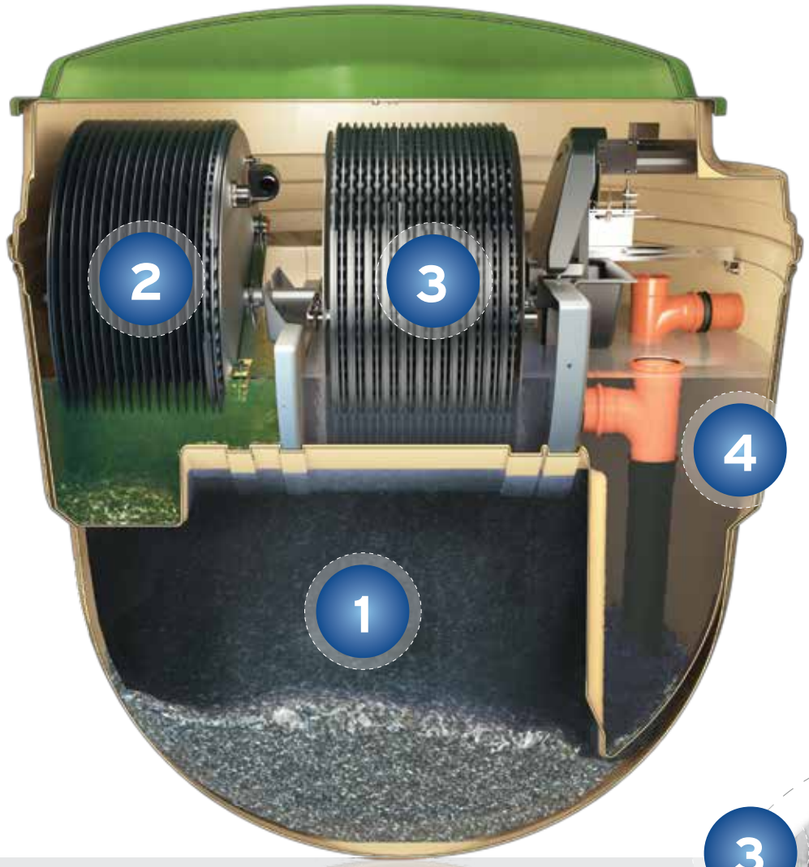
*Subject to stock levels and other conditions. Free delivery from our distribution hubs.

BioDisc®
HOW IT WORKS

The Rotational Biological Contactor (RBC) is central to the operation of each Kingspan Klargester BioDisc®. It supports a biologically active film or biomass onto which aerobic micro-organisms, naturally found in sewage, become established. Natural breakdown of sewage can then occur as described below.

UNIT SIZE	SINGLE HOUSE		MULTIPLE HOUSES	
	BA	BA-X	BB	BC
Population Equivalent	1 House up to 4 bedrooms	1 House up to 7 bedrooms	2 House up to 8 bedrooms	3 House up to 12 bedrooms
Overall diameter / Width (mm)	1995	1995	1995	2450
Standard drain inlet (mm)	750*	750*	750*	600†
Standard outlet (mm)	835	835	835	685
Depth from invert to base (mm)	1400	1400	1400	1820
Pipework Diameter (mm)	110	110	110	110
Sludge storage period (Approx)	12 Months	9 Months	6 Months	7 Months
Standard power supply	Single Phase	Single Phase	Single Phase	Single Phase
Motor rating	50W	50W	50W	75W
Weight (tonnes) standard units	0.388	0.418	0.418	0.650

* BA-BB 450/1250 † BC 11000



ROTATING BIOLOGICAL CONTACTOR (RBC)

The RBC comprises banks of vacuum formed polypropylene media supported by a steel shaft. This is slowly rotated by a low energy consumption electric motor and drive assembly.

BioDisc® from Kingspan Klargester

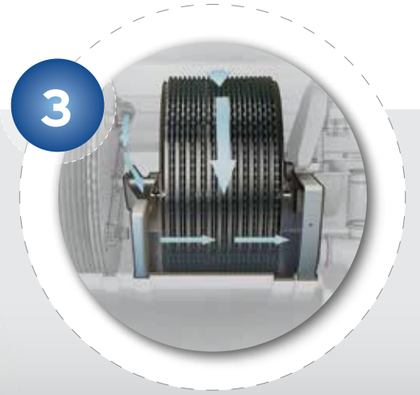
For further technical information and videos on the BioDisc® treatment plant visit our website at **kingspanklargester.com**



PRIMARY SETTLEMENT TANK
Wastewater and sewage flows into the primary settlement tank where the large solids are retained for future removal.



FIRST STAGE BIOLOGICAL TREATMENT
The liquor and fine solids then flow into the Biological Treatment Zone 1 where the first stage of treatment occurs.



SECOND STAGE BIOLOGICAL TREATMENT
The liquor is then fed forward at a controlled rate into Biological Treatment Zone 2 for further cleaning.



FINAL SETTLEMENT TANK
The clean liquid passes into the final settlement tank where it can be discharged to ground or water course.

BioDisc®

CHOOSING THE CORRECT SEWAGE TREATMENT PLANT FOR YOUR HOME

At Kingspan Klargester we offer a full range of options and professional insight to help you choose the perfect sewage treatment plant for your home.

All our robust BioDisc® models cater for properties housing between 4-16 people. The premium BioDisc® sewage treatment system is available in four sizes for all types of domestic applications.

For single house applications we offer the BA and BAX models and, for multiple homes, the Kingspan Klargester BB and BC BioDisc® models are ideal.

Because various inlet and outlet options are available, we carry out a free comprehensive site assessment to ensure the correct system model and size for your home.



WHAT DETERMINES MY CHOICE OF SEWAGE TREATMENT PLANT?

The BioDisc® is technically engineered with high performance and quality in mind. Each component of the BioDisc® has been manufactured and chosen with care, to ensure continuous operation of a tried and tested wastewater treatment process.

What else do I need to consider when choosing my sewage treatment plant?

- **The size of treatment plant needed**
  We'll take you through the best practice guidelines from British Water's 'Flows and Loads' sizing criteria to help you make the correct choice.

- **Ground conditions around the plant**
  We'll establish whether it's a wet or dry site to determine the choice of backfill used on the tank.

- **Wastewater discharge options**
  With the new Environmental Agency regulations for domestic plants, it's now more important than ever to take responsibility for wastewater discharges.

- **Ground conditions around the plant**
  Kingspan Klargester offer a range of drain invert level options to match your site conditions.

BioDisc® from Kingspan Klargester

For further technical information and videos on the BioDisc® treatment plant visit our website at **kingspanklargester.com**

REED BEDS

Klargester BioDisc® treatment plants use a reed bed filtration process to further enhance the quality of the effluent migrating into drainage fields or a surrounding watercourse.

DESIGN
Advanced Patented design delivers superior performance
Pre-fabricated to ensure correct sizing
Modules designed with a hydraulic gradient across the length of the units
Performance tested in Germany to EN12566-3 in combination with a Part 3 plant
Modular system comprising of: · Two individual reed beds = single house application · Four individual reed beds = two house application
Adjustable outlet weir allows water level control
One piece GRP moulding installed flush to the ground
Reeds and GRP beds supplied. Washed pea gravel, 'growing' media by others (not included)
Effluent discharge is typically improved by at least 50%, providing reduced BOD and suspended solids
Provides rooting zone depth of 600mm (required by Phragmites Australis)



Benefits

- Tertiary treatment for new applications with tight discharge consents
- Satisfies new building regulations
- Improved effluent quality for existing works
- Very low maintenance
- Aesthetically pleasing and environmentally friendly
- Easy to install and maintain

CUSTOMER SUPPORT

We stand by the quality and performance of Kingspan Klargester products and our support doesn't stop once your tank is installed. We're on standby 24/7 with guidance on servicing and maintenance and offer tailored warranty options. Our trained professional support team is only a phone call away.

Peace of mind with extended warranty options
We offer an extended and tailored warranty or bond on your sewage treatment plant to suit your needs and budget. This cost effective package offers the benefits of scheduled maintenance inspections to ensure your system performs at optimum levels at all times.

Customer support when you need it
Our friendly local customer service team are on hand with professional advice. We operate a dedicated helpline on 01296 633 000 and a support email address for customers on klargester@kingspan.com

WE OFFER A FULL
2 YEAR GUARANTEE* ON OUR DOMESTIC **BioDisc®** TREATMENT PLANT.

* One year guarantee offered as standard on the domestic BioDisc model

Register for your extended two year guarantee at:
kingspanenviro.com/guarantee

Service and maintenance
We recommend that you service your BioDisc sewage treatment plant once a year. Under new Environment Agency regulations, it's now your responsibility to ensure smooth running of your plant. Our in house Service department offer a range of service packages including Gold, Silver and Bronze to cater for all homeowners' needs. To find out more about how you could benefit from a tailored service package from Kingspan, call us on **0844 846 0500** or email **helpingyou@kingspan.com.**



Contact your expert local Kingspan Klargester team today

Our experienced local Kingspan Klargester product experts are on hand with professional advice on all aspects of your sewage treatment system, including sizing and installation.

Book your no obligations site assessment from the global experts in wastewater treatment, Kingspan Klargester. Contact us today on **+44 (0) 1296 633 000.** You can also book your visit online at **Kingspanklargester.com**

BioDisc®

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