Toza India Pvt Enterprise

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Govt Trademark Registration - 4707489 Govt MSME Registration - 738986642222 GST No – 05AIDPG0586N1Z7

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EnzimoX BioDigester and BioFurnaX i-SeptoSys, a BioDigester That Eats Sewer biologically™

• (Fitted with RetainSol, AutoMesh Technology, BioTube, O'Letfil and Enzymes)

Details for Sewer Management System. Rates quoted are for various models. Please choose as per your need or ask our expert advice.



Prepared by: - Er Pravesh Gupta, Project Director)

General Details

BioFurnaX/EnzimoX Digester

Soakage BioPit+
Rainwater Harvesting
Sewer Treatment Plant
Effluent Treatment Plant

We are pleased to introduce our Pre-casted **EnzimoX BioDigester™** and BioFurnaX i-SeptoSys, a Sewer BioDigester that Eats Sewer Biologically™; generated by hotels, factories, residential or commercial buildings. We are innovative organization working in environment construction field and would like to send information related to effective management of effluent generated by buildings. Requested to note rates and other relevant details mentioned in this document. These rates are valid for three months from today. Visit at www.tozaindia.com

Dear Sir / Ma'am,

Please note that Toza India is an Environment Protection and construction Company; working in field of:-

- A) Sewer Treatment –for Industry / Commercial building / Hotel / Resort etc
- B) Effluent Treatment for any process system like factories
- C) BioGas Plants for residential or commercial buildings
- **D)** Bore well and Recharge Dry or existing bore well recharging system
- **E)** Rainwater Harvesting for reuse, collection or ground recharge system
- **F)** Water proofing sector since last 20 years in Dehradun (Uttarakhand).

We would like to present precise details for effective management of sewer Effluent coming from residential or commercial building. We install Sewer Management System including EnzimoX BioDigester and BioFurnaX i-SeptoSys, a Sewer BioDigester that Eats Sewer Biologically™ for the same.

This document consist the details, working methodology, comparison, scope of work and other details herewith for your information and reference. The rates shall be sent separately, if needed. Our proposal is based on using the latest innovation, widely accepted and most preferred Technology which offers compact as well as easy to operate and maintain process. **Toza India** is proud to present to you BioDigester / BioFurnaX i-SeptoSys, a Sewer BioDigester that Eats Sewer Biologically™ specifically designed to cater to sewage management; generated by domestic and commercial buildings as well, It is quick to install and reliable in operation. Some of the special features of BioFurnaX i-SeptoSys™ as follows:-

- 1 All components are Pre-casted so takes little time to install.
- 2 Based on up flow Anaerobic Microorganism.
- 3 Solid Retaining arrangement has been attached.
- 4 It's not Simple Septic Tank but BioFurnaX i-SeptoSys, a BioDigester that Eats Sewer Biologically™

Our focus is to supply trouble free systems which are compact in design and are energy efficient. We are known in the industry for **reliable engineering** as well as **strong customer support** which is reflected by increasing number of repeat business which we are getting from our existing customers. A brief list of satisfied customers for STP / ETP / Septic Tank is published below for your kind information:-

Uttarakhand Pay Jal Nigam, Superia housing Project, Resort at Bairat Khai, Hotel Paras Grand — ISBT, Orchid Green Residential Society, Trafalgar Residential society, Cross Road Mall, H I T — Maal Devta, Indian Institute of Petroleum (through sub-contractor), U P Rajkiya Nirman Nigam, NBCC — Garhi Cant (through their sub-contractor), , Osho Resorts, Indian Public School, Pashupati Real Estate, Steel Factory — Sikundrabad, Bansal Associates — Delhi, Hotel Madhuban, Hotel, Him Place, Uttaranchal. College of Technology and Biomedical, Bajaj Hostel, Hope Town School, Asian School — Dehradun, Quantum University — Roorkee, Swift Life Science Pvt Ltd, Eminent Heights Housing Project, S D Constructions — Delhi, Tibetian Village School — Selaqui, Suja, Chauntra (HP), Sahani Builders. Khanna Builders - Dehradun and thousands of home owners. List is increasing

Working Methodology of BioFurnaX i-SeptoSys™ / EnzimoX BioDigester™: -

BioFurnaX i-SeptoSys, a Sewer BioDigester that Eats Sewer Biologically™ is a nonelectric sewer management system. It is an advanced Readymade Latrine Tank that has multi chambers including solid particle stopper, filtration device (in advance system only); however our other designs like SeptiX BioPlus has one and half or two chambers. In case of BioFurnaX i-SeptoSys or BioFurnaX i-SeptoSys Advance; the first chamber acts as sewer settling tank, second one acts as ZerOxy AutoMesh Treatment Tank, Third chamber or final chamber act as clarifier and filtration chamber.

Numbers of chambers depend on different type of models. There is an eco-T filtration system (in advance designs), ECOintesta fitted inside in case of Soakage BioPit, RetainSol Device Inside to retain solid particle in chambers for better effluent quality. About working methodology it was postulated by Innovator that the human excreta entering in settling tank from toilets; floats over the water surface at first because of oil and fat mixed within and gradually it tries to settle down towards bottom of first settling chamber. Here excreta decomposes by anaerobic bacteria naturally; however we do seeding (adding bacteria externally to enhance this process) for enhancing bacterial decomposition process.

In this first settling tank the existing human excreta is topped by fresh excreta intake entering every day from source. This continuously accumulating night soil inside first tank start rotting / putrefying by anaerobic bacteria present at bottom of chamber. The gas produced by bacterial action and entrapped in the particles of human excreta reduces their size, divided into small particles and weight and force these broken solids to rise up throughout the water till the pressure of gas entrapped in the particle is equal to the pressure of water (Hydrostatic Pressure). But due to momentum of moving particle are rises slightly above and the pressure of gas become more than hydrostatic pressure, thereby resulting in the exploding of particles into smaller once. These smaller particles being heavier than water, again moving down and try to settle at bottom and further decomposes by anaerobic bacteria present in sewer.

It's a continuous process and goes on till almost entire night soils gets decomposed. These are three zones in settling tank, the top is scum layer contains fresh excreta with oil and fat, at bottom there is sludge layer where anaerobic bacteria is present and middle is clear zone. The treated effluent as per above process from this clear zone are syphoned by gravity to next chamber called ZerOxy AutoMesh Treatment Tank. Special piping arrangement inside this second tank allows partially treated sewer to form sludge mesh automatically to treat effluent further and solids remain in the chamber. Further treated effluent by up flow anaerobic sludge blanket method syphoned to the third tank for making it clearer. The filtration tank filters effluent by enhancing travel path of effluent by installing interconnecting pipes and other devices in such a fashion that it produces clearer effluent compare to conventional Septic Tank. The gas so produces are allowed to escape through vent pipes. The effluent coming from filtration tank is quite clean with very low turbidity and foul smell, however to meet the pollution board standard we need to install secondary treatment system like soakage BioPit or STP etc to further treat this effluent. This final effluent may be directed to sewer lines, Green ecoSTP - The Green Sewer Treatment Plant for secondary treatment where media and plants do the job or multi soak pit system for better results or can be treated aerobically for drain discharge purpose.

Scope of work

For BioFurnaX / EnzimoX Sewer BioDigester™:- Excavation, Supply and Installation of Reinforced Cement Concrete Precasted BioFurnaX / BioDigester in parts with 4" diameter, 6" long inlet / outlet connection and round shape RCC covers are in our scope of work. Any other work like Plumbing, Flooring, extra soil removal, beautification, levelling and cleaning of site, manhole chambers and soak pits are excluded. Water filling inside tank for hydro testing shall be arranged by customer however hydro testing shall be in our scope of work. Rates are for normal type of soil; in case of high water table water sucking arrangement with tanker shall be arranged by client.

In case of rocky soil rates shall be quoted extra. Before signing agreement; it has been made clear to customer / client that AutoClean warrantee is valid if BioFurnaX i-SeptoSys / BioDigester is adopted by client with accessories and other houses hold waste water like bathroom etc passed through filtration tank and outlet connection of this tank is connected to running sewer drain. If drain is absent or local authorities don't permit then multi soak well system shall be constructed and used alternatively and separate drainage system shall be developed for other household like bathroom / kitchen water. The inlet / centre / outlet path of septic tank should be kept clear always by customer/user to achieve its full effectiveness. In this case we recommend multi soakage pits.

About Toza India: As being an Environmental Protection Company working in the field of Readymade Septic Tank, Soak Pit Construction, BioDigester installation, Rainwater Harvesting and electro-Mechanical Sewer Treatment Plant design, installation since 2000 in Dehradun, we express our concern to solve the challenge effectively and in systematic fashion to save environment by adopting **BioFurnaX Sewer management** System. Here in this document we have furnished the details of BioFurnaX / EnzimoX Sewer BioDigester and we have other low cost models too. You need to choose as per your requirement or may ask our team of expert to choose the right design for your project.

Comparison between Conventional or Readymade Septic Tank and BioFurnaX i-SeptoSys:-

| Conventional or Readymade Septic Tank | EnzimoX BioDigester or BioFurnaX i-SeptoSys | |
|---|--|--|
| 1 – Has 01 to 03 outer compartments | Has settling, treatment & filtration chambers | |
| 2 – Cost is high compare to benefits | Value for money | |
| 3 – Re-cleaning is compulsory | No need to clean if used with dual soak system | |
| 4 – Design and developed before 1970 | Based on latest technology | |
| 5 – Particle may travel to next chamber | Solid retaining device is attached | |
| 6 – No filtration arrangement is inside | Has eco-T filtration & BioTube arrangement | |
| 7 – Up flow blanket Technology is lacking | It has ZerOxy AutoMesh Technology | |
| 8 – No Calculation for Retention time | Well designed and Enzymes seeded | |
| 9 – Outlet connection is simple | Modification has been done for betterment | |

Payment Terms: -

- A 60% advance along with work order
- B 30% after material at site
- C 10% after completion of Project

Regards

Er Pravesh Gupta @ Dehradun Project Director | Sanitation Expert

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Notes:-

- **A** Rates shall be quoted separately.
- **B** We have different models as per requirement.
- **C** GST shall be charges @ 18% as per Govt laws.

Rainwater Harvesting | Sewer Treatment Plant | BioDigester Sewer System | Soakage BioPit

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