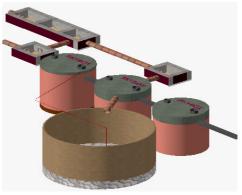
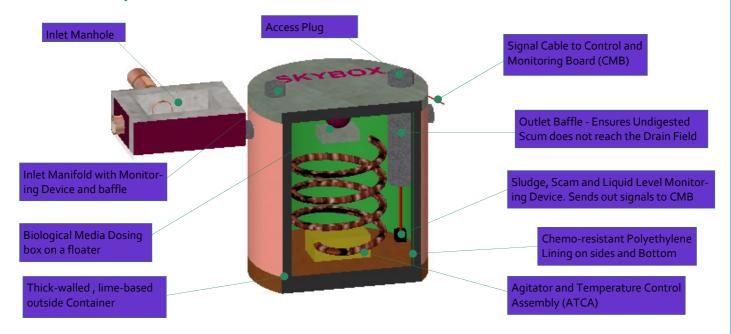
# SKYBOX<sup>®</sup> biodigester

Skybox<sup>™</sup> is the newest, most elaborate technology in on-site sewer treatment as presented by Fluidsystems Engineering Ltd. Skybox<sup>™</sup> units are prefabricated offsite and combines the use of biotechnology and telemetry to handle the current challenges in solid waste management. The biodigester units utilize anaerobic bacteria and other biological media to break down solid wastes into liquid for further treatment and safe disposal or re-use. Sensors are fitted in the units that transmit data for monitoring and control purposes which make our systems much more reliable than existing ones and less likely to fail at any moment.



HOTLINE: 0732071210

# Features of Skybox<sup>™</sup>:



- ⇒ Grease trap to separate oils and greases in grey water and channel the effluent into the Skybox<sup>™</sup> or direct to filtration and/or drain-field
- ⇒ Treatment chambers made of Chemo-resistant polyethylene to ensure adequate waterproofing, long life and best operating temperatures for biological digestion of sewer
- $\Rightarrow\,$  Strong, Thick-walled outer lining that guards against soil and any other external pressure
- ⇒ Sludge, Scam and Liquid level monitoring device that senses and reports the condition of the unit for monitoring and control purposes
- ⇒ Agitator and Temperature Control mechanism that enables control of the conditions for bio-digestion whenever need arises.
- $\Rightarrow$  Means of monitoring and reporting quantity and quality of influent for control purposes.
- ⇒ Gravity Sand Filters for treatment of Primary Effluent
- $\Rightarrow\,$  Chemical Treatment Unit in cases where effluent is to be recycled or disposed of in storm drains.
- $\Rightarrow$  A specially designed drain-field with devices for monitoring performance and various discharge options.



FLUIDSYSTEMS ENGINEERING LTD

A member of Skyline Group P.O Box 103979-00101, Nairobi \* Phone: 020-2037630, 0734619441 E-mail: fluidsystems@skylinebuilders.co.ke Web: http://www.fluidsystems.skylinebuilders.co.ke

## Challenges in existing Systems:

There are several entities in Kenya dealing in Biodigesters and Septic Tanks. However, there has been a myriad challenges with existing ones as concerns life-time of the drain-field especially in poor drainage soils, quality of effluent where there is need for waste water recycling, failure of biological media to adequately break-down solid matter, surrounding ground water finding their way into the biodigester, high costs especially to small residences, etc.

### How does Skybox address these challenges?

- Skybox capitalizes on proper drain-field design to reduce overall system size required thus utilizing as low as 500L units for smaller applications which cost as low as Ksh. 60,000/=
- Parameters within the biodigester unit is very much controlled to ensure that final effluent has very minimal suspended solids to so as to elongate the lifespan of the drain-field and hence the entire system
- Electronic measurement and reporting of the happenings within the entire system enables **Skybox** to function without any hitches. In deed , we offer remote monitoring activities within the units to ensure trouble-free operation of the systems. We do this even on existing systems by introducing telemetric devices in them.



	Product Range				
Number of Chambers	Total Chamber Capacity (L)	Drain Field (Yes / No)	Grease Trap (Yes / No)	Agitator & Temp. Control Unit	Sludge, Scam and Liquid Moni- toring Device
2	500	NO	NO	NO	NO
2	500	YES	YES	NO	NO
2	1,000	YES	YES	NO	NO
3	3,000	YES	YES	NO	NO
3	5,000	YES	YES	NO	NO
2	500	YES	YES	YES	YES
2	500	YES	YES	YES	YES
2	1,000	YES	YES	YES	YES
3	3,000	YES	YES	YES	YES
3	5,000	YES	YES	YES	YES
	Chambers 2 2 2 2 2 2 2 3 3 2 3 3 3 3 3 3 3 2 2 2 2 3<	Number of Chambers Total Chamber Capacity (L)   2 500   2 500   2 500   2 1,000   3 3,000   3 5,000   2 500   2 500   2 500   2 500   2 500   2 500   2 500   2 1,000   3 3,000	Number of ChambersTotal Chamber Capacity (L)Drain Field (Yes / No)2500NO2500YES21,000YES33,000YES35,000YES2500YES2500YES2500YES2500YES21,000YES33,000YES2500YES33,000YES	Number of ChambersTotal Chamber Capacity (L)Drain Field (Yes / No)Grease Trap (Yes / No)2500NONO2500YESYES21,000YESYES33,000YESYES35,000YESYES2500YESYES2500YESYES2500YESYES2500YESYES2500YESYES2500YESYES33,000YESYES33,000YESYES33,000YESYES	Number of ChambersTotal Chamber Capacity (L)Drain Field (Yes / No)Grease Trap (Yes / No)Agitator & Temp. Control Unit2500NONONO2500YESYESNO21,000YESYESNO33,000YESYESNO35,000YESYESNO2500YESYESNO33,000YESYESNO2500YESYESYES2500YESYESYES2500YESYESYES21,000YESYESYES33,000YESYESYES33,000YESYESYES

#### • We have a ready, rapid response unit for any emergencies that may arise with these units.

#### NOTE:

- The list above is for our standard products. For special needs, we carry out a design and fabricate as per customer's needs.
- You can take a multiple of any of the units above to achieve capacities not listed in the table.
- Fluidsystems Engineering Ltd reserves the right to change any of it's product's specification or price without prior notice to the customers/ Please make enquiries before ordering.
- We supply, install and maintenance (including real-time remote monitoring) services **Skybox**<sup>™</sup>. We also modify, repair, improve and monitor existing systems at affordable costs.
- Skybox<sup>™</sup> is a trademark of Fluidsystems Engineering Ltd.
- Fluidsystems offers other solid waste management products and services



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