# **Wastewater Solutions**



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### SITE - Howgate Restaurant Housing Development

Thank you for your valued enquiry we are pleased to provide details on our **BioDisc Sewage** 

# **Treatment Plant**

# **BASIS OF DESIGN**

We understand that the site consists of a housing development with 1  $\times$  2 bed, 2  $\times$  3 bed, and 5  $\times$  4 bed properties. At peak times the site can be expected to have up to 300 employees over a 24 hour period. The site usage figures are as detailed on the enclosed enquiry sizing sheet. Please check these figures for accuracy and provide details of any changes you envisage.

Source of Waste			Flow: Litres/Day		BOD : Grams/Day		Amm : Grams/Day		
Description			No	Per Head	Total	Per Head	Total	Per Head	Total
A A standard residential		40	150	6000	60	2400	8	320	
Totals		40	6000		2400		320		
Comments:									
1. BOD concentration: 400		mg/l	Ammoniacal Nitrogen Concentration:		53	mg/l			

All the loading figures stated have been taken from the British Water Code of Practice, Flows and Loads 4, which provides figures for use in sizing small waste treatment systems.

EFFLUENT QUALITY		
BOD	20mg/L	
Suspended Solids	30mg/L	
Ammoniacal Nitrogen	10mg/L	
Phosphate	**	

This should be acceptable for discharge to a watercourse, but would however, be subject to formal permit/consent from the Environment Agency. This may require that the above effluent figures be varied.

#### **PROPOSAL**

We would propose the use of our **NF BioDisc** sewage treatment plant which is a single piece unit making it extremely simple to install. The **BioDisc** incorporates our unique Managed Flow System producing an unprecedented level of treatment efficiency.

Proposal detailed below (supply only)

- Treatment system
- · Loss of rotation alarm
- Sample Chamber
- EN Approved Kiosk

PRODUCT	QUANTITY	PRICE PER UNIT
NF BioDisc System 600mm/1100mm Invert (TBC)	1	£15,217.00
Loss of Rotation Alarm	1	Included
Sample Chamber	1	£130.00
EN Approved Kiosk	1	£660.00
Commissioning	1	£499.00

TERMS AND CONDITIONS				
VAT:	Excluded			
Delivery:	Paid to Site UK mainland or dock. Offloading client's responsibility.			
Payment:	By agreement			
Validity:	60 Days			
Delivery Period:	15-17 working days			

**IMPORTANT:** When installing the BioDisc sewage treatment plant you should ensure that all surface water is excluded from the foul drain, as the BioDisc is not designed to accept any form of ground/rain water. This proposal assumes that waste disposal units will not be used.

Please find enclosed our data sheet numbered TDS0002 (BA-BG) or TDS0045 (BH-BL), which must be read

in conjunction with our proposals to ensure that due consideration is given to all relevant design and installation criteria.

Where there is the use of catering facilities on site, the use of a grease trap is essential. This unit is designed to be fitted to the waste line from the kitchen (outside), to separate grease from the wastewater flow, preventing the ingress of fats and grease to the BioDisc. This avoids treating wastewater, which is contaminated with fats, thus minimizing associated maintenance and environmental problems. Please note we do not recommend the use of enzyme type systems for use with treatment plants. The grease separator must be EN1825 approved and sized as per our quotation or we cannot guarantee the process.

### **BENEFITS SUMMARY**

- The latest Klargester Design Development.
- Unique Managed Flow System.
- Low Profile securable covers.
- Low Running costs, we are confident that you will not find a more economical unit...
- For a full technical electrical specification see Installation and Operational Guideline attached.
- The treatment plant requires desludging, the frequency is based on the type of application. For expert guidance contact the undersigned.
- No Compressors or air lift pumps, hence, economical to operate and almost silent in use.
- EN 12566 Approval. Klargester BioDisc was awarded EN12566 performance certification for the BioDisc in July 2005. BioDisc performed extremely well during this exhaustive testing programme and demonstrated its unmatched performance credentials. This new European guideline will become the performance benchmark for treatment plant up to 50 population throughout the European community by 2008. It provides the purchaser with the security of third party performance measurement and means that they do not have to rely solely on the claims of the manufacturer when selecting a product. Purchasers should be looking for EN12566 performance certification as a minimum standard when selecting their new treatment plant.

For more information on the BioDisc Commercial Range please visit <a href="https://youtu.be/GqTPW7OOTsY">https://youtu.be/GqTPW7OOTsY</a> or our website www.klargester.com

Please note all Klargester products are made under a BS EN ISO 9001:2008 Quality Management Accreditation.

We trust our comments and enclosures are sufficient for your immediate needs. Please do not hesitate to contact us if we can be of any further assistance.

Yours faithfully

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