

BIOLOGICAL TREATMENT

► SBR Decanter



- Capacity- As per requirement
- Size- As per design
- Type- Motorized/floating
- No. of decanter per chamber- 01
- Material of construction- SS304, SS316



- Capacity- As per requirement
- Size- As per design
- Material of construction- SS304, SS316

► Jet Mixer



BIOLOGICAL TREATMENT

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► Surface Aerator

- Capacity- As per requirement
- Type- Fixed / floating
- Material - MSEP / SS304, SS316



- High oxygen transfer efficiency: Particularly effective in large water bodies.
- Operational versatility: Suitable for diverse applications, including varying water levels and quality.
- Improved water quality: Prevent stratification and anaerobic conditions, reducing odors and promoting healthy ecosystems.

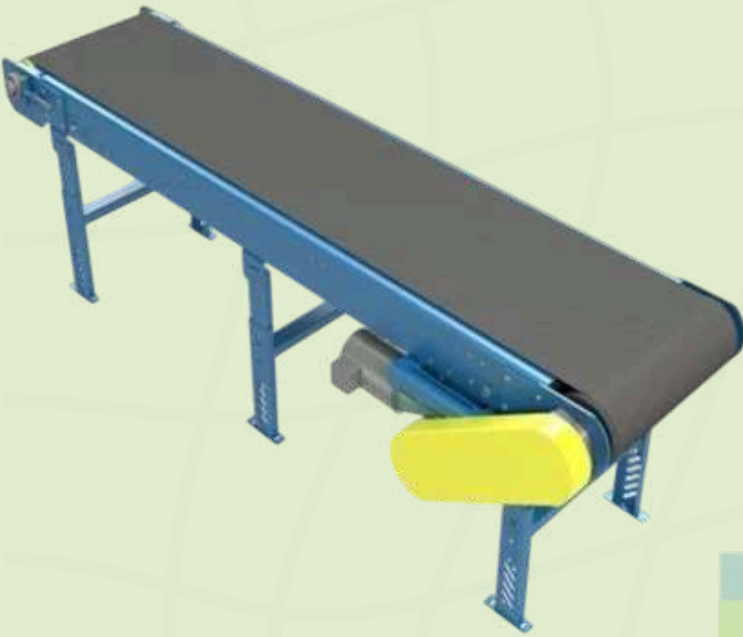
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CONVEYOR



► Flat Belt Conveyor

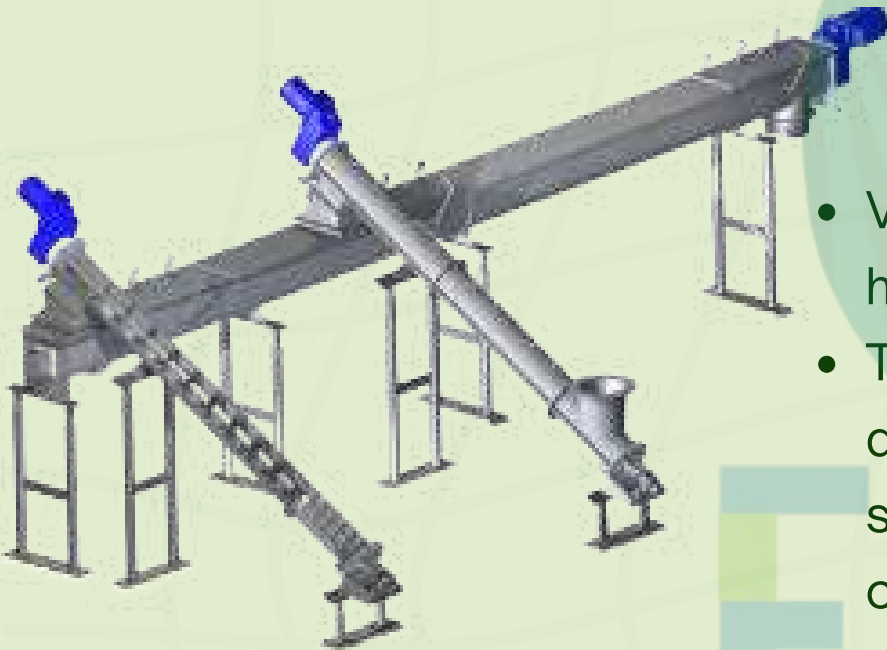
- Very suitable for long distance transportation of screening.
- Installed at the discharge points of the screens & screening conveyed to the discharge pit or screw compactor.
- Used in water and wastewater treatment plants to transport materials like screenings, sludge, and other solids.



- Capacity- As per requirement
- Overall length-As per design
- Width-As per design
- Material of construction-SS304 , SS316

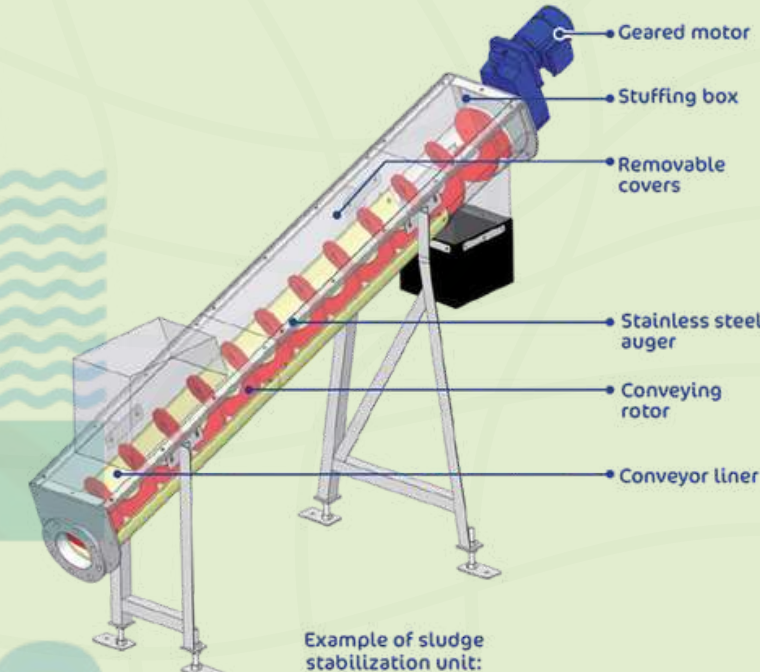
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► Screw Conveyor



- Used in water and wastewater treatment plants to transport materials like screenings, sludge, and other solids.

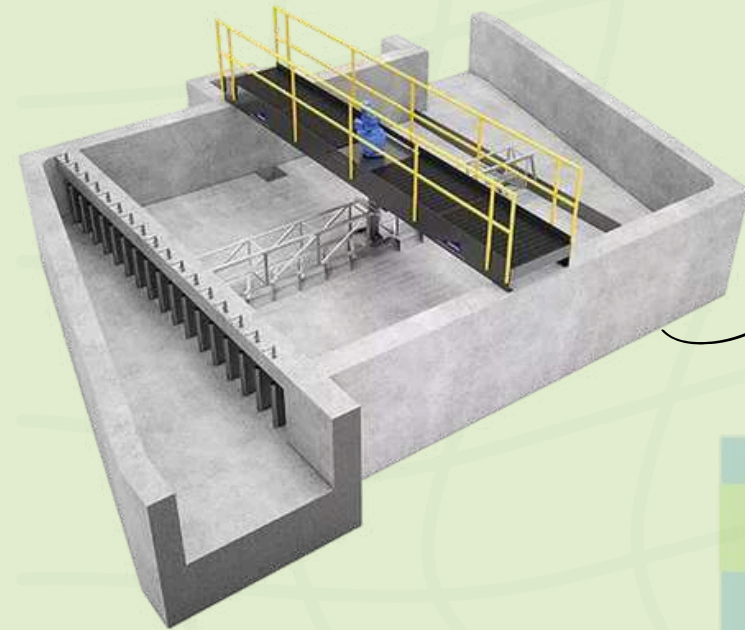
- Very suitable for non hazardous screening.
- This is installed at the discharge points of the screens and screening conveyed to the discharge pit or screw compactor.



- Capacity- As per requirement
- Screw diameter-As per design
- Overall length-As per design
- Inclination angle-As per design
- Material of construction - SS304, SS316

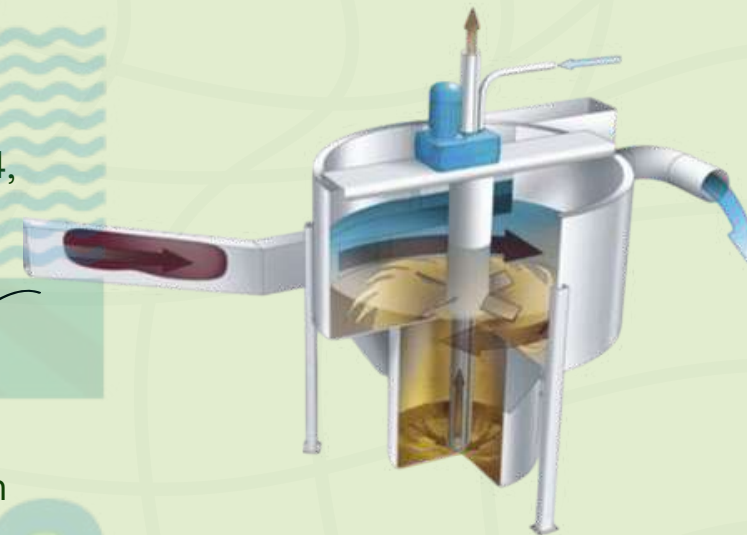
DE-GRITTING

Grit Detritor



- Scraper shape- As per requirement (di/tri arm)
- Size- As per chamber
- Grit separation: $\geq 90\%$ for particles up to 200 μm
- Screw classifier-shafted/shaftless
- Trough Protection - HDPE/UHMWPE
- Material of construction-MSEP/SS304, SS316

Vortex Type Grit Chamber



- Capacity-As per requirement
- Height- As per design
- Upper chamber diameter-As per design
- Lower hopper diameter-As per design
- Detention time- 20-30 Second
- Removal efficiency- 85 to 95 %
- Material of construction-MSEP / SS304, SS316

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DE-GRITTING

► Grit Washer

- Capacity-As required
- Screw dia-As per design
- Shaft-shafted/ shaftless
- Drive -As per requirement
- Grit separation $\geq 90\%$ upto 200 μ m
- Trough Protection-HDPE/ UHMWPE
- Material of construction- MSEP / SS304, SS316



► Mini Unit

► Combo Unit

~Whirling motion created by blower separates grit from organic material using the principle of gravity.


~Represents the most economical solution to treat low flow rates for screening and grit removing.

~Used for the separation and cleaning of sandy material from wastewater.




DISC DIFFUSERS


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9" fine bubbles
disc diffuser with
EPDM membrane




12" fine bubbles
disc diffuser with
EPDM/
EPDM+PTFE
membrane



5" coarse bubbles
diffuser with
EPDM membrane



9" fine/medium
bubbles disc
diffuser with
silicone membrane



12" fine bubbles
disc diffuser with
silicon membrane

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TUBE DIFFUSERS


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2" fine bubbles
tubular diffuser with
EPDM membrane -
threaded connection



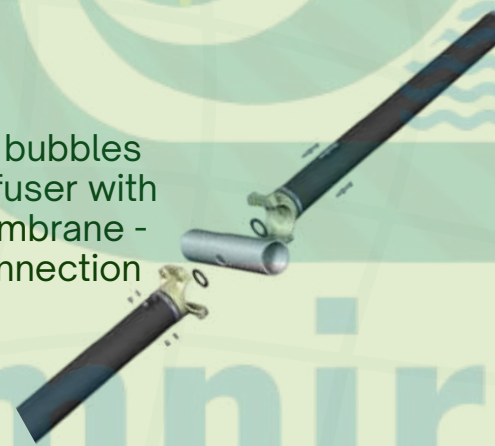
3" fine bubbles
tubular diffuser with
silicon membrane -
threaded connection




2"/3" fine bubbles
tubular diffuser with
EPDM membrane -
clamp connection




2" fine bubbles
tubular diffuser with
silicone membrane -
threaded connection



2"/3" fine bubbles
tubular diffuser with
EPDM membrane -
clamp connection



3" medium bubbles
tubular diffuser with
EPDM membrane -
threaded connection



AISI 316 coarse
bubble tubular
diffuser

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FLOW CONTROL GATES

Wall Mounting Gate

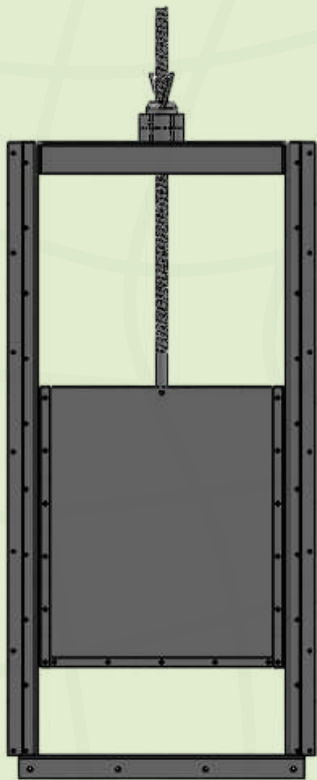


- Mounting- Wall / channel mounted
- Size- As per requirement
- Sealing- Metal-Metal & Metal-Non metal
- Water heads- till door depth (seating/unseating)
- Material of construction- SS304, SS316, Alu
- A sluice gate helps to control water flow and water levels.
- When lifted or lowered the gate, it changes how fast and how much water moves in a channel or pipe.
- This helps stop floods, send water where it is needed, and keep water at safe levels.
- Can be operated manually, electrically, pneumatically, hydraulically as per client demand.

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FLOW CONTROL GATES

Open Channel Gate



- Mounting- Wall / thimble mounted
- Size - As per requirement
- Sealing- Metal-Metal & Metal-Non metal
- Water heads- up to 35mm
- Material of construction- SS304, SS316, Alu
- Can be operated manually, electrically, pneumatically, hydraulically as per client demand.
- To isolate/ control water flow through open channel/ in the chamber.
- Mounted between two parallel walls of open channel or at the end of the channel to control the flow from the chamber.

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MEMBRANE

MBR Membrane

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MEMBRANE TECHNOLOGIES



SPECIFICATION	RANGE
Membrane Material	Reinforced PVDF
Avg. Pore Size	0.06μm
Operation pH	5 to 7
Membrane ID & OD	0.9&2.0mm
Design Flux	12-32LMH
Temperature	10-45degree
Produce Water	Tur.<10NTU SS<5mg/l



MODEL	HMTB-MBR-10	HMTB-MBR-15	HMTB-MBR-30	HMTB-MBR-10
Element size(mm)	1050X45X625mm	1505X45X625mm	2000X38X1250mm	1300X40X710mm
Connection(mm)	ø 32	ø 32	ø 24	ø 12.7
Area (Sq.m)	10	15	32.5	10

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MEMBRANE

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REINFORCED PVDF MEMBRANE



20" Jumbo Material: PVDF

- Flow : 1000 -1500 LPH
- Maximum Operating Pressure : 2.0 bar
- Backwash : Manual/Automatic
- In/Out connections : 1" & 1.5"

Applications :

- Surface water
- Borewell
- Turbidity
- Sand dust removal



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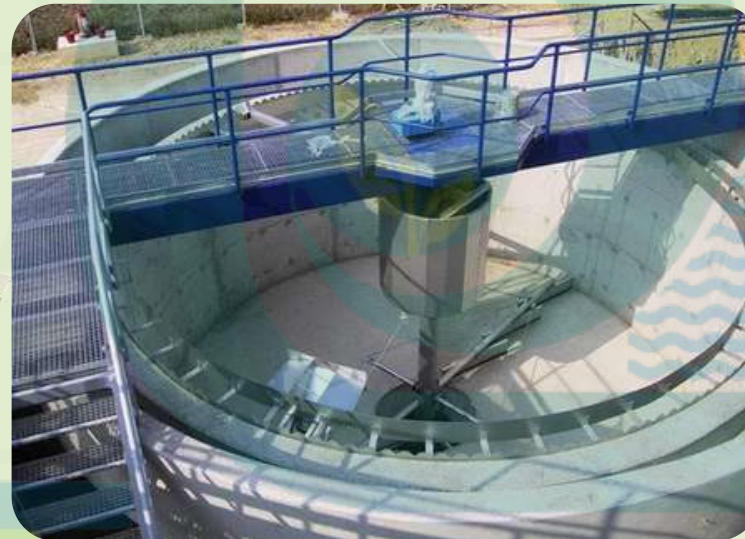
PRIMARY & SECONDARY TREATMENT

Clarifier



~ Settling tanks designed to separate solid particles from wastewater using gravity.

Sludge Thickener



- Capacity- As per requirement
- Size- As per design
- Shape- Rectangular/circular
- RPM- 0.03
- Drive- DH, CM / Turn table
- Walkway bridges- half & full
- Material of construction- MSEP/SS304, SS316

Clariflocculator



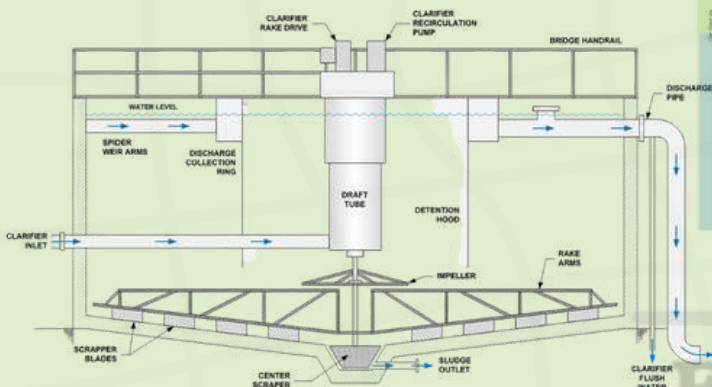
~ Combined unit that performs both flocculation and clarification processes to remove suspended solids from wastewater.

PRIMARY & SECONDARY TREATMENT

High Rate Solid Contact Clarifier

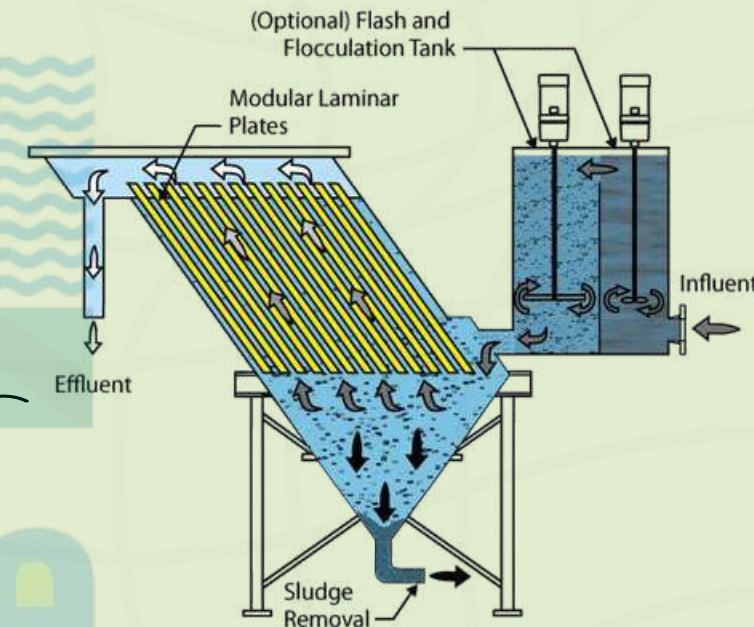


- Capacity- As per requirement
- Size- As per design
- Shape- Circular
- Impeller RPM- 3 to 8
- Scraper RPM- 0.03
- Drive- Dual drive
- Walkway bridges- half & full
- Material of construction- MSEP/SS304, SS316



- Capacity- As per requirement
- Size- As per design
- Shape- Rectangular/conical
- Tube/plate angle- 55-60 deg.
- Scraper speed- 0.03 m/s
- Material of construction- MSEP/SS304, SS316

Lamella Clarifier

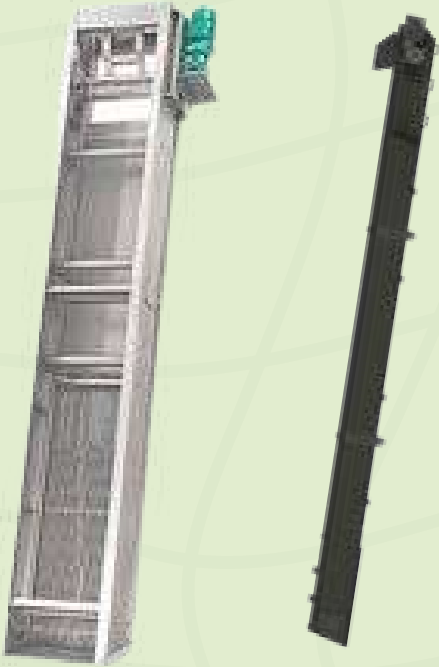


MECHANICAL SCREENS

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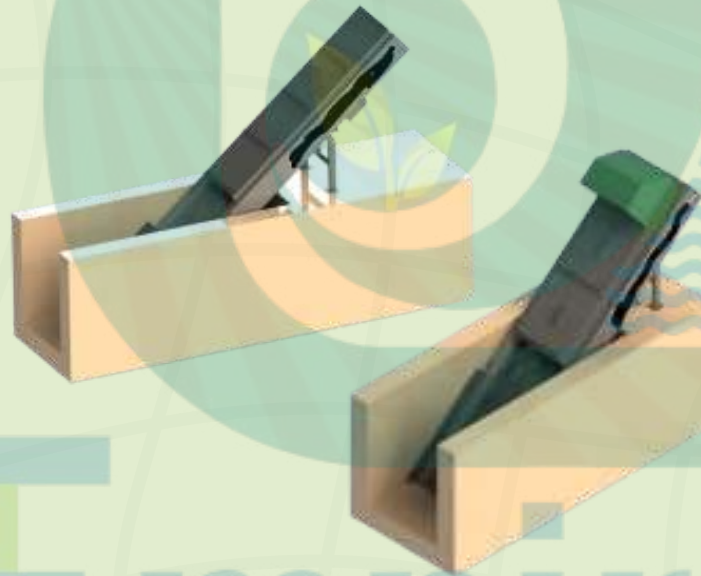


Multi Rake Screen



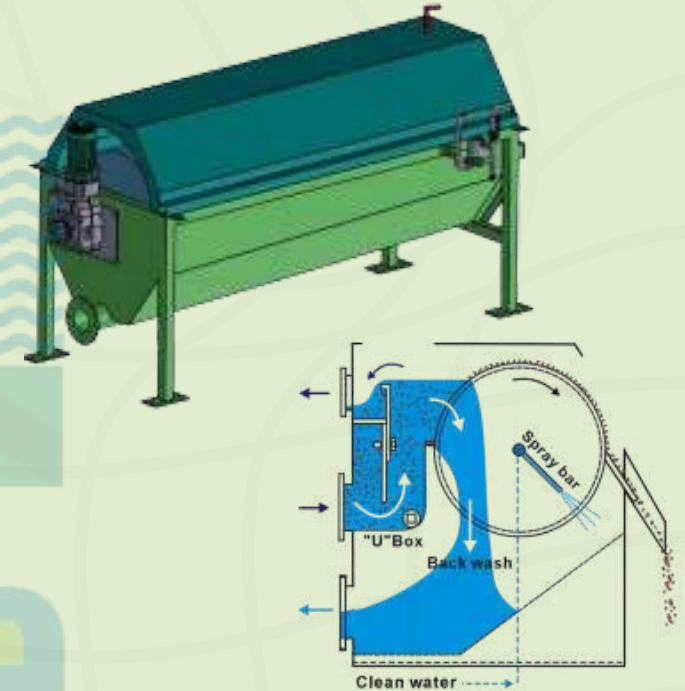
- Bar size-50x10/50x8
- Screen width-As per requirement
- Screen height-As per requirement
- Material of construction-SS304, SS316

Step Screen



- Bar spacing-2mm to 6mm
- Screen width-As per requirement
- Screen height-As per requirement
- Material of construction-SS304, SS316

Drum Screen



- Perforated dia. size-0.5mm to 6mm
- Type-Externally feed/Externally feed
- Drum dia.-As per requirement
- Drum length-As per requirement
- Material of construction-SS304, SS316

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MANUAL SCREENS

Trace Rake

- Bar spacing-50mm to as required
- Lifting arrangement-manual & pulley
- Tank size - variable



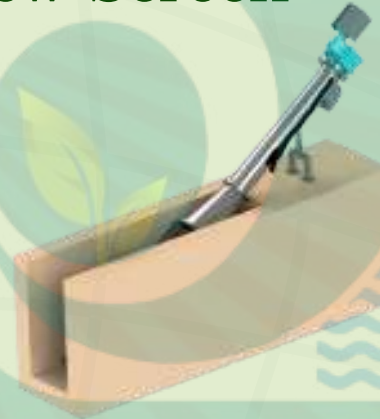
- Channel width & depth -as required
- Material of construction-carbon steel / SS304, SS316

J-Type Screen

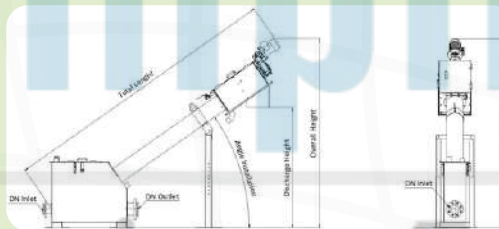
- Bar spacing-20mm to as required



Screw Screen



- Wedge wire slot size-0.25mm to 7mm
- Drum dia.- As per demand
- Screen field length-Depends on data
- Compactor- on request
- Material of construction-SS304, SS316

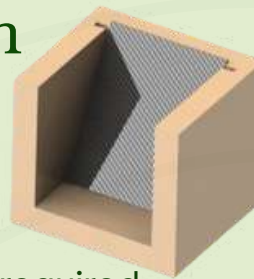


Hyperbolic Screen



- Wedge wire slot size -0.25mm - 1.5mm
- Opening-500 to 2000mm
- Material of construction-SS304, SS316
- No power required

Bar Screen



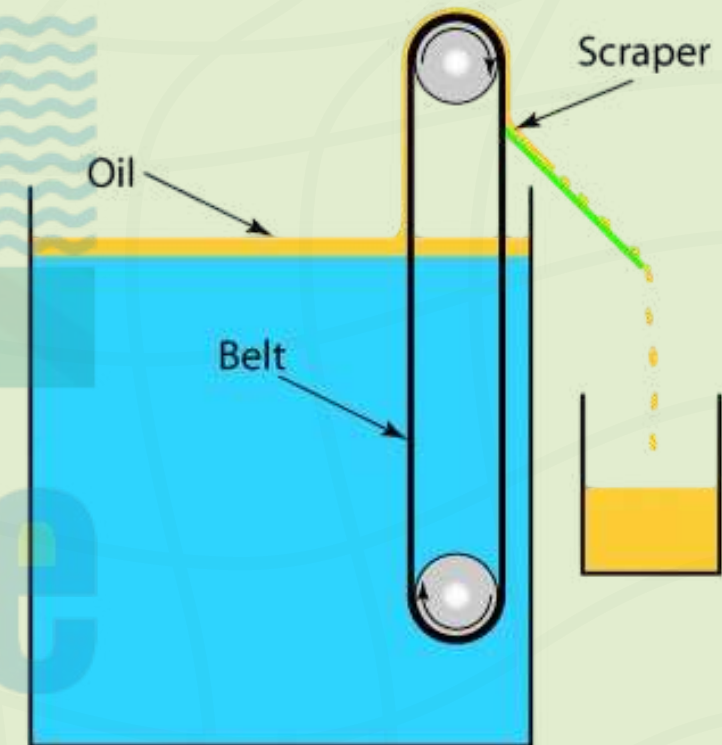
- Bar spacing-6mm to as required
- Screen width & height-as required
- Material of construction-SS304, SS316

OIL & GREASE SKIMMER

► Belt Type Skimmer



- Type- Belt skimmer
- Material of construction- MSEP, SS
- Belt skimmers lift and remove unwanted floating tramp oils from the surface of metalworking coolants, parts of washing machines, pressure spray operations, oil leakage pits, wastewater, and water treatment tanks, pits, sumps and wells.

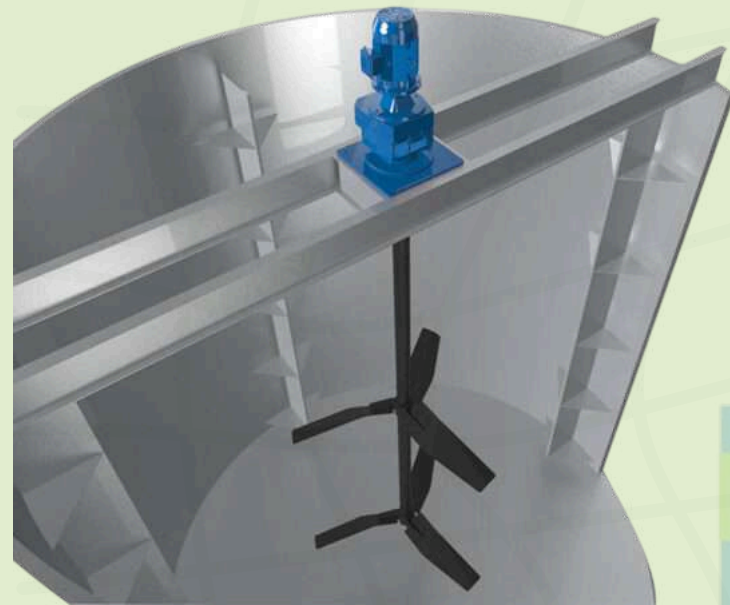


AGITATOR

► Mixer

- Capacity- As per requirement
- Type- One / both end fixed
- RPM- As per design
- Material of construction- MSEP / SS304, SS316

- A motorized mixing equipment used for the mixing of chemical in chemical, flocculation or digester chamber
- Widely employed in industries such as chemical, food, pharmaceutical, and cosmetic manufacturing.



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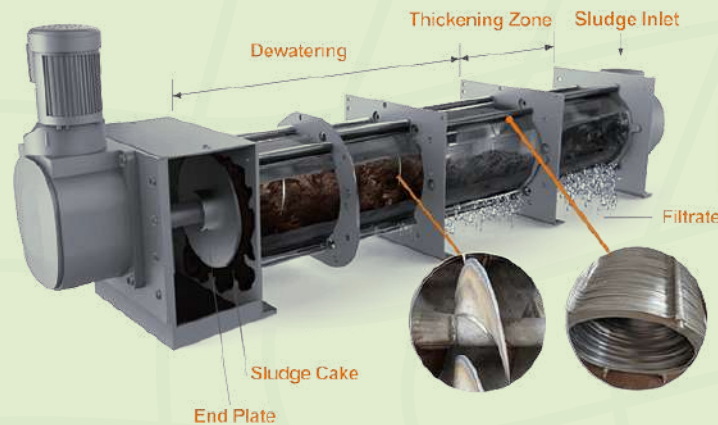
SLUDGE TREATMENT

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Screw Sludge De-watering Press

- High dewatering efficiency
- Suitable for large-scale, continuous operations
- Energy efficient
- Low maintenance
- Compact design
- Environmentally friendly



- Capacity (flow)- As per requirement
- Dry Sludge- As per design
- Min. Sludge Concentration- 10 gm/Ltr.
- Type- Single Screw, Double Screw & Triple Screw
- Moisture-Less than 80%
- Material of construction - SS304, SS316

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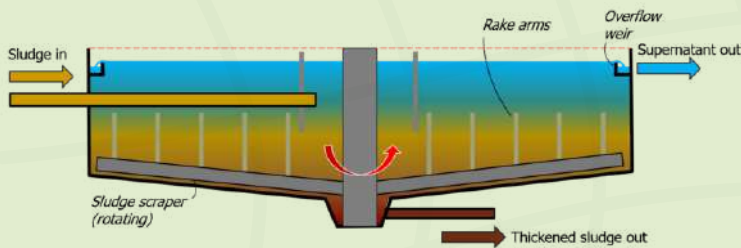
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SLUDGE TREATMENT

Sludge Thickener



- Reduces sludge volume
- Lowers processing, disposal, and transport costs
- Improves handling and treatment efficiency
- Enhances dewatering performance
- Supports resource recovery
- Minimizes environmental impact



- Capacity- As per requirement
- Size- As per design
- Shape- Rectangular/circular
- RPM- 0.03
- Drive- DH, CM / Turn table
- Walkway bridges- half & full
- Material of construction- MSEP/ SS304, SS316



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TERTIARY TREATMENT

► Dual Media Filter

~Ideal for filtration of water having very fine suspended matter like mud, dust particles and biological growth.

- Capacity- As per requirement
- Plate thk- As per design
- Material of construction-MSEP/FRP

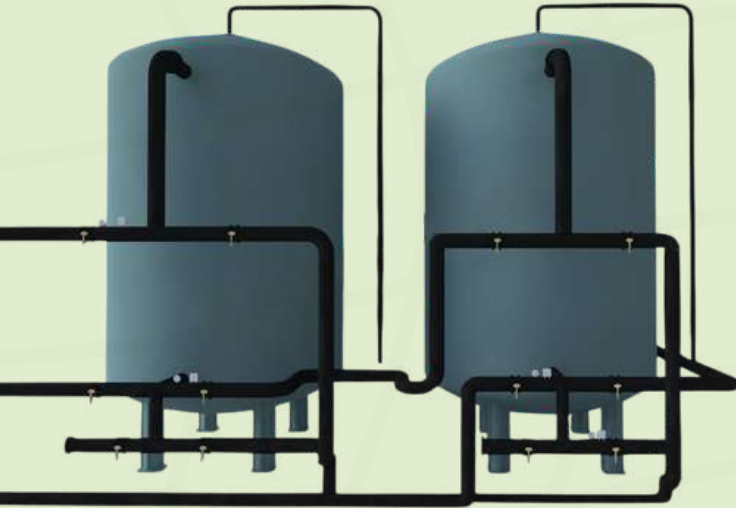
► Pressure Sand Filter

~Ideal for removing turbidity & suspended particles present in the feed water with minimum pressure drop.



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TERTIARY TREATMENT



Activated Carbon Filter

~Bed consisting of pebbles & gravels with a distributor at top to distribute the incoming water across the filter & an underdrain system for the collection of filtered water.



~This process effectively eliminates chlorine, organic compounds, pesticides, and even some heavy metals, improving the taste, odor, and overall quality of the water.

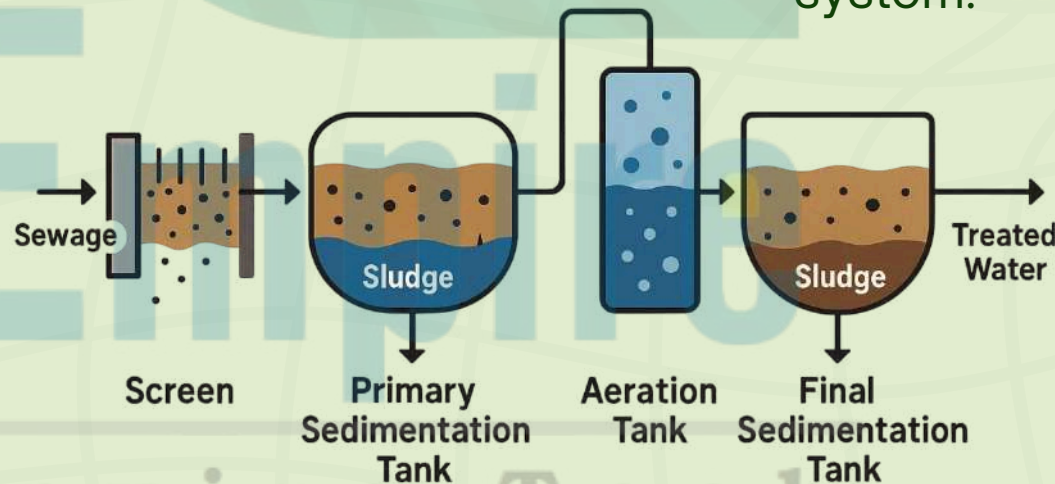
- Capacity- As per requirement
- Plate thk- As per design
- Material of construction-MSEP/FRP

WASTEWATER TREATMENT PLANTS

STP

- Capacity range- As per requirement
- Air blowers- As per design
- Material of construction- MSEP, SS
- Size- As per data
- Head loss- Very less
- Chemical dosing system- Yes
- Oil & Grease removing basin- Optional
- Permeate- As per PCB

- Designed to bring the treated sewage parameters (BOD, COD, TSS, TN etc.) below the permissible limit which is stipulated by the Pollution Control Board. MBBR technology is used in this system.



WASTEWATER TREATMENT PLANTS

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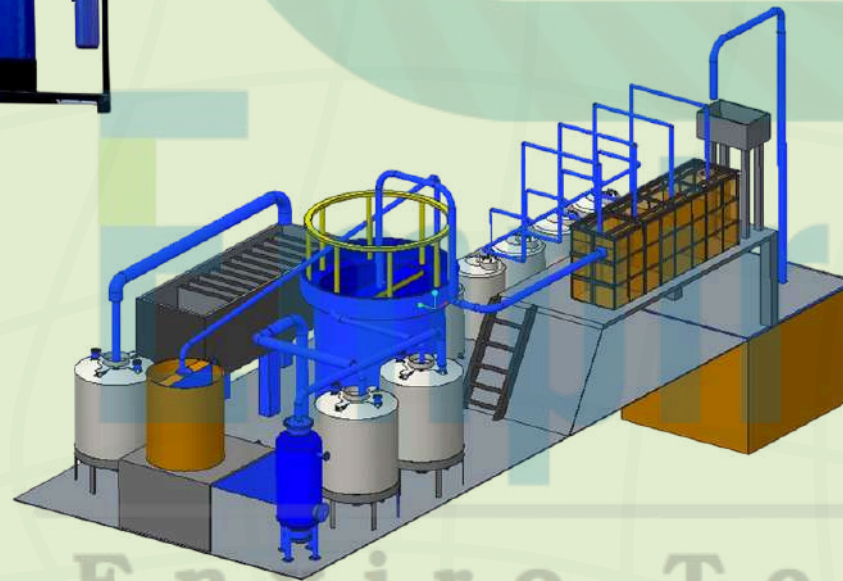


ETP



- Capacity range- As per requirement
- Air blowers- As per design
- Material of construction- MSE, SS
- Size- As per data
- Head loss- Very less
- Chemical dosing system- Yes
- Oil & Grease removing basin- Optional
- Permeate- As per PCB

- Designed for the removal of high amounts of organic compounds, debris, dirt, grit, pollution, toxic, non-toxic materials and polymers etc. from industrial effluent using evaporation, drying & other auxiliary techniques such as centrifuging, filtration, incineration.



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