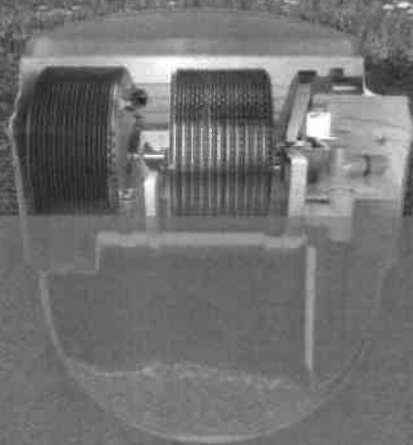


Wastewater Solutions

BioDisc®

WASTEWATER SOLUTIONS

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





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.

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



WORLD LEADER
in quality wastewater
management solutions



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

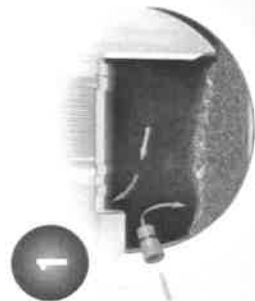
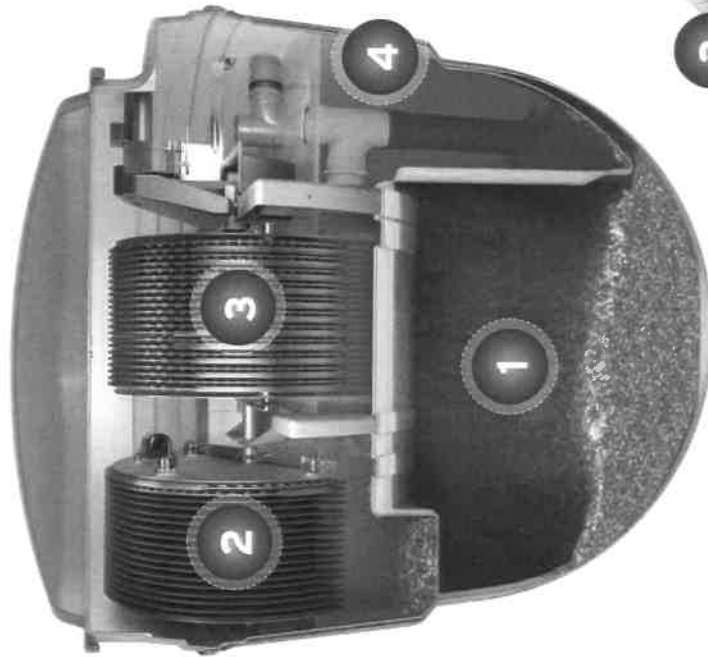
* BA-98 450/1250 † BC 11000

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



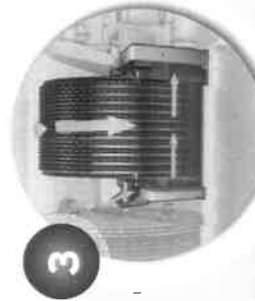
PRIMARY SETTLEMENT TANK

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 liquor passes into the final settlement tank where it can be discharged to ground or water course.

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 AB 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

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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 Australia)



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 klargesterkingspan.com

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 Kingspanklargesterkingspan.com

BioDisc®

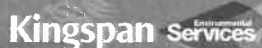


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Disclaimer: We take every care and precaution to ensure that information in this document is accurate at the point of publication, but with continuous product development the details given in this document are subject to alteration without notice.

Kingspan Klargester - BioDisc Domestic Brochure - English - Feb 2016