



Cooling Fails



Tube diffuser



Disk Diffuser

Coarse bubble diffuser



Vertical inline pump



Horizontal multistage pump



Filter press



Dosing pump



Twin lobe blower



Ring blower



Frb Vessels



Ro Housing



Membrane



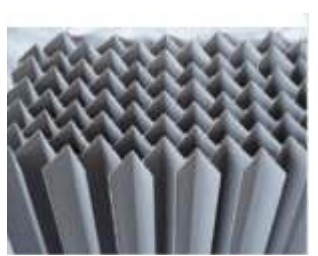
Cartridge filter housing



Fill pac media



chevron tube settler



V shaped tube settler



**SENTHIL ANDAVAR
INDUSTRIES**

vision for water treatment



7/474-62, Sai Illam Village Nagar, Keeranatham,
Saravanam Patti Post, Osaanam Old Home Age, Coimbatore.

Cell : +91 96009 66800, 95000 02976

E-mail : sai2006@gmail.com

Web : www.senthilandavarindustries.in



An ISO 9001 : 2008
Certified Company



**SENTHIL ANDAVAR
INDUSTRIES**

vision for water treatment



ABOUT US

We, **SENTHIL ANDAVAR INDUSTRIES** are the leaders by Nature. Like a true leader, we strengthen our market visibility with Avant-grade solutions in water purification. We, as an industry offer end-to-end solutions for any kind of water needs that you may have in your industry. In additions, we offer a wide range of domestic products that are essential for daily usage.

OUR MANUFACTURING BRAND INCLUDES

Oil Skimmer [Mini belt type, Double Belt type, Multistage, Drum Type, Disk type, Oil Skimmer] Agitator, Flocculation System, Venturi Aerator System, MBBR Media [Black & White] Oil &Grease Trap, Diffuser [Dube type, Fine Type, Coarse, Disk type], Screw Dewatering Systems, Bar Screen [Screw screen, Bucket Screen, Domestic & Industrial RO Plant, Softener Plant, Sewage Treatment Plant (STP), Effluent Treatment plant (ETP), Zero Liquid Discharge (ZLD) Bio Gas Plant, Hydro Pneumatic System, Pressure Booster Pump, Swimming Pool – Filter & Spares, SS Water Dispenser, Condensate Water Recovery Unit.

Our vision keeps us committed to inventing new dimensions and making water treatment the most sophisticated and demanding. Having the best set of equipment in the industry today, for varied applications of Reserve Osmosis, the comprehensive, Softening, Sewage Water, Effluent Water **SENTHIL ANDAVAR INDUSTRIES** is determined to solve the latest needs of the hour. Each member of our team are committed to their work Awe pride in having them with us for more than a decade.

The vision for brilliance, the power to face the challenges and solve, the toughness of sprit to stand tall and the benignity to support depict our leadership abilities. We believe in promoting the morals of integrity and originality and accept them to create a unique culture within the organization.In addition to the excellence of the Team, we recently launched a brand named Dution Pure that is known for serving to the best and finest of quality.

BAG FILTER DEWATERING SYSTEMS



For dewatering the sludge of every nature produced by treatment plants, proposes .The heart of the system is **the original draining bag**, which permits to reach 15-30% dry solids content after only a few hours and 50-80% of dry solids after certain storage period. The right management of this system depends upon the **special module realized in stainless steel AISI 304L**, projected to optimize the filling of the bags and to simplify all moving operations. To be able to satisfy all the necessities of the WWTP is available in **various models**, starting from the **manual modules with 2 bags up to automatic and pressurized with 12 bags**. The largest module can treat **up to 20m³/day** of sludge depending on its concentration.

Areas within the cities, towns and villages those are impossible to cover under centralized wastewater treatment system, to offer perfect solution for the same, Steps in this field. Prefabricated sewage treatment plant / Compact STP type waste water treatment. System is compact, effective and economical for wastewater treatment in decentralized manner.



- Compact STP for individual bungalows
- Low Rise Apartments
- Restaurants
- Offices
- Small Factories
- Malls
- Hospitals
- Office Building
- Institutions
- Townships / Colonies
- High Rise Buildings Etc.,

COMPACT SEWAGE TREATMENT PLANT

We offer our Clients Compact Package Sewage Treatment Plants that meet their issues regarding wastewater generations in Industrial, Institutional and Commercial Sectors. Our solutions include independent review of alternative technologies, troubleshooting, investigations and consultant support. We provide the best Sewage Treatment Plant. Compact Sewage Treatment Plant available in various sizes and grades, this plant is developed indiverse customized sizes that can be installed as per client need and demands. Moreover, our team makes sure to stand tall on the client need and demands to attain maximum level of patron satisfaction.

OIL SKIMMER

MINI BELT TYPE

DESCRIPTION	MINI BELT
BELT MATERIAL	POLYTHRIEN & SS
TYPE OF BELT	TIMING BELT
MOTOR & GEARBOX	20 RPM
VOLTS	12V 230W
BELT LENGTH & WITH	650, 945, 1150(50)
WEIGHT APP	3Kg APP
OIL LPH APP	6 LPH

SINGLE BELT TYPE

DESCRIPTION	SINGLE BELT
BELT MATERIAL	POLYTHRIEN
TYPE OF BELT	TIMING BELT & CONVER BELT
MOTOR & GEARBOX	0.5HP 20 RPM
VOLTS	12V 230W
BELT LENGTH & WITH	1,1.5,2,3, METER & 4"
WEIGHT APP	20Kg APP
OIL LPH APP	20 LPH

MULTI BELT TYPE

DESCRIPTION	DOUBLE BELT
BELT MATERIAL	POLYTHRIEN
TYPE OF BELT	TIMING BELT & CONVER BELT
MOTOR & GEARBOX	0.5HP 20 RPM
VOLTS	12V 230W
BELT LENGTH & WITH	1,1.5,2,3, METER & 4"
WEIGHT APP	35Kg APP
OIL LPH APP	35 LPH



EFFLUENT TREATMENT PLANT

Being a quality-oriented enterprise, we are engaged in manufacturing, exporting and supplying a broad gamut of **Effluent Treatment Plant**.

APPLICATION

Broadly used for treating effluent to make it suitable for.

- Gardening
- Cooling tower
- Toilet flushing

Features

- High efficiency
- Long service life
- Simple to operate

PRODUCT DESCRIPTION

Sai Technologies offers a wide range of industrial effluent treatment plants for various industrial applications in paint shop, dairy & food products, paper mills, oil refineries, leather industry, glass factories, chemical and processing industries etc. These industrial effluent treatment plants are designed to provide a pollution free working environment and recycle the water for other applications. All the effluent treatment plants strictly comply with the design specifications laid down by the regulatory authority.

The industrial effluent treatment plants involve different stages of treatment including physio- chemical treatment and biological treatment followed by tertiary treatment. Integrated functions with simple control makes the operation much easier. We can also custom design effluent treatment plants based on the specific application requirement of the customers. Envirotech's Industrial effluent plants have compact design and can be easily installed on the site.

PRODUCT DESCRIPTION

Salient Features

- Highly Energy efficient
- Featuring newest technologies like SAFF, FAB & MBBR
- Water recycles for Gardening, Cooling Tower, Toilet Flushing
- wCompact with low footprint
- Low operation & maintenance costs
- Available in containerized (ready to use) & non containerized mode

MULTI BELT TYPE

DESCRIPTION	TRIPLE BELT
BELT MATERIAL	POLYTHRIEN
TYPE OF BELT	TIMING BELT & CONVER BELT
MOTOR & GEARBOX	0.5HP 20 RPM
VOLTS	12V 230W
BELT LENGTH & WITH	1,1.5,2,3, METER & 4"
WEIGHT APP	35Kg APP
OIL LPH APP	35 LPH



WILD BELT TYPE

DESCRIPTION	WILD BELT
BELT MATERIAL	POLYTHRIEN
TYPE OF BELT	TIMING BELT & CONVER BELT
MOTOR & GEARBOX	0.5HP 20 RPM
VOLTS	12V 230W
BELT LENGTH & WITH	1,1.5,2,3, METER & 4"
WEIGHT APP	35Kg APP
OIL LPH APP	35 LPH



DISC TYPE

MATERIAL	MOTOR & RPM	VOLTS	DISK SIZE	WEIGHT	OIL LPH APP
SS,NYLON,ALUMINIUM	05 RPM	12V 230W	1 FEET	3Kg APP	12 LPH
SS,NYLON,ALUMINIUM	0.5HP 10 RPM	12V 230 W	2 FEET	20Kg APP	25 LPH



SOFTNER PLANT

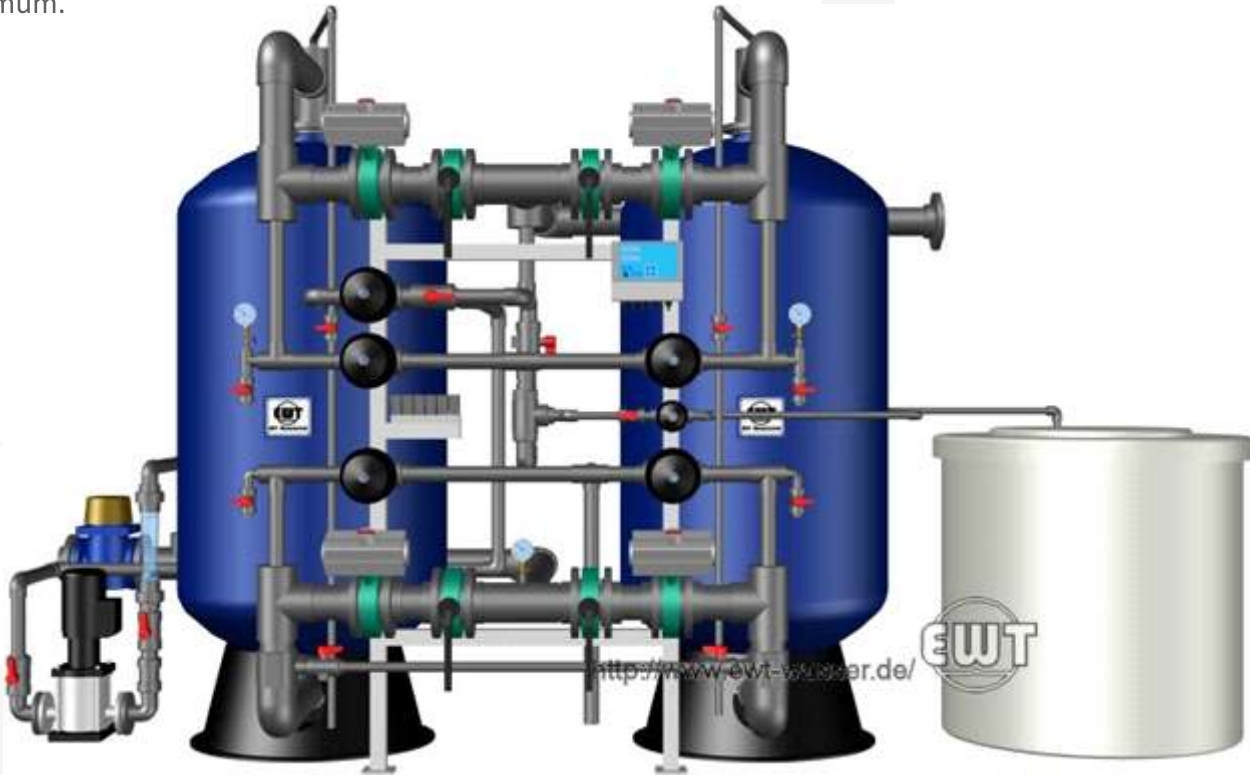
AUTOMATIC WATER SOFTENERS

WATER SOFTENING PLANTS

Water is considered ‘hard’ when it has excessive levels of calcium and magnesium dissolved in it. Hard Water can lead to the following Water problems :

- Scale build-up in pipes, resulting in decreased flow rates.
- Scale build-up on heating and cooling systems, leading to increased electricity costs and breakdowns.
- White film on glass surfaces and staining on Water taps.
- Increased laundry costs due to hard Water reacting with soap and laundry detergents.

The Water Softening Plants are designed to produce treated Water to suit for various applications. Treated Water is of consistency quality with low residual hardness throughout the service cycle. The high synthetic resin is used to exchange Sodium ion with hardness forming Calcium and Magnesium ions. After producing desired output, the resin is regenerated with (NaCl) Sodium Chloride solution after which unit is again ready to deliver next batch. The Water Softening Plant units are available with different models. The difference between these models is in the capacity of the resin used for each model. These units are easy to operate and maintenance free. These models are available to produce various capacities up to 200 Cu. Meters per hour maximum.



AGITATOR

MATERIAL	MOTOR & RPM	KW	SHAFT SIZE	WEIGHT
SS 304, 316	0.5HP, 100 RPM	0.37 KW	DIA 1" X 1 METER	15Kg APP
SS 304, 316	0.5HP, 100 RPM	0.37 KW	DIA 1" X 1 METER	10Kg APP



A rapid (or flash) mixer is used to uniformly disperse and blend chemicals, such as coagulant aids, chlorine, and sulfur dioxide, into the process stream. These chemicals, either in solution or slurry form, are added for the purpose of neutralization, odor & color control, and/or to aid in the removal of solids.

A flash mixer is a chamber that contains mechanical stirrers, which is designed to assure fast, thorough, mixing of lime and alum for the purpose of creating flock.

After screening out debris and testing the raw water, water treatment really begins at the flash mix chamber. Here, chemicals are added to the water, primarily to aid in coagulation and flocculation. In the flash mixer, the water is agitated violently for a short period of time before being released into the flocculation basin.

AVAILABLE SIZES

- 0.25 Hp To 10hp, Single And 3ph, Shaft Material SS304, Impeller Dia 300 To 1000mm
- Rpm 70 To 100 Rpm
- Capacity Of Mixer 20 Liters to 5000 Liters



RO PLANT



We manufacture a wide Range of industrial Reverse Osmosis Plants to cater the stringent process requirements. Our industrial reverse osmosis Plants are carefully customized and configured to suit the individual requirement of the output water, which varies from normal drinking application to the specific usage, such as food Processing, pharmaceuticals and boiler feeding requirement.

These systems come standard with pre-filters, chemical dosing and Antiscalant dosing. Customization is available on all our units based on individual water application and customer needs.

- 4" & 8" TFC spiral wound membranes
- FRP membrane housings
- Epoxy painted steel frame
- SS High Pressure Piping
- Stainless steel High Pressure Multi-stage pumps
- 20 & 5 micron cartridge filter
- Low & High pressure switches
- Glycerin filled pressure gauges
- Permeate & concentrate flow meters
- PLC/Microprocessor based Controllers
- Outlet Conductivity meter

These Industrial RO Systems are available in the Flow Ranges from 1 M3/Hr Product Water Capacity and above. Standard Ranges are available in Multiples of 1 M3/Hr up to 10 M3/Hr.

Higher flow Rates from 10 M3/Hr to 100 M3/Hr and above are custom-built as per Customers requirement with extensive pre-filtration units to suit the most aggressive waters.

FLOCCULATION AND COAGULATION

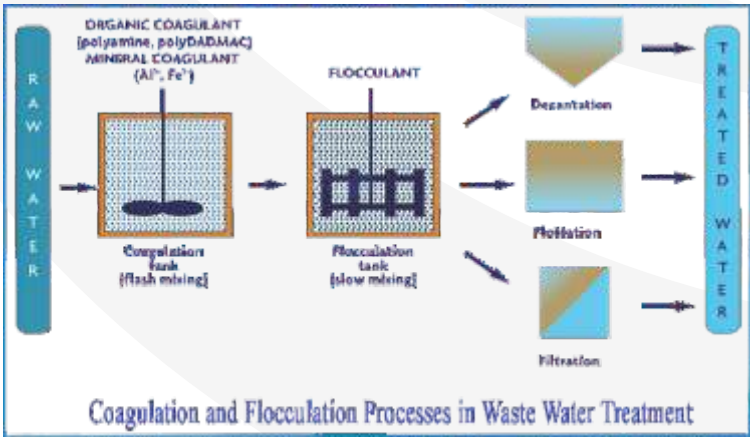
Flocculation and Coagulation in water treatment are used to remove suspended solids through a process that destabilizes the suspended particles in water solutions. The difference between the two is coagulation is the coming together, or clumping of particles, and flocculation is the settling of coagulated particles. Their purpose is to remove and neutralize charge density of particles with coagulation and then facilitate particle bounding through flocculation so that the larger aggregated particles easily separate from the water and settle to the bottle.

COMMON APPLICATIONS INCLUDE:

- Slurry Pond Management
- Wastewater solids dewatering
- Effluent wastewater treatment
- Recycled plastics wash water treatment
- Mining wastewater treatment

AVAILABLE SIZES

- 0.25 hp to 10hp, single and 3ph, shaft material ss304, impeller dia 300 to 1000mm
- Rpm 70 to 100 rpm,
- Capacity of mixer 20 liters to 5000 liters



FINE BUBBLE TUBE DIFFUSER

PRODUCT INTRODUCTION

Fine Bubble Tube Diffuser can be connected on one side or in pairs to different rectangular and round tubes (ABS material) with the appropriate adapter. The membranes are manufactured with premium quality EPDM material and are available with fine or coarse-bubble perforation. The support tubes (ABS or PVC material) can be reused when membranes are replaced The units offer maximum performance at minimum cost and require minimum maintenance.

FEATURES

- High oxygen transfer efficiency
- Low cost or total ownership
- Anti-clogging, corrosion resistant
- Ease of installation, 2 minutes for one diffuser
- Maintenance - free design, 8 years service life
- EPDM membrane with excellent performance



TECHNICAL PARAMETERS

Type	Membrane Tube Diffuser		
Image			
Model	ø63	ø93	ø113
Length	500 / 750 / 1000 mm	500 / 750 / 1000 mm	500 / 750 / 1000 mm
MOC	EPDM / Silicon Membrane ABS / PP Carrier Plate	EPDM / Silicon Membrane ABS / PP Carrier Plate	EPDM / Silicon Membrane ABS / PP Carrier Plate
Connector	1" NPT male thread 3/4" NPT male thread	1" NPT male thread 3/4" NPT male thread	1" NPT male thread 3/4" NPT male thread
Bubble Size	1-2 mm	1-2 mm	1-2 mm
Design Flow	1.7-6.8m³/h	3.4-1.6m³/h	3.4-17.0m³/h
Flow Range	2-14m³/h	5-20m³/h	6-28m³/h
SOTE	≥ 40% (6m submerged)	≥ 40% (6m submerged)	≥ 40% (6m submerged)
SOTR	≥ 0.90kg O₂/h	≥ 1.40kg O₂/h	≥ 1.52kg O₂/h
SAE	≥ 8.6kg O₂/kw.h	≥ 8.6kg O₂/kw.h	≥ 8.6kg O₂/kw.h
Headloss	2200-4800Pa	2200-4800Pa	2200-4800Pa
Service Area	0.75-2.5m²	1.0-3.0m²	1.5-2.5.0m²
Service Life	>5 Year	>5 Year	>5 Year

MANUAL AND AUTOMATIC BAR SCREEN

Vertical sandwich in the canal to intercept of trees, branches, wastes of large diameter floater BS (W) type bar screen (mesh), is a kind of simple and easy of artificial cleared block the dirt equipment for medium and small dirt quantity is little of water and wastewater engineering, has the good rigidity, cut and superior performance, easy to shift instillation etc



BIO PACK MEDIA

SHAPE	CYLINDRICAL
HEIGHT & DIAMETER	DIA 22mm x 16mm HEIGHT
PROTECTED SURFACE AREA	250 (M2)
TOTAL SURFACE AREA	300-325 (M2)
COLOUR	BLACK, WHITE
THICKNESS	1.0 mm
MAX. CONTINUOUS WORKING TEMP	55C



FINE BUBBLE DISC DIFFUSER

PRODUCT INTRODUCTION

Fine Bubble Disc Diffuser features a unique spilt pattern and slit shapes, which can disperse arr bubbles in an extremely fine and uniform pattern for high oxygen transfer efficiency. A much highly effective and integrated check valve enables the aeration zones to be easily shutdown for air-on/air-off applications. The membrane disc diffuser can be operated over a wide range of airflows with minimum maintenance for long term performance

FEATURES

- Low resistance loss
- Highly Tear Resistant
- Ann-clogging, anti-backflow
- Ageing-resistant, anti-corrosion
- High efficiency, energy-saving

DIFFERENT MEMBRANE MATERIAL OF DIFFUSER

1. EPDM
Epdm can resist heat, light, oxygen, especially ozone. Epdm is essentially non-polarity, polarity solution and chemical resistant. bibulous rate is low, it has good insulating properties.
2. Silicone
Insoluble in water and any solvent, non-toxic and tasteless, chemical properties stable, except strong alkali, hydrofluoric acid not react with any material.
3. PTFE
 - (1) High and low temperature resistant, working temperature can be 250°C, good mechanical toughness; even temperature drops to -196°C also can keep 5% elongation.
 - (2) Corrosion - resistance to most chemicals and solvents, showing inertia, strong acid resistance, water and various organic solvents.
 - (3) High lubrication - the lowest friction coefficient in solid materials.
 - (4) Non - adhesion - is the smallest surface tension in a solid material and does not adhere to any substance.

TECHNICAL PARAMETERS

Model	GNBQ - 170	GNBQ - 215	GNBQ - 260	GNBQ - 350	GNBQ - 650
Bubble Type	Coarse Bubble	Fine Bubble	Fine Bubble	Fine Bubble	Fine Bubble
Image					
Size	6 inch	8 inch	9 inch	12 inch	675*215 mm
Membrane Material	EPDM / SILICONE / PTFE				
Base Material	ABS	Strengthened PP + GF (Glass Fiber)			ABS
Membrane Thickness	2 mm	2 mm	2 mm	2 mm	2 mm
Bubble Size	4-5 mm	1-2 mm	1-2 mm	1-2 mm	1-2 mm
Design Flow	1-5 m 3/h	1-5 - 2.5 m 3/h	3-4 m 3/h	5-6 m 3/h	6-14 m 3/h
Flow Range	6-9 m 3/h	1-6 m 3/h	1-8 m 3/h	1-12 m 3/h	1-16 m 3/h
SOTE	≥ 10 % (6m submerged)	≥ 38 % (6m submerged)	≥ 38 % (6m submerged)	≥ 38 % (6m submerged)	≥ 40 % (6m submerged)
SOTR	≥ 0.21 kg O2 / h	≥ 0.31 kg O2 / h	≥ 0.45 kg O2 / h	≥ 0.75 kg O2 / h	≥ 0.99 kg O2 / h
SAE	≥ 7.5 kg O2 / kw.h	≥ 8.9 kg O2 / kw.h	≥ 8.9 kg O2 / kw.h	≥ 8.9 kg O2 / kw.h	≥ 9.2 kg O2 / kw.h
Headloss	2000-3000 Pa	1500-4300 Pa	1500-4300 Pa	1500-4300 Pa	2000-3500 Pa
Service Area	0.5 - 0.8m2 / pcs	0.2 - 0.64m2 / pcs	0.25 - 1.0m2 / pcs	0.4 - 1.5m2 / pcs	0.5 - 0.25m2 / pcs
Service Life	> 5 Years				

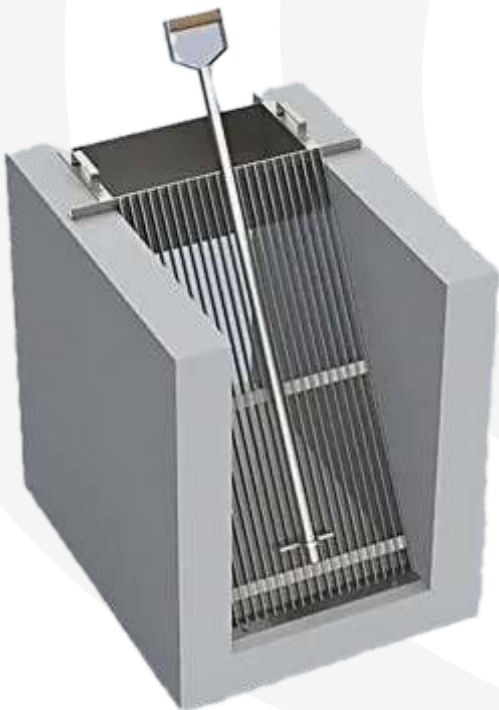


MULTI RACK BAR SCREEN

The bar screens made for wastewater treatment plants have evolved into few different forms over the years. But what unites them all is their durability. Today’s modern bar screens are made mostly of stainless steel. And their durable construction is essential to the wastewater treatment operations that depend the removal of large screenings function efficiently. By removing solids, bar screens help downstream processes work efficiently. And they prevent costly maintenance repairs that might otherwise disrupt the facility.

BENEFITS OF BAR SCREENS

- Good solution for pump protection or head works coarse screening
- Maintenance tends to be accessible from the top channel
- More positive engagement of rakes into bars than previous versions of bar screens



1	BAR SPACING	10 mm and above
2	CHANNEL WIDTH	700 mm to 2,000 mm
3	CHANNEL DEPTH	Maximum up to 12,000 mm
4	MODE OF OPERATION	Motorized
5	MATERIAL OF CONSTRUCTION	Stainless Steel 304, 316 / Duplex / Super Duplex. Other grades of stainless steel on request.

OIL & GRAPE TRAP

THREE STAGE OPERATION SYSTEMS

- STAGE 1**
Solids collection Wastewater from the kitchen is directed through the inlet of the Grease Guardian® where a remove strainer basket collects any solid debris.
- STAGE 2**
Grease & Oil Separation Grease in the wastewater floats to the surface and is trapped while the clear water leaves the unit and enters the drainage system.
- STAGE 3**
Self Cleaning & Grease Removal the timer-driven heating element is activated to liquefy grease, which is then removed by the skimming wheel and deposited in a portable container for recycling.



SPECIFICATIONS

DESCRIPTION	OGT 10	OGT 20	OGT 30
OIL & GREASE MATERIAL	SS & M.S	SS & M.S	SS & M.S
TYPE OF OIL SKIMMER	DISK TYPE	DISK TYPE	DISK TYPE
MOTOR & GEARBOX SPEER	SINGLE PH 10 TO 15 RPM	SINGLE PH 10 TO 15 RPM	SINGLE PH 10 TO 15 RPM
VOLTS V 230W	12V 230 W	12V 230 W	
TANK SIZE (INCHES)	23 X 12 17	27 X 14 18	33 X 16 18
AUTOMATIC & MANUAL	BOTH	BOTH	BOTH
WATER LPH APX	36 LPH 69 LPH	76 LPH	

CURVED SCREEN

The curved screen is inserted into a channel. The effluent to be treated passes through the grid which holds suspended matter on its surface. The grill is cleaned using brushes attached to the end of 2 rotating arms (4 arms optional). The screen rejections are ejected at the back of the screen and fall into a removable perforated basket.

CHARACTERISTICS

CURVED SCREEN IS COMPOSED OF DIFFERENT ELEMENTS :

- Stainless steel structure
- Scraper
- Stainless steel screen
- Adapters
- Position sensor
- Connection box



RANGE

BIOTRADE manufactures curved rakes with sieving from 5 mm to 50 mm accepting flow rates ranging from 1 to 750 m³ / h.

ACCESSORIES

- Waste conveying / compacting screw with automatic bagging
- Stainless steel waste chute
- Overflow detection probe
- Bypass box with manual grating
- Control box
- Electronic torque limiter on motorization