

Decantech

Decantech SBR
SBR Technology
For Sewage Treatment
Plants



By
Parchure Engineers Pvt. Ltd.
Pune

Decantech SBR is the latest offering by Parchure Engineers Pvt. Limited. It is based on the Sequential Batch Reactor Technology which has been proven over time to be one of the best technology for modern sewage treatment plants the world over.

Parchure Engineers Pvt. Limited, better known as PEPL is a professionally run Environmental Engineering manufacturing Pollution Control Equipment , Process Equipment for Sewage Treatment Plants and Turn Key Projects in the water and waste water treatment sector and is also headquartered in Pune India.

At the heart of the Decantech SBR is the patent pending DECANTECH DECANter which are highly durable , reliable & extremely energy efficient solution to the decanting needs of the sewage treatment plant based on SBR Technology.

Decantech SBR is a total solution provider for

SBR Process Design

SBR Basin Design

SCADA—PLC Panels for SBR Control

Decantech Decanter Supply

Diffusers & Aeration System Supply

Pumping , Dosing and Process Control Equipment Manufacturing Services.

Supply of Pollution Control Equipment like

Isolation Gates

Mechanical Screens

Grit Separator Mechanisms

Decanters

Dosing Agitators

About SBR Technology

A SBR or Sequential Batch Reactor Technology based STP comprises mainly of the following steps :-

Stage One : PRELIMINARY TREATMENT

Preliminary Treatment of Sewage like screening , de-gritting and removal of grit and solid waste from the sewage

Stage Two : DECANTECH BASIN

*Here waste water after primary treatment enters into specially designed DECANTECH BASINS which consist of
MOTORISED GATES FOR INFLUENT CONTROL
DECANTECH DECANTERS
DIFFUSER GRIT AND PIPING FOR AERATION SYSTEM
RAS & VAS PUMPS FOR CONTROL OF SLUDGE*

Stage Three : POST TREATMENT

This stage consist of Dosing and other processes for further treatment of decanted waste water.

SBR Technology has the following benefits over conventional Treatment Technologies

- 1. 100 % Treatment of Water*
- 2. Excellent outlet parameter quality*
 - BOD & COD <5 mg/l*
 - TSS & pH control*
 - Low Power Consumption*
- 3. Batch Reactor Technology and can be controlled using SCADA Systems hence high level of automation.*

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Decantech SBR Technology has the following benefits over conventional Treatment Technologies

- 1. 100 % Treatment of Water*
- 2. Excellent outlet parameter quality*
 - BOD & TSS <5 & COD <50*
 - NH₄-N < 2 & P<1*
 - Low Power Consumption*
- 3. Batch Reactor Technology and can be controlled using SCADA Systems hence high level of automation.*

About DECANTECH SBR ...

A Decantech SBR Cycle Consists of the following cycles

1. STEP ONE : Raw waste water is filled into the DECANTECH SBR Basin using Influent isolation motorized gates—also manufactured by PEPL Decantech. In this step aeration is done simultaneously for a specific predetermined period of time along with biomass / sludge.

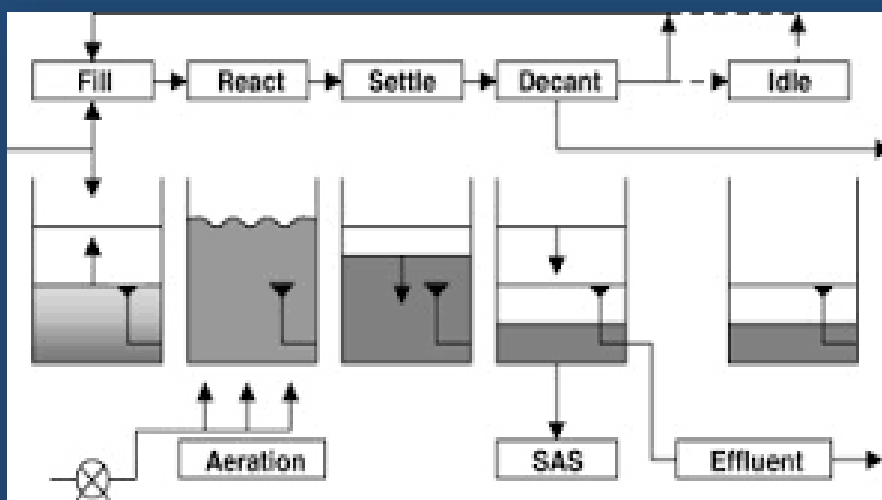
This step is also called AERATED FILL STAGE

2. STEP TWO : After aerated fill and aeration cycle the water is allowed to settle under protected and perfect settling conditions .

Also called as AERATION & SETTLE PHASE

3. STEP THREE : In this stage the settled supernatant is slowly removed without disturbing the settled mass using DECANTECH DECANTERS. Solids are removed /wasted from the tank.

This process continues in multiple cycles.



Decantech

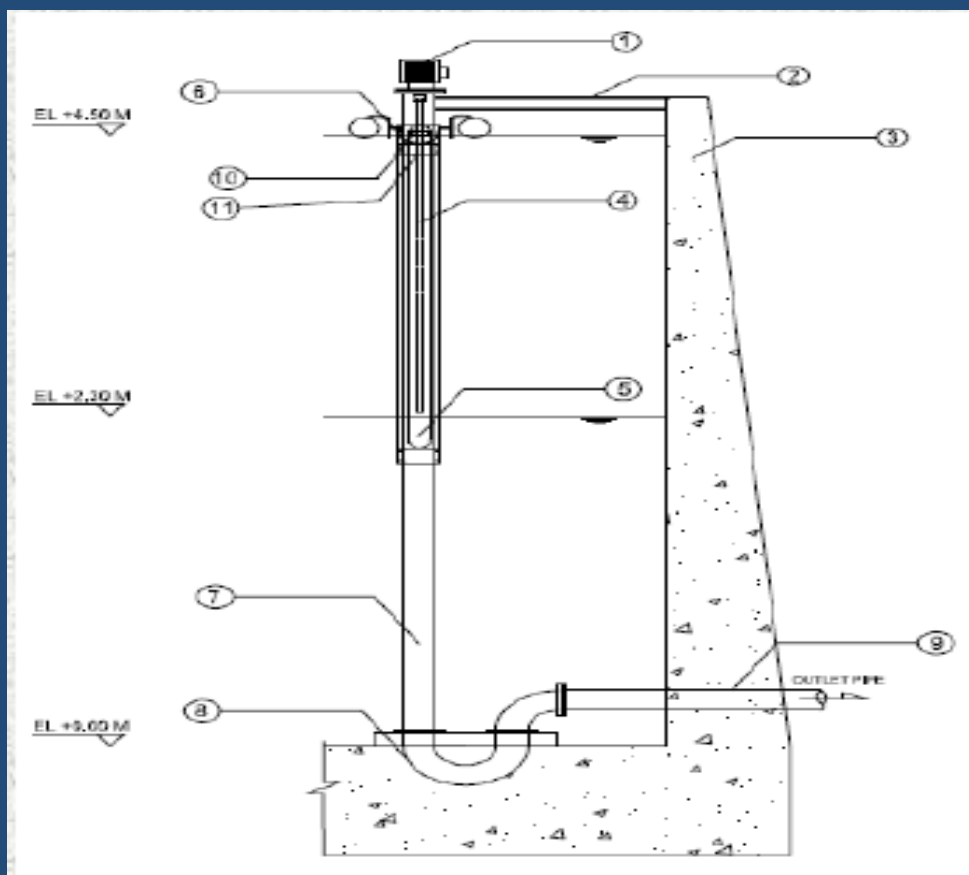
Decantech SBR Components

1. Decantech Decanter in AISI 316 Stainless Steel
2. Decanter Components like Decantech SEAL , Drive Head , Collection Trough , Scum Guard , Duck Foot Bend etc. in high quality material.
3. Tubular Diffusers
4. Decantech-Logic PLC for complete control

Decantech SBR Decanter Mechanism

The clean supernatant is removed from the basin using a Decantech Decanter assembly complete in stainless steel construction. During decanting there is no inflow to the basin. The moving weir DECANTER is motor driven and travels slowly from its “park” position to a designated bottom water level. Once the Decanting phase sets in, the decanter automatically lowers to the required bottom level.

Variable frequency drives are provided to control the rate of movement of the Decanters. After the required level of supernatant is removed the Decanter is returned to its “park” position through reversal of the drive. The basin is now ready for the next cycle to begin.



Decantech SBR Technology - Models & Range Available

Model	Plant Capacity
DT 100	Upto 0.5 MLD Per Basin
DT 150	Upto 1.25 MLD Per Basin
DT 200	Upto 2.5 MLD Per Basin
DT 300	Upto 5 MLD Per Basin
DT 400	Upto 10 MLD Per Basin
DT 500	Upto 12.5 MLD Per Basin

We provide Decantech SBR Systems for plants upto 12.5 MLD Per Basin , hence for 4 Basin Systems we can provide for a plant of 50 MLD Capacity.

Please contact us at

DECANTECH SBR TECHNOLOGIES

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Decantech - The Perfect SBR.

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