SAKAR INTERNATIONAL

Designer, Manufacturer & Exporter of Water & Wastewater Treatment Plants & It's Equipments

www.sakarllc.com





About Our Company

Sakar International is a professional manufacturer dedicated to the design and fabrication of industrial and household waste water treatment plants and equipment's. Our products ranges from packaged MBBR, MBR, SBR, STP and ETP, Oil Skimmer, DAF , Lamella Clarifier, Surface Aerators, Oil Separator and Online Mixing System etc. With a professional staff and more than 20 years of experience, Sakar has become one of the leading manufacturer and is certified with ISO 9001-2015 Standard.

Sakar International is not only the manufacturer of WWTP but also most experienced in designing of equipment's related to the waste water treatment . The company developed a new line of packaged plant to serve the municipal & industrial effluent treatment. We are the exporter of WWTP in countries like Mexico, Philippines , Seychelles, Guyana , Bangladesh , Ethiopia, Sri Lanka, etc.

Vision :

The Company's vision is to keep improving the quality and performance of its products and services and to expand business activity to the global environmental market by providing innovative solutions.

Main Applications

- Municipal Sewage
- Industrial ETP
- Hospital & Hotels
- WWTP Equipment
- Water Treatment



Hydrox *Ultra* - A MBR Technology

Hydrox Ultra Series, is a high efficiency membrane based technology, incorporated MBBR with MBR for higher BOD removal (90-95%), all in containerized packaged plants.

Both Series are constructed in the Hydrox Format for both indoor and outdoor location providing higher treatment capacity.

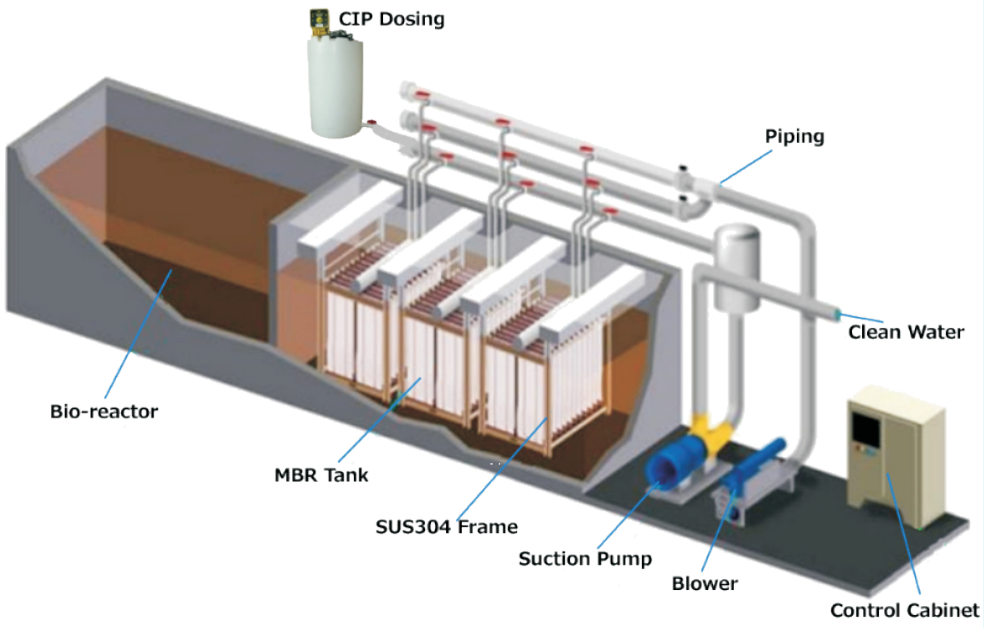
Hydrox Ultra is a fully Automatic compact system comes with Submerged Hollow Fiber Membrane or Flat Sheet Membranes.

Features

- Fully Automatic
- High Efficiency
- Compact & Modular
- Superior Product Water
- Easy To Relocate

Membrane Bio Reactor Series

HYDROX ULTRA SERIES							
MODEL	**Hydrox Ultra 20**	**Hydrox Ultra 50**	**Hydrox Ultra 100**	**Hydrox Ultra 200**	**Hydrox Ultra 300**	**Hydrox Ultra 400**	**Hydrox Ultra 500**
Capacity	20	50	100	200	300	400	500
POPULATION	100	250	500	1000	1500	2000	2500
Inlet BOD , mg/lit	300	300	300	300	300	300	300
Outlet BOD , mg/lit	<10	<10	<10	<10	<10	<10	<10
Length, meter	4.5	5.5	7.5	11.5	15	18	24
Width, meter	2	2	2.25	2.25	2.25	2.25	2.25
Height, meter	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Power Consumption , HP	3	5	8	12.5	26.25	31	39
Approx. Empty Weight ,Kg	3000	5500	6300	7000	9000	12000	16000
Approx. Operating Weight ,kg	18200	24000	35800	55500	70000	79500	128500



Features

- Modular Design
- Low Footprint
- 100% Recycle with UF
- Mobile STP
- Fully Containerized

Hydrox - A MBBR Technology

The Hydrox System is based on the Moving Bed Bio Reactor and Tube settling technologies, and is unique due to its compactness and performance with respect to Volumetric efficiency. These technologies are combined in prefabricated, skid mounted standardized tank system with variable length, suitable for overseas transportation. The overall size of the plants are based on the ISO freight containers.

Sakar Containerized Plant offers a number of standard model ranging from 5-500 m3/day.

Hydrox Series, introduces High Rate Bioreactors for efficient BOD removal (85-95%), incorporated into a small compact pack.



Moving Bed Bio Reactor Series

HYDROX SERIES							
MODEL	**Hydrox 20**	**Hydrox 50**	**Hydrox 100**	**Hydrox 200**	**Hydrox 300**	**Hydrox 400**	**Hydrox 500**
Capacity	20	50	100	200	300	400	500
POPULATION	100	250	500	1000	1500	2000	2500
Inlet BOD , mg/lit	300	300	300	300	300	300	300
Outlet BOD , mg/lit	<30	<30	<30	<30	<30	<30	<30
Length, meter	3.7	4.5	6.4	10.5	13.5	15	21
Width, meter	2	2	2.25	2.25	2.25	2.25	2.25
Height, meter	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Power Consumption , HP	3	5	8	12.5	26.25	31	39
Approx. Empty Weight ,Kg	2500	3500	4500	6300	7500	9000	14000
Approx. Operating Weight ,kg	17300	22000	33300	53550	68250	76500	108500

Dissolved Air Flotation (DAF)

Dissolved Air Flotation (**DAF**) is a water treatment process that clarifies wastewaters (or other waters) by the removal of suspended matter such as oil or solids. The removal is achieved by dissolving air in the water or wastewater under pressure and then releasing the air at atmospheric pressure in a flotation tank basin. The released air forms tiny bubbles which adhere to the suspended matter causing the suspended matter to float to the surface of the water where it may then be removed by a skimming device.





Features

- All Series Treatment Ability
- Water Residence Time 3-5 Min.
- Ion Bubble Diameter 3-7μm
- Oil/SS Removal Rate Over 90-95%
- Highly efficient

Main Applications

- Oil Refinery
- Food & Beverage
- Pharmaceutical
- Printing & Dyeing
- Paper Mills & Dairy
- Electro Plating

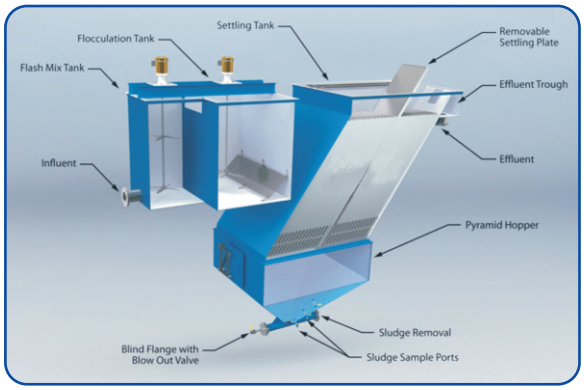
Oil / Solid Separator

Features

- Better Effluent Quality
- Superior Solids Handling
- Low Maintenance
- Design Meets API Standards
- Easy To Relocate

Lamella Clarifier

The Lamella Plate Vertical Clarifier is designed to provide low cost, high efficient solids removal from a wide range of waste and process liquids. The inclined plate design allows the total gravity settling area to be as much as ten times more than the actual floor space occupied by the clarifier. Integral chemical mixing and flocculation tanks are available, as well as options for enhanced sludge thickening.





Corrugated Plate Interceptor – CPI Separator

Sakar CPI allows the separation in the oily water treatment of the suspended solids and of the oil globules from water by gravity separation principle that is based on the difference of specific gravity between the phases (oil, solid, water). CPI is often used for a preliminary water treatment in order to process the waste water before the flotators.



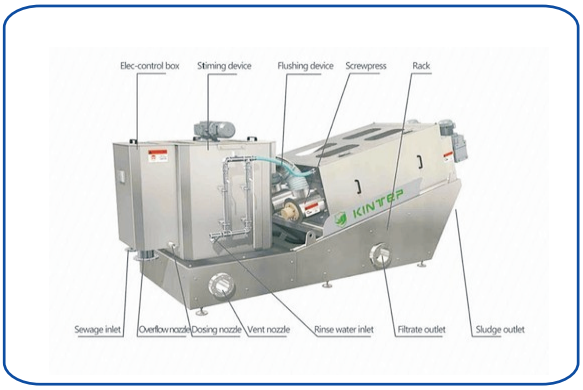


Screw Type Sludge Dehydrator

The Screw sludge dewatering machine is integrating with auto-control cabinet, sludge thickening and dewatering body liquid collection tank. Therefore, the high efficiency flocculation, continuous sludge concentration, dewatering and filtrate collection can be automatically completed all in one, the collected liquid will be reflux or emissions finally.

Features

- Energy Efficient
- Compact Design
- Easy in Operation
- Low Electricity
- Simple Process

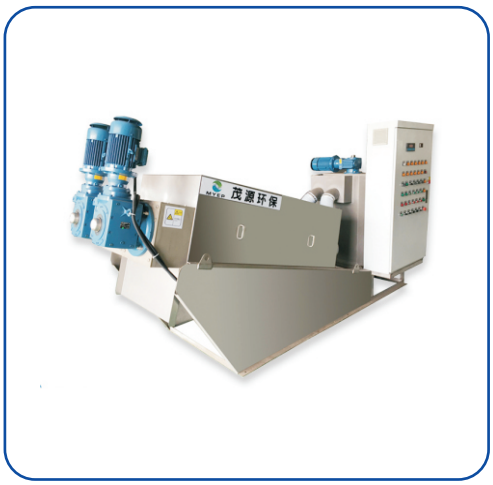




Working Principle

The sludge is pushed into the filter cartridge from the feed inlet and then moves to the sludge cake outlet under the pushing of the helical axis blades. Because the gaps between the helical axis blades will gradually become smaller, so the pressure to the sludge is becoming bigger. Under the differentiations of pressure, water comes out from the gaps between the fixed and moving plates.





Applications

- Petro Refining
- Leather Making
- Painting & Dying Papers
- Biochemical Pharmacy
- Food Processing

SOME OF OUR PRODUCTS



Mixture Agitator



Pressure Filter



Step Screen



HD Disc Diffuser



Dosing Pump

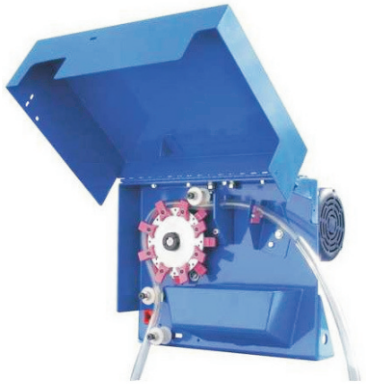


Ultra Filtration System

Other Wastewater Treatment Equipments



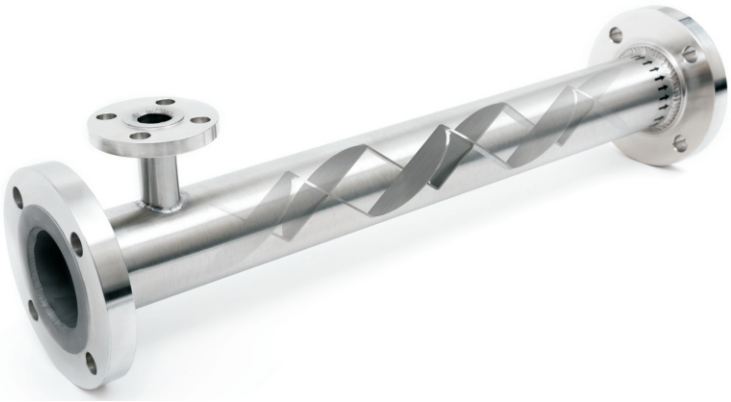
Belt Type
Oil Skimmer



Tube Type
Oil Skimmer



Disc Type
Oil Skimmer



Static Mixer



Fixed Surface Aerator



Floating Surface Aerator

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