

Water Management Solutions

Kingspan



Klargester
BioDisc® BA-BE
Sewage Treatment Plant



kingspan.co.uk/klargester


Kingspan®

Klargester BioDisc® Domestic Sewage Treatment Plant

Support from start to finish
from our expert team



Step 1

Free survey

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

Choice

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



Step 3

Set up

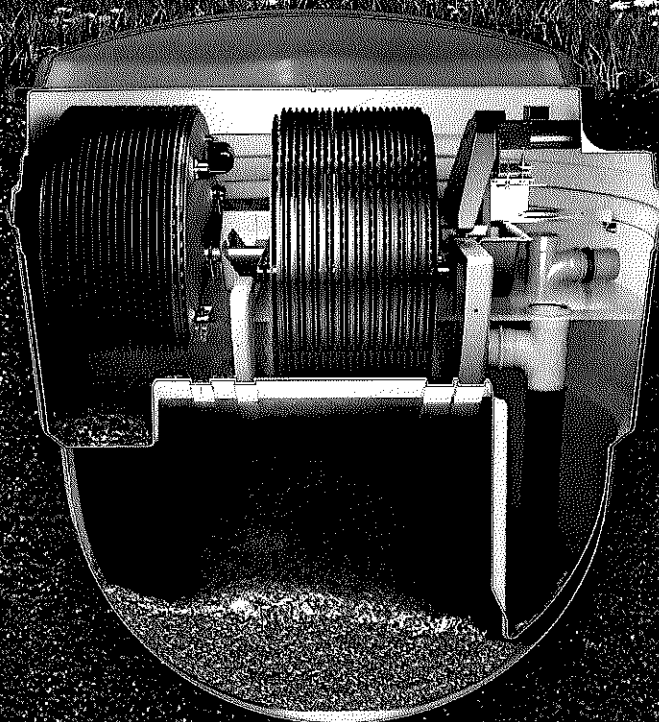
We offer full commissioning and activation for your BioDisc, ensuring it runs optimally right from the start.



Step 4

Service

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



1400mm*

1995mm*

*Dimensions illustrated here are applicable to the BA and BB models only.

Choosing the right sewage treatment plant for your home with Kingspan Klargester

Kingspan Klargester provides relevant advice and support throughout the wastewater treatment purchasing process based on our in-depth local knowledge and expertise. We offer comprehensive free site visits, professional installation options (optional extra) and expert aftersales care through our national network of accredited installers and engineers.

BioDisc is 100% compliant with European standard EN 12566-3

I'm a homeowner - what do I need to consider before choosing my treatment plant?

The Kingspan Klargester BioDisc sewage treatment system is available to suit all types of domestic applications, catering for single and multi-house properties. BioDisc is engineered to treat wastewater to a very high standard and offers affordable lifetime costs compared to other treatment processes.

Our team will guide you through:

- Size of treatment plant required
- Ground conditions around the plant
- Wastewater discharge options
- Invert level options

Why BioDisc®?

With strict Environment Agency standards, it's more important than ever to choose a sewage treatment plant that delivers peace of mind with reliable treatment of wastewater.

The Kingspan Klargester BioDisc is built on the back of 65 years' experience and offers the following benefits:

Product benefits



Affordable lifetime running costs



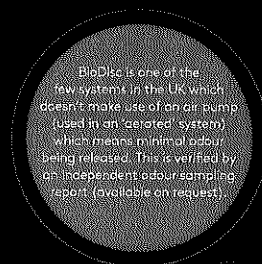
Odour free



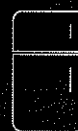
Trusted and reliable performance



Silent Operation



At a recent site, our expert team concluded that the domestic BioDisc has the same level of noise as the average ambient background noise outside (between 40-55 decibels) *



Domestic BioDisc
Decibel equivalent to a modern refrigerator

* This is a representative figure based on a commercial BioDisc plant



Typical aerated system
Decibel equivalent to a coffee grinder grinding

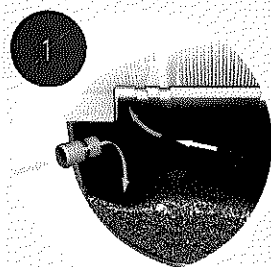
**7 YEAR
WARRANTY****

Register your guarantee online at kingspan.co.uk/klargesterguarantee to arrange your service and enjoy an extended seven year guarantee period.**

** For BA and BB BioDisc models only, when registered online - terms and conditions apply.

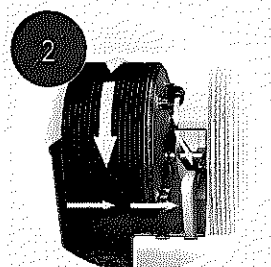
Visit: <https://www.kingspan.com/gb/en-gb/products/wastewater-management/warranty-terms>

How it works



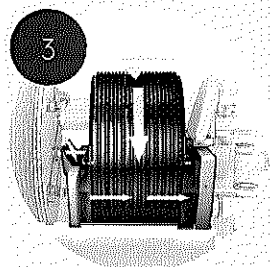
Primary settlement tank

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



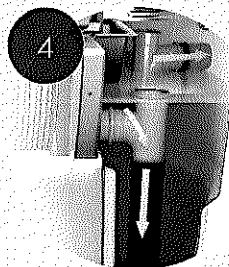
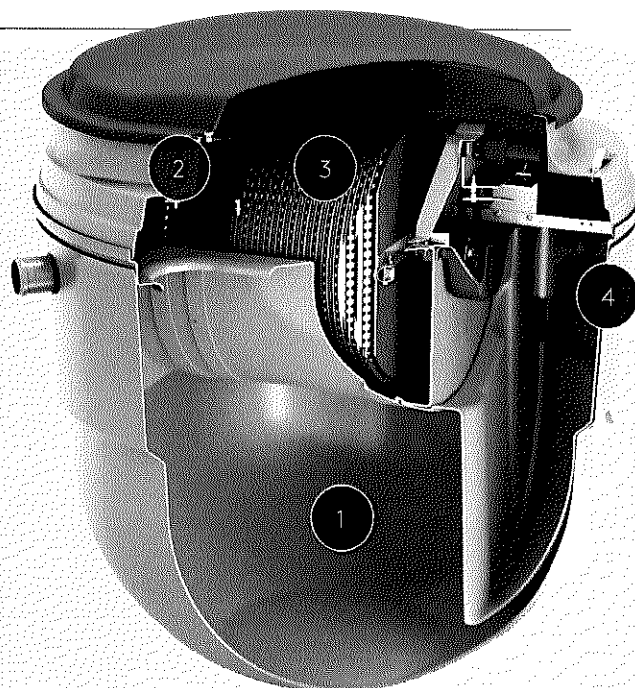
First stage biological treatment

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



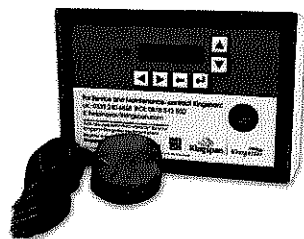
Second stage biological treatment

The liquor is then fed forward at a controlled rate into Biological Treatment Zone 2 for further treatment.



Final settlement tank

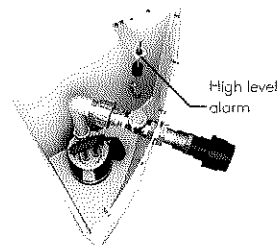
The clean liquid passes into the final settlement tank where it can be discharged to ground or water course.



Control panel and beacon featuring alarm* and digital display to signal that your system is working optimally (beacon and alarm optional extras).

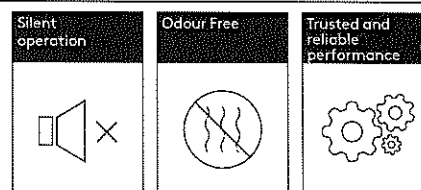
SmartServ Pro

Ask us about our SmartServ Pro remote monitoring solution (optional extra). With early fault detection, SmartServ Pro lets you know when your system needs serviced, giving you peace of mind. Find out more at helpingyou@kingspan.com



Integrated Pump System also available (for pumped systems only). Our technical team will guide you through the best options for your site.

Book your free site visit from our expert Klargestar team at klargestar@kingspan.com or visit kingspan.co.uk/klargestar



Technical Specifications

Model Reference	BA	BAX	BB	BC	BD	BE
Population Equivalent	8	12	16	24	33	47
Maximum Daily BOD5 (g BOD5)	360	540	720	1080	1500	2100
Maximum Daily Flow (m ³)	1.2	1.8	2.4	3.6	5	7
Maximum Daily Ammonia (g NH ₄)	48	72	96	144	200	280
Overall Diameter (mm)	1995	1995	1995	2450	2450	2450
Length (mm)	N/A	N/A	N/A	N/A	3340	3340
Inlet Invert depth (mm)	450/750/1250	450/750/1250	450/750/1250	600/1100	600/1100	600/1100
Depth Below Inlet Invert (mm)	1400	1400	1400	1400	1820	1820
Outlet Invert Depth (mm)	1315	1315	1315	1735	1735	1735
Overall Height (mm)	2160/2460/2960	2160/2460/2960	2160/2460/2960	2825/3325	2825/3325	2825/3325
Height to Rim of Cover (mm)	1945/2245/2745	1945/2245/2745	1945/2245/2745	2485/2985	2485/2985	2485/2985
Empty Weight (kg)	310/325/380	335/350/405	335/350/405	650/750	1100/1200	1200/1300
Standard Power Supply	1 phase	1 phase	1 phase	1 phase	1 phase	1 phase
Motor Rating – Single Phase (Watts)	60	60	60	173	253	253
Full Load Current – Single Phase (amps)	0	0	0	1	1	1
Optional Power Supply	N/A	N/A	N/A	3 phase	3 phase	3 phase
Motor Rating – 3 Phase (Watts)	N/A	N/A	N/A	90	90	90
Full Load Current – 3 Phase (amps)	N/A	N/A	N/A	0.38	0.38	0.38
Sludge Return Pump Rating (Watts)	250	250	250	250	250	250

Invert level options

Three standard drain invert level options are available from stock to match the site topography and where applicable, minimise the excavation depth. The BA, BB and BA-X models are available with an integral pump to move the effluent from the point of treatment, if site level demands.

Environment Agency regulations

As an off-mains homeowner, you must comply with the General Binding Rules by ensuring your treatment system is maintained properly and does not cause pollution. These rules state that you must arrange regular

maintenance for your system, via a trusted service provider. Kingspan Service can help with expert servicing and alarm packages – email helpingyou@kingspan.com

Protect your investment with our Service and Maintenance Plans

We recommend that you service your BioDisc sewage treatment plant **once a year**. Under 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 **0333 240 6868** or email helpingyou@kingspan.com

For further technical information & videos on the BioDisc treatment plant visit our website at.kingspan.co.uk/klargester

BIODISC BA to BF - DECLARATION OF PERFORMANCE

kingspan-klargester-biodisc-ba-to-bf-dop-en-oct2021-v2

1. Unique identification code of the product-type:

**Wastewater Treatment Plant for up to 50 Population Equivalents
BA, BB, BC, BD & BE BioDisc**

2. Type, batch or serial number or any other element allowing identification of the construction product as required under Article 11(4) of the CPR:

**BioDisc Prefabricated Domestic Wastewater Treatment Plant: See CE marking affixed to product
BA to BE**

3. Intended use/es of the product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

To be used for Collection & Treatment of Wastewater from Domestic applications up to 50 Population Equivalent

4. Manufacturer name, registered trade name or registered trade mark and contact address as required under Article 11(5):

**Kingspan Water & Energy Ltd
College Rd North
Aston Clinton, Aylesbury, Buckinghamshire
HP22 5EW**

5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2):

N/A

6. System/s of assessment and verification of constancy of performance (AVCP) of the product as set out in CPR, Annex V:

3

7. In case of the declaration of performance concerning a construction product covered by a harmonised standard:

EN:12566-3:2005+A2:2013

Notified body/ bodies:

Notified Body No: 1739 + PIA Prüfinstitut für Abwassertechnik GmbH

Document date:	Document version no:	ECN no:
12/10/2021	V1.	1587

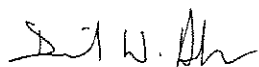


8. Declared performance/s:

Essential characteristics		Performance		Harmonised technical specification
Structural Behaviour		Confirmed by Pit Test under the following Conditions: - Maximum installation Depth 0m over cover level - Wet conditions maximum water level 2.49m		EN:12566-3:2005+A2:2013
Reaction to fire		Class E		
Water Tightness (water test)		Water Tight (water test)		
Material Durability		Creep Factor $\alpha_{material}$ = 0,48 (average value)		
		Ageing Factor (β) = 0,46 (average value)		
Treatment Efficiency	COD	89.4%	59 mg/l	
	BOD ₅	95.7%	10 mg/l	
	NH ₄ -N	88.6%	3.8 mg/l	
	SS	94.8%	15 mg/l	
	P	NPD	NPD	
	KN	NPD	NPD	
Electrical Consumption (measured during 38-week test)		1.3kWh/d		
Emission of Dangerous Substances		NPD		

9. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:



David Anderson – Water Business Unit Director

At Portadown on 22 September 2021

Document date:	Document version no:	ECN no:
12/10/2021	V1.	1587