

OUR VALUABLE CUSTOMERS

Government Sector



Real Estate



Industrial Sector



**CONVERTING
WASTE WATER
INTO REUSABLE WATER
TO SAVE THE ENVIRONMENT**

PACKAGED SEWAGE TREATMENT PLANTS

World over there is now recognition that decentralized wastewater treatment is a better and efficient alternative to a centralized Wastewater treatment system from the angle of investment and energy consumption. There are many areas within cities, towns and villages that are impossible to cover through centralized treatment system. It has, therefore, become imperative to employ decentralized treatment systems that take care of proper treatment and disposal of sewage.











In line with our innovative approach, we now bring to you Packaged Sewage Treatment Plants that are compact and can be used in a decentralized manner anywhere for water treatment. For delivering the best solution we have implemented technology which is an advanced version of MBBR.

Sintex Packaged Sewage Treatment Plants are based on anaerobic and aerobic process and are designed to have dual functions for efficient treatment of domestic wastewater from toilets, bathrooms, kitchens and washing area.

AVAILABLE IN TWO VARIANTS

- 1 Series NBF is designed for medium and large applications like High-rise Residential Apartments, Commercial Complexes, Super Mall, Hospitals, Hostels, Universities, Schools, Large Office Buildings, Factories, Institutions etc.
- 2 Series PWTS-STBF is made for domestic and commercial applications such as Individual Houses, Low-rise Residential Apartments, Villas, Bungalows, Row Houses, Dhabas, Restaurants, Canteens, Offices, Small Factories, etc.

FEATURES AND BENEFITS

| FEATURE | BENEFIT |
|---|--|
|  100% ECO-FRIENDLY | Sintex STPs keep the soil safe from contamination and improves its quality as it reduces BOD by between 90-95% |
|  LEAK PROOF | FRP/Roto PSTP tank ensures no corrosion and leakage unlike an RCC or Metal Tank |
|  LIGHT WEIGHT | FRP/ ROTO PSTP are much lighter compared to metal which makes them easy to transport, unload and install |
|  ZERO FOOTPRINT | FRP/ ROTO PSTP are installed 100% under the ground making the land available for other uses thus ensuring zero footprint |
|  RUST PROOF | The material used for making the PSTP is fibre reinforced plastic & roto moulded plastic which will never get rusted. |
|  DURABLE | As these PSTPs are rust proof and leak proof hence they have a life span exceeding 50 years |
|  EASY TO INSTALL | As these PSTPs are compact and light in weight making them easy to install. |
|  COST-EFFECTIVE | Sintex STP operations and maintenance cost are much lower compared to conventional STP as they do not need specialized and skilled manpower. |
|  ENERGY-EFFICIENT | Energy consumption of Sintex STPs is atleast 50% less than conventional STPs |
|  EASY TO MAINTAIN | Sintex STPs need sludge handling once in 12-18 months compared to conventional STPs which require the same every 10-15 days |

OPERATION PRINCIPLE

1 Solid Separation Zone (Anaerobic Zone)

First stage transforms the influent solids to settled solids while allowing scum to float on the surface. It is a primary sedimentation zone in which settled sludge is stabilized by anaerobic digestion. The treatment efficiency of the chamber is in the range of 30% BOD removal.

2 Aeration Zone (Aerobic Zone)

Second stage is the aerobic zone along with plastic media inside the tank which in turn increases the surface area and retains micro-organism long enough to digest the organic substance. Clear water overflows to the next treatment chamber. Air is provided through blowers and higher contact time with the Bio-film on the plastic media facilitates efficient digestion. BOD removal is around 60%.

3 Final Sedimentation Zone

Final stage involves sedimentation where organic waste are settles in the sedimentation zone. The settled waste in the bottom is pumped back to the solid separation zone as a return sludge having active biomass (MLSS) to increase the efficiency of the system. The output from this zone is effluent that meets the stipulated PCB's Standards.

4 Optional

For more Stringent effluent parameter, we also offer Tertiary Treatment Plant (TTP) addition to the system which does the job of filtration that further improves effluent.

NBF SERIES
FOR MEDIUM AND LARGE APPLICATIONS

APPLICATIONS AND USES

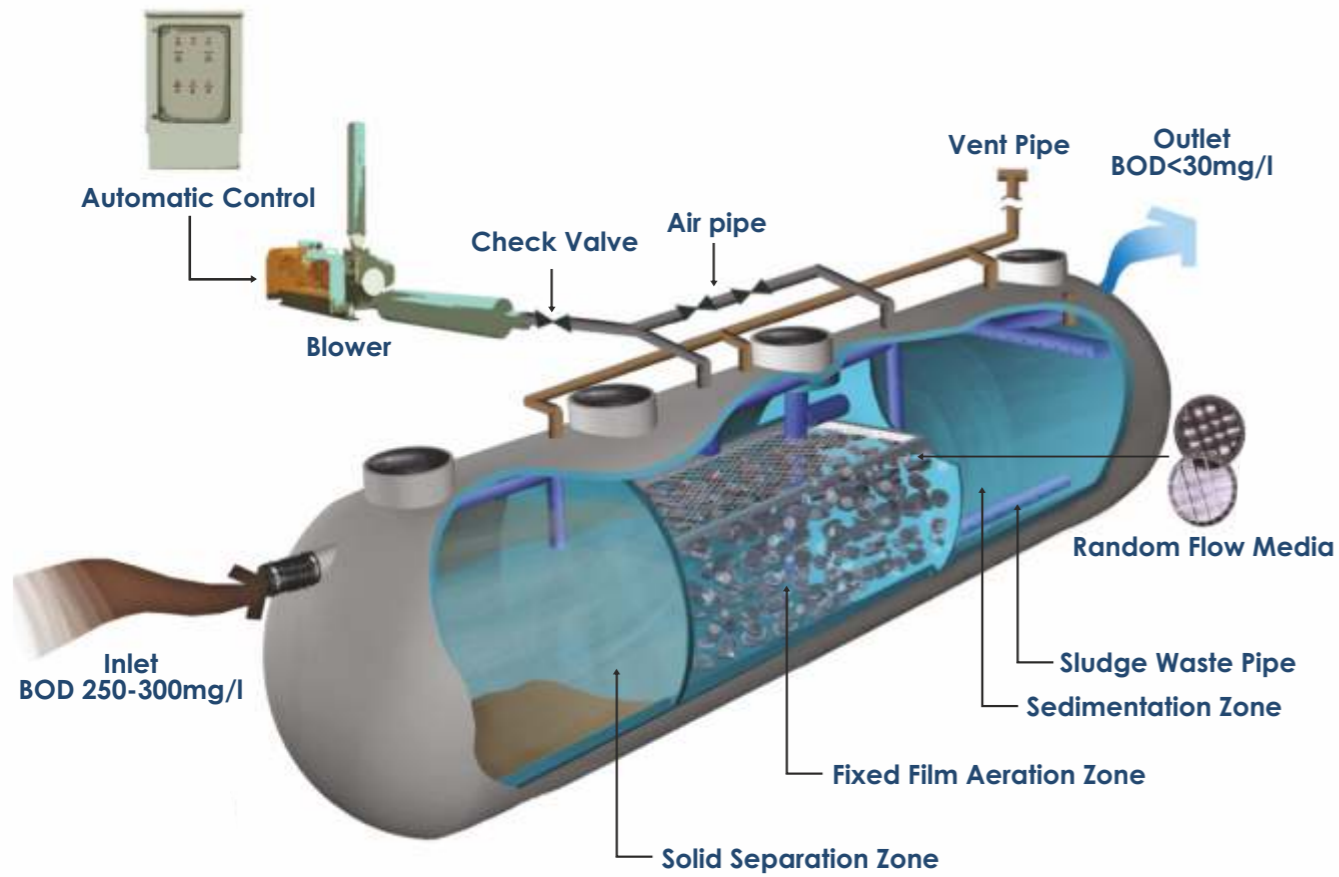
- Residential and Commercial Complexes
- Public Gardens and National Parks
- Hotels And Resorts
- Restaurants
- Industries
- Institutions
- Temples
- Government Offices
- Labour Quarters
- Townships
- Hostels
- Hospitals



RANGE & SPECIFICATIONS

| SPECIFICATION | MODEL | | | | | | | | | | | | | | | | |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| | NBF-10 | NBF-15 | NBF-20 | NBF-25 | NBF-30 | NBF-35 | NBF-40 | NBF-45 | NBF-50 | NBF-60 | NBF-70 | NBF-80 | NBF-90 | NBF-100 | NBF-120 | NBF-150 | NBF-200 |
| Flow rate per day(KLD) | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50 | 60 | 70 | 80 | 90 | 100 | 120 | 150 | 200 |
| Residential (150 LPCD) | 67 | 100 | 133 | 167 | 200 | 223 | 267 | 300 | 333 | 400 | 467 | 533 | 600 | 667 | 800 | 1000 | 1300 |
| Office (80 LPCD) | 125 | 187 | 250 | 312 | 375 | 437 | 500 | 562 | 625 | 750 | 875 | 1000 | 1125 | 1250 | 1500 | 1875 | 2500 |
| Toilet (50 LPCD) | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2400 | 3000 | 4000 |
| Educational Institutions (80 LPCD) | 125 | 187 | 250 | 312 | 375 | 437 | 500 | 562 | 625 | 750 | 875 | 1000 | 1125 | 1250 | 1500 | 1875 | 2500 |

*LPCD: Litres per capita per day
*KLD: Kilo litres per day



Step 1

Dig the cavity of the required size and carefully place the tank in it



Step 2

Fill the area surrounding the tank with Gravel



Step 3

Now cover the entire area with soil and you can use the space for any other purposes thus leaving a Zero footprint

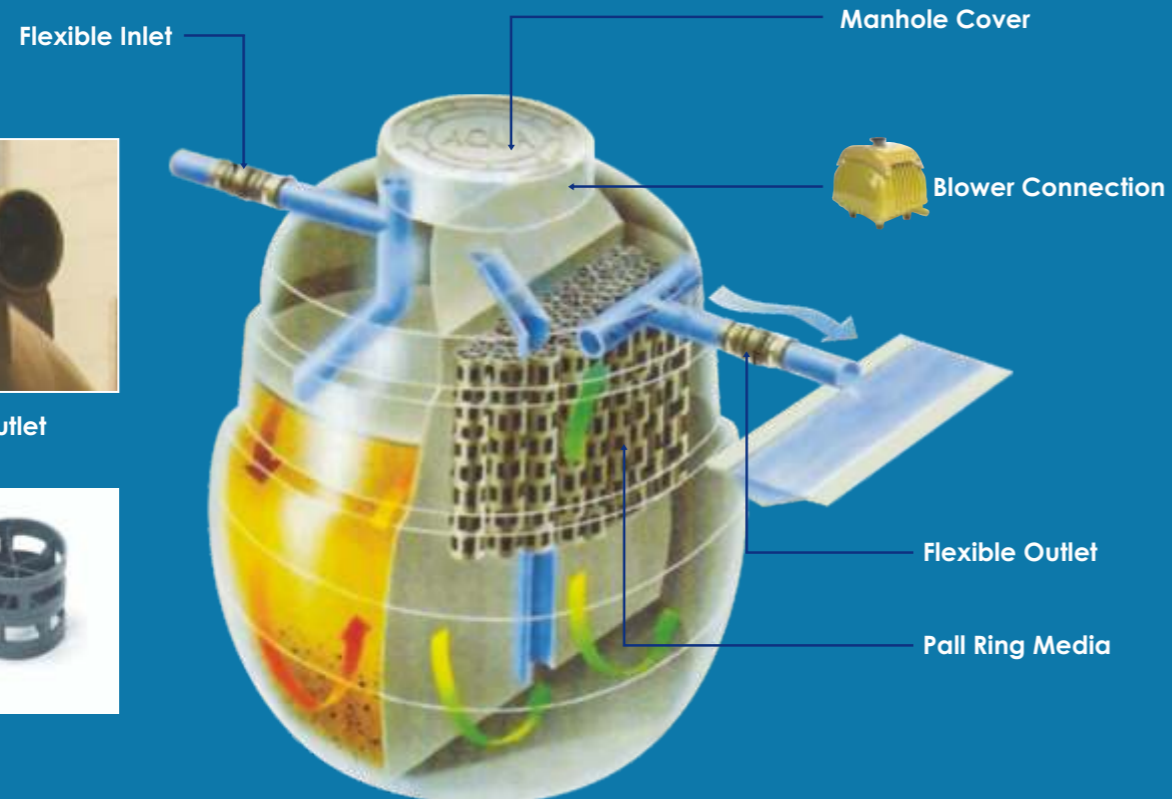
AEROBIC PWTS-STBF SERIES
FOR DOMESTIC AND SEMI COMMERCIAL PLACES



RANGE & SPECIFICATIONS

| Model | Number of Users | | | | | | Dimension | | | |
|-------------------|------------------------|------------------------|------------------|------------------------------------|------------------|-------------------|---------------|-------------|-----------------------|-----------|
| | Flow rate per day(KLD) | Residential (150 LPCD) | Office (80 LPCD) | Educational Institutions (80 LPCD) | Toilet (50 LPCD) | Canteen (20 LPCD) | Diameter (mm) | Height (mm) | Inlet/Outlet Pipe(mm) | Vent (mm) |
| PWTS-STBF-0120-01 | 1.2 | 6 | 8 | 8 | 16 | 30 | 1300 | 1400 | 100 | 50 |
| PWTS-STBF-0160-01 | 1.6 | 10 | 13 | 13 | 22 | 50 | 1440 | 1560 | 100 | 50 |
| PWTS-STBF-0180-01 | 1.8 | 12 | 15 | 15 | 24 | 60 | 1490 | 1615 | 100 | 50 |
| PWTS-STBF-0200-01 | 2 | 14 | 18 | 18 | 28 | 70 | 1540 | 1640 | 100 | 50 |
| PWTS-STBF-0300-01 | 3 | 16 | 23 | 23 | 46 | 80 | 1830 | 1880 | 100 | 50 |
| PWTS-STBF-0400-01 | 4 | 20 | 26 | 26 | 52 | 100 | 1900 | 2020 | 100 | 50 |
| PWTS-STBF-0500-01 | 5 | 24 | 33 | 33 | 66 | 120 | 1970 | 2280 | 100 | 50 |
| PWTS-STBF-0600-01 | 6 | 32 | 40 | 40 | 80 | 160 | 2070 | 2330 | 100 | 50 |

*LPCD: Litres per capita per day
*KLD: Kilo litres per day



Flexible - Inlet & Outlet



Pall Ring Media



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