

CATALOGUE



YOUR INNOVATIVE WATER TREATMENT SOLUTIONS

COMPANY

EQUIPWATER is specialized in wastewater treatment solutions and follow you in all stages of your projects until their completions.

- Study
- Manufacturing
- Installation
- Maintenance

Our cost effective solutions are adapted to any situation according to your needs and requests.

OUR FIELDS

- Wastewater Treatment Plant WWTP
- Pump Station
- Lift Station
- Drinking Water Station
- Recycling Industry
- Paper Mills
- Food Industry
- Desalination Plant
- All other industry using water in their process











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BASKET SCREEN

AUTOMATIC BASKET

AUTOMATIC BASKET SCREEN

Designed for Pump Station & Lift Station

DESCRIPTION

Our vertical automatic BASKET SCREEN is generally installed in pump station and lift station to protect the pumps from clogging and trash coming out of the discharge pipe. The screen is facing the raw water and captures all the possible waste. The basket is designed to receive way more waste than a vertical wire rack which requires a rake that continuously comes up and down. The basket can handle any waste from wipes to rocks with no jamming.

DIMENSIONS

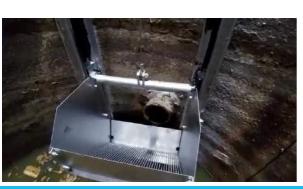
Discharge pipe diameter: Up to Ø 900 mm

Opening filtration: 5 to 30 mm

Depth: No limits

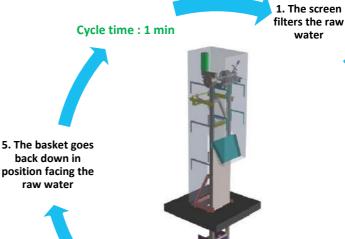
BENEFITS:

- Protect your pumps
- Retrofit in any Pump Station & Lift Station
- Capture all sizes of wastes, wipes, wood, rocks, bottles
- Autonomous operation









4. The basket moves up

along the wall to the

hopper and empties the

waste using an ejector

shovel

2. The basket

screen is filled

with trash

3. The control panel activates the cleaning cycle



BASKET SCREEN MOTORIZED BASKET

MOTORIZED BASKET SCREEN

Designed for Pump Station & Lift Station

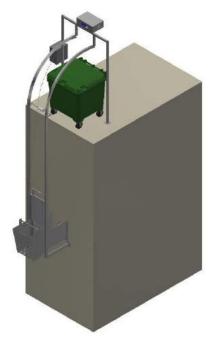
DESCRIPTION

The motorized BASKET SCREEN is made of a rectangular basket lifted out of the well and lowered by an electrical winch. The guidance of the basket is made by two guide rails fixed at the structure in which the basket is driven over 4 rollers. At the top, waste is discharged by gravity into the dumpster. The drive is made by a rope drum with gear motor installed on top of the frame. The size of the basket is suited to the inlet situation and the opening filtration is designed following the type of waste. The basket can be made with tubular bars, rectangular bars or even perforated plate. When the basket is lifted, a drop screen automatically closes the inlet so that no screenings is discharge into the well.



BENEFITS:

- Custom designed on request for each situation
- > Retrofit in any Pump Station & Lift Station
- > Catch all sizes of wastes, wipes, wood, rocks, bottles



3D view in situation

DIMENSIONS

• Discharge pipe: Any dimensions

Opening filtration: Customized

· Depth: No limits



Installation



BASKET SCREEN MANUAL BASKET

MANUAL BASKET SCREEN

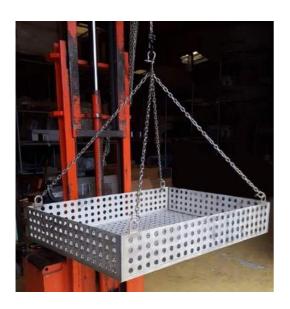
Designed for Pump Station & Lift Station

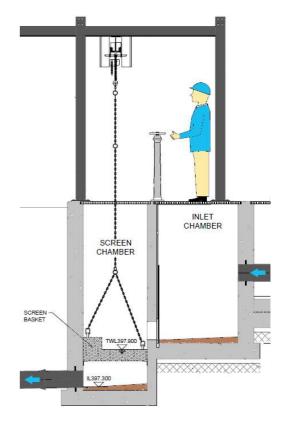
DESCRIPTION

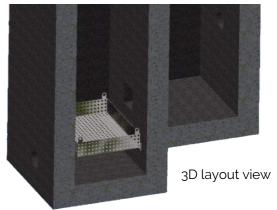
The manual BASKET SCREEN is generally installed in a pump station and lift station to protect the pumps from clogging and trash coming out of the discharge pipe. The basket can handle any size of waste, wipes, rocks, bottles, pieces of wood etc. The basket is supported by two L fixed on the walls by anchor bolts inside the screen chamber. A chain hoist is operated manually to lift up the basket. The operator clean up the basket and put back the empty basket screen in position below the influents.

BENEFITS:

- Custom designed on request for each situation
- Retrofit in any Pump Station & Lift Station
- Capture all sizes of wastes, wipes, wood, rocks, bottles
- Low cost solution







DIMENSIONS

Discharge pipe: Any dimensions

· Opening filtration: Customized

Depth: No limits





MANUAL BAR SCREEN

Designed for Inlet Wastewater Treatment Plant

DESCRIPTION

Manual BAR SCREEN is used for manual cleaning and is ideal for the coarse filtration at the inlet of waste water treatment plants or outlet of food industry. It consists of a stainless steel frame fixed to the wall with a central screenings area. The frame is installed in the channel with an inclination angle (usually 75°); wastewater passes through filtration area (bars) and screenings are captured. Through a rake, used manually, the screenings are removed of the filtration area and moves them to the discharge chute.

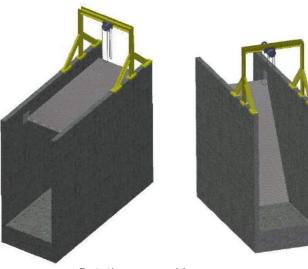
The advantage of this solution is a high life time due to low mechanical components.



Fixed manual bar screen

- Capture all sizes of wastes, wipes, wood, rocks, bottles
- Screen always custom made
- Low cost





Rotating manual bar screen



RAKE SCREEN

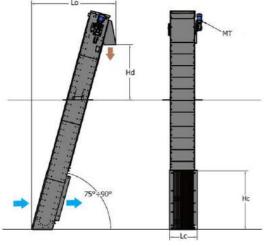
MULTIPLE RAKE SCREEN

MULTIPLE RAKE SCREEN

Designed for Screening in Channel

DESCRIPTION

The RAKE SCREEN meets the need to have a separation of the coarse screenings from wastewater, whether civil or industrial. The machine is composed by a screen with a spacing which can vary from 6 to 40 mm but can also be made with perforated plate. The screenings are lifted, transported and discharged using rakes, that are also suitable for cleaning the filtration area. Rakes are guided by rails at the bottom without any bearings/mechanical components submerged by the raw water.







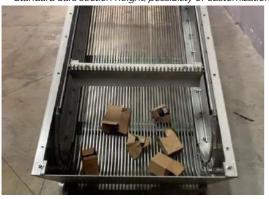
BENEFITS:

- No Sprocket, bearings or mechanical components submerged
- Guides & Rails at the bottom
- Low maintenance
- Capture wipes, wood, rocks, bottles

Model RAKE SCREEN	400	600	800	1000	1200	1400	1800	2000	2200	2400	2600	2800	3000
Channel width (Lc)	400	600	800	1000	1200	1400	1800	2000	2200	2400	2600	2800	3000
Channel height							Variab	le					
Bars section height* (Hc)	600	600	600	800	800	800	800	800	1300	1300	1300	1300	1300
Bar dimensions	40x8	40x8	40X10	40X10	40x10	40X10	40X10						
Discharge height** (Hd)	2300	2300	2300	2500	2500	2500	2500	2500	3000	3000	3000	3000	3000

* Standard bars section height, possibility of customization

** Standard discharge height, possibility of customization











VERTICAL BAR SCREEN XS

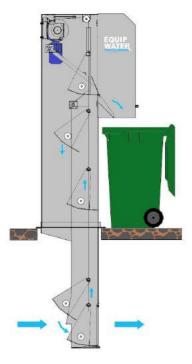
Designed for Pump Station & Lift Station

DESCRIPTION

The VERTI SCREEN XS is a vertical wastewater filtration equipment specially designed for pump and lift station or deep channel. Water screening is carried out by vertical bars catching the waste. A rake comes up and down to pick up the solids maintain on the screen. When the rake is at the top, a shovel ejects the waste into a hopper then discharges in a compactor or dumpster.

BENEFITS:

- > Vertical design to retrofit in any structure
- No bearings at the bottom: low maintenance
- Fully enclosed for odor control
- Customized and adapted to your situation



Vertical Bar Screen Operation

DIMENSIONS:

Flow: Up to 1000m³/h

Opening filtration: 10 to 25 mm

Screen height: Up to 1500 mm

Pipe diameter: 450 to 2000 mm

Pipe depth: Unlimited



Installation



VERTI SCREEN

VERTICAL BAR SCREEN

VERTICAL BAR SCREEN XL

Large Flow in Deep Channel

DESCRIPTION

The VERTI SCREEN is a vertical wastewater filtration equipment specially designed for deep channels and difficult access. Water screening is carried out by a multitude of vertical bars catching the waste. A rake comes across to pick up the waste through the screen and goes back up to the top of the machine. A shovel ejects the waste into a hopper that discharges in a compactor or dumpster.



Flow: Up to 5000m3/h

Opening filtration: 10 to 25mm

Screen height: Up to 1500mm

Channel width: 500 to 2000mm

Channel depth: Up to 15 m

- Sturdy frame and installation
- > Catch any trash, wipes, wood, bottles
- > Trash collection from downstream side
- Protect your downstream wastewater process











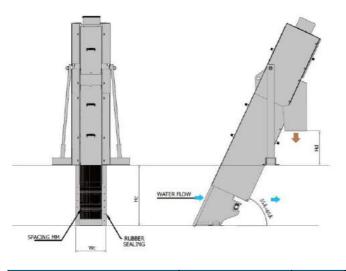
INCLINED STEP SCREEN

Fine Screening for WasteWater Treatment Plant

DESCRIPTION

EQUIP STEP is a mechanically cleaned screen ideal for headworks and water inlet structures. It consists of a stainless steel frame provided with a filtration area composed by fix and mobile lamellas. The distance between fix and mobile lamellas represents the screen meshes section. The frame is installed in the channel with an inclination angle usually 55° wastewater passes through filtration area (lamellas) and screenings are captured and lifted up by a chain. Screenings are removed from the filtration area and discharged.

- Fine filtration, between 3 6 mm
- Minimum noise emissions
- > Structure & Screen completely stainless steel







MODEL - Equip Step	Equip Step 400	600	800	1000	1200	1400	1600	1800	2000
Channel height (Hc) mm	400	600	800	1000	1200	1400	1600	1800	2000
Channel width (Wc) mm	400	600	800	1000	1200	1400	1600	1800	2000
Discharge height (Hd) mm	700	700	700	700	700	700	700	700	700
Power installed kW	0,55	0,55	0,75	1,1	1,1	1,1	1,5	1,5	2,2
Opening filtration mm	3 - 6	3 - 6	3 - 6	3 - 6	3 - 6	3 - 6	3 - 6	3 - 6	3 - 6



BRUSH SCREEN

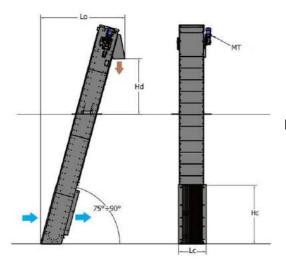
MULTIPLE BRUSH SCREEN

MULTIPLE BRUSH SCREEN

Fine Bar Screen in Channel

DESCRIPTION

BRUSH SCREEN separates fine elements from municipal or industrial wastewater. The equipment consists of a perforated sheet metal or wedge wire (mesh) with an air gap ranging from 0.25 to 6 mm. The solid elements are lifted, transported and unloaded using brushes suitable for cleaning the filtration zone. The brushes are guided by rails at the bottom without any bearings / mechanical components immersed by the water of the channel.





BENEFITS:

- > Fine filtration by perforated sheet or wedge wire mesh
- → No gears, bearings or submerged mechanics
- Guides & Rails at the bottom of equipment
- Also captures wide waste like wipes and plastics

Model BRUSH SCREEN		400	600	800	1000	1200	1400	1800	2000	2200	2400	2600	2800	3000
Channel width (Lc)	mm	400	600	800	1000	1200	1400	1800	2000	2200	2400	2600	2800	3000
Channel height								Variab	le					
Height filtration area* (Hc)	mm	600	600	600	800	800	800	800	800	1300	1300	1300	1300	1300
Opening Perforated holes or wedge	wire					0,25 -	0,5 - 0,	75 - 1 -	2 - 3 - <u>t</u>	5 - 6 mı	m			
Discharge height** (Hd)	mm	2300	2300	2300	2500	2500	2500	2500	2500	3000	3000	3000	3000	3000

^{*} Standard bars section height, possibility of customization

** Standard discharge height, possibility of customization









BRUSH SCREEN 1000

BRUSH SCREEN 400





SCREW CONVEYOR COMPACTOR

Wash, Drain, Convey, Compact

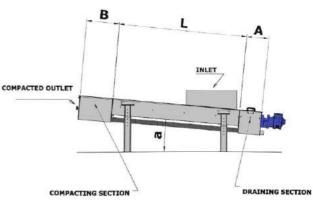
DESCRIPTION

EQUIP SCREW allows to combine four operations: washing, draining, conveying and compacting. The operation of the machine starts from the entrance of screenings in the hopper. The material is then conveyed up to the area of compaction and dehydration through the shaft less screw conveyor, then is downloaded into a bin. The volume of the screenings can achieve a reduction higher than 50%. The water drained from the compaction zone is conveyed to the lower point to be discharged.



- 4 in 1 equipment
- Volume reduction more than 50%
- Dryness reached 30%
- Option solenoid valve with washing system
- Option bagging system for odor control











Compaction zone

Waste outlet					Dr	ain zone					
STANDARD MODELS											
MODEL	A (mm)	L (mm)	B (mm)	Angle	Solid flow	Power (kW)					
Equip Screw 200	350	1000 - 7000	500	5° - 30°	$2 \text{ m}^3/\text{h}$	1,5					
Equip Screw 300	550	1000 - 9000	700	5° - 30°	5 m³/h	3					
Equip Screw 400	700	2000 - 12000	950	5° - 30°	$8 \text{ m}^3/\text{h}$	5					



Waste inlet





SCREW WASHING PRESS

Washing & Compacting

DESCRIPTION

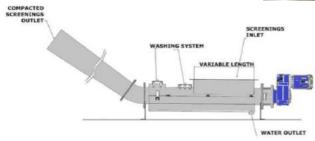
EQUIP PRESS compactor combines two operations: washing and compacting screenings. Waste is dropped into the hopper connected with a tubular section with a perforated bottom for water discharge. Along the transport section, a spray bar washes the solids until the compacting section. The compaction is achieved by means of a "trunk" shaped discharge tube. The high compacting rate and the screen washing allows to reduce disposal costs and odor problems.



- High volume and weight reduction
- Dryness up to 45%
- Save on disposal cost
- Low & easy maintenance







STANDARD MODELS										
MODEL	Screw	Hopper	Solid flow	Power (kW)						
Equip Press 200	DN 200	variable	$2 \mathrm{m}^3/\mathrm{h}$	1,5						
Equip Press 300	DN 300	variable	5 m³/h	3						
Equip Press 400	DN 400	variable	8 m³/h	5						



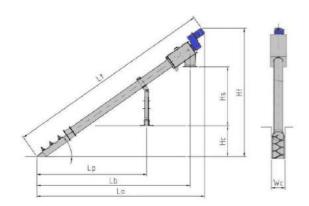


SCREW SCREEN COMPACTOR

Fine Screen in Channel

DESCRIPTION

The SPIRAL SCREEN is useful to pre-treat any kind of sewage water being it municipal or industrial. Following the application, there are two different versions: screw screen directly installed in the channel or screw screen supplied complete with tank, with liquid inlet and outlet flanges and, at request, with lateral by-pass screen. For both models, you can choose the version with or without compacting zone. The main advantages of these models of machines are mainly the low cost of initial investment and the subsequent little maintenance required.



- Low cost solution
- > Excellent performance with fibrous or long wipes
- > Spire in carbon steel, stainless steel 304 or 316L
- Low maintenance

		Model S-SC								
Dimensio	ns (mm)	S-SC 200	300	400	500	600	700			
Lt		5360	5355	5410	5420	5825	6165			
Ht		2990	3340	3325	3330	3740	3940			
Lo		4500	4500	4350	4365	4635	4900			
Hs		1500	1500	1520	1525	1550	1550			
Lb		3670	4000	3990	3990	4220	4480			
Нс		800	800	800	800	800	1000			
Lp		2685	2870	2870	2875	3360	3440			
Wc		250	350	460	560	660	860			
Opening	g (mm)	Flow (m³/h)								
	0,25	20	35	55	120	200	290			
Wedge	0,5	45	60	85	190	275	370			
wire	1	75	90	120	265	360	530			
	2	85	105	150	310	415	670			
	3	100	125	180	320	465	740			
Ø	5	140	162	268	396	590	950			
W	6	160	198	300	435	600	980			
	7	180	220	350	480	650	1000			







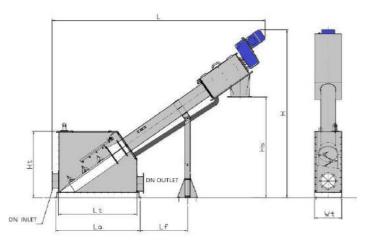
SCREW SCREEN TANK

SCREW SCREEN IN TANK

Screening and Compaction in Tank

DESCRIPTION

The SPIRAL SCREEN is useful to pre-treat any kind of sewage water being it municipal or industrial. The machine is installed inside a self-supporting tank. The machine is composed of a tank, complete with hinged upper cover with safety micro switch, air vent, 1" threated pipe. The screening zone is composed by a stainless steel screen basket that can have a perforated mesh aperture from 2 to 10mm in case of perforated profile, or from 0,25 up to 2 mm in case of wedge wire profile. The screen basket is cleaned by reinforced brushes fixed with bolts directly on the external of the transport screw. These reinforced brushes are divided in sectors, easily replaceable when worn. It rotates inside a transport tube coated with wear bars bolted directly on it.





- Low cost solution
- Excellent performance
- Option water level sensor
- Option by pass with manual screen

Model		SCT 200	SCT 300	SCT 400	SCT 500	SCT 600	SCT 700					
Opening	(mm)		Flow m³/h									
	0,25	20	35	55	120	200	290					
Wedge	0,5	45	60	85	190	275	370					
wire	1	75	90	120	265	360	530					
	2	85	105	150	310	415	670					
	3	100	125	180	320	465	740					
Ø	5	140	162	268	396	590	950					
W	6	160	198	300	435	600	980					
	7	180	220	350	480	650	1000					







VERTICAL SCREW SCREEN

For Pump & Lift Station

DESCRIPTION

VERTI SCREW screens are used to pre-treat any type of wastewater, whether municipal or industrial, but especially for the use in pumping stations, to protect the pumps. Depending on the type of application, is possible to choose between the version with or without compacting zone. The main advantages of these models of machines are mainly the low cost of initial investment and the subsequent little maintenance required.

- Protect your pumps
- Retrofit in any Pump Station & Lift Station
- Capture all wipes and fibrous wastes





Pump station



Food industry







VERTICAL SCREW SCREEN

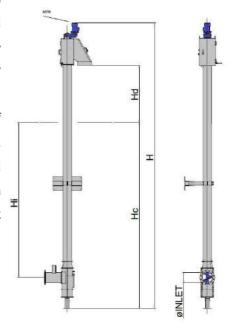
For Pump & Lift Station

MANUFACTURING FEATURES

The screw is always shaft less type. The machine is constituted by a screen basket of Stainless Steel that may be "open-type", that is directly installed in the channel or pit, or "closed-type" that can be coupled directly with the pipe from which the wastewater comes. The screen basket is cleaned by reinforced and bolted brushes, easily replaceable once worn out.

These machines guarantee excellent performance even in the presence of fibrous or particularly long products, that do not cause clogging or blocks. In the standard model the washings in the screenings, in the transport and in the compacting area are always included. Sprays are controlled with a manual valve. The vertical screw screens, being them with or without compacting zone, lend themselves to a large variability of customizations, to make applications highly functional, according to the application.

				Мо	del						
Dimension	ons (mm)	VSS 200	VSS 300	VSS 400	VSS 500	VSS 600	VSS 700				
Inlet		DN 200	DN 200	DN 300	DN 300	DN 500	DN 500				
Н		5500	5500	5500	5500	5500	5500				
Нс		2900	2900	2900	2900	2700	2700				
Hd		1500	1500	1500	1500	1500	1500				
Hi		2100	2100	2200	2300	1800	1800				
Ope	ning	Flow m³/h									
	0,25 mm	50	87	137	275	500	725				
Wedge	0,5 mm	100	150	212	487	687	925				
wire	1 mm	112	205	300	650	900	1325				
	2 mm	212	262	375	775	1037	1675				
	3 mm	250	300	450	800	1150	1850				
Ø	5 mm	350	387	650	990	1475	2300				
v	6 mm	375	462	700	1050	1500	2450				
	7 mm	450	525	875	1200	1625	2500				











MINI SCREW SCREEN

For Multiple Filtration Applications

DESCRIPTION

MINI SCREW are used for solid separation. They feature a screen basket, perforated sheet or wedge wire, depending on the type of application, followed by the transport section and a discharge spout that can be provided with a chute or a bagging system. Screenings are conveyed by a shaft provided in the screen basket section with bolted brushes to keep the basket clean. The machine is usually installed with inlet pipe.

CONSTRUCTION FEATURES

- Screw: high strength carbon steel or stainless steel AISI 304 / 316
- Structure: stainless steel AISI 304 / 316
- Length: the total length may be varied to meet the plant lay-out specifications
- Screen Basket: perforated sheet or wedge wire
- · Screen Basket Cleaning: bolted brushes

INLET & DIAM

- Low cost
- Equipment compact
- Easy installation





Outlet discharge



Solution in tank

			Dimensions (mm)									
Model	Flow m ³ /h	Α	В	C	D	Е	G	Н	DIAM	INLET		
MINI SS 20	15-20	1700	910	168	1000	1440	440	1650	168	DN100		
MINI SS 60	40-60	2500	1338	219	1470	2116	650	2420	219	DN150		





SEPTAGE ACCEPTANCE UNIT

Septage, Liquid Treatment Unit for Trucks

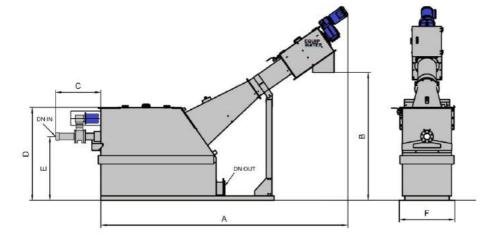
DESCRIPTION

EQUIP SEP is a machine used to pre-treat wastewater from cesspools, storm drain, industry sewage carried by a tank truck, that have the necessities to be treated before a waste water treatment plant. The machine receive the liquid directly from tank truck by means of a quick connection DN Perrot type. The liquid pass through a perforated screw screen in order to remove all suspended solids; all the filtrated material is transported by the screw on the top of the machine, where it will be washed and compacted before the discharge.



The machine is composed by a reception tank with quick connection, automatic motorized ball valve and a screw screen with compacting zone. Inside the tank is installed a bars sensor level to control the height of the water inside the tank; this, in order to open or close the automatic valve. This system can control the tank truck cycle of discharge automatically. Screening, transport and compacting zone are equipped with a washing system in order to remove all the organic parts from before the discharge.

- DN Perrot type
- Automatic motorized valve
- Integrated washing system





MODEL	Flow		Dimensions (mm)									
MODEL	m³/h	Α	В	С	D	Е	F	DN IN	DN OUT			
Equip Sep 50	50	3100	1500	780	1300	800	620	100	200			
Equip Sep 100	100	4300	2200	780	1600	1105	960	100	200			



ROTARY SCREEN IN CHANNEL DRUM

ROTARY DRUM SCREEN

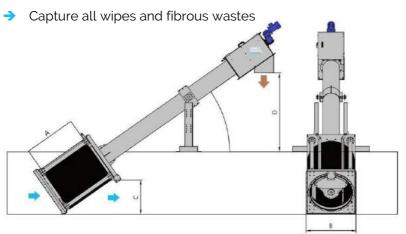
Fine Screen with drum in Channel

DESCRIPTION

ROTARY SCREEN is used for solid/liquid separation for high flow rate and combine two operations: filtration and compacting. They feature a screen basket, perforated sheet or wedge wire, that act as a filter and rotating with the transport screw, followed by the transport section that ends with a compacting/dewatering modulus that can be provided with a chute or a bagging system. Screenings are conveyed by a shafted screw until the compacting/dewatering section where both the volume and the weight are reduced (up to 40%).



- Structure & Screw: stainless steel
- → Fine screen & efficient



		Model Rotary Drum Screen										
Dimension	ons (mm)	RDS 6	8	10	12	14	16	18	20	24	26	30
Α		600	800	1000	1200	1400	1600	1800	2000	2400	2600	3000
В		600	800	1000	1200	1400	1600	1800	2000	2400	2600	3000
С		447	580	760	930	1050	1200	1400	1600	2000	2100	2200
D		1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
Drum o	pening	Flow m³/h										
Wedge	0,5 mm	76	108	235	290	430	580	790	940	1460	1820	2050
wedge	1 mm	126	270	400	470	720	970	1480	1750	2420	2998	3210
WIIE	2 mm	148	290	490	720	936	1420	1840	2010	2780	3310	3519
Ø	3 mm	169	325	400	550	890	1200	1550	1867	2450	2710	3202
	6 mm	252	690	990	1310	1890	2980	3490	4510	5620	7120	8020
	8 mm	310	810	1020	1910	2460	3110	3900	4950	5990	7510	8980











EXTERNALLY FED DRUM SCREEN

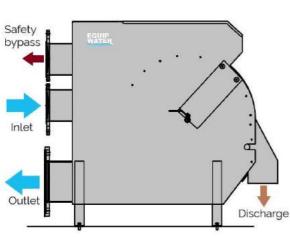
Compact Fine Screen Solution

DESCRIPTION

The DRUM SCREEN executes fine micro-screening and is installed upstream of small and medium-sized purification plants. The flow of the suspension for screening meets the surface of the rotary screen perpendicular to the direction of the hole between the bars. While the filtered liquid passes through the holes of the screen and is discharged into a tank under the cylinder, the solids are trapped on the surface of the same screen and are drawn by rolling friction to a spillway blade that diverts them to a special container. The bars of the cylinder are wedge-shaped, permitting the uninterrupted flow of hydraulic pressure and minimizing the risk of solids sticking and causing obstruction.



- Most efficient screening technology
- Capture everything
- Structure & Drum in stainless steel









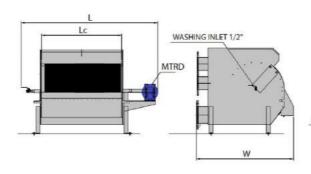


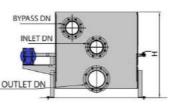
EXTERNALLY FED DRUM SCREEN

Compact Fine Screen Solution

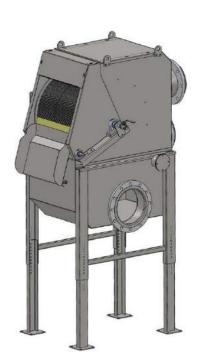
MANUFACTURING FEATURES

- Feed chamber with incorporated overflow, designed to allow sewage to cover the entire width of the cylinder,
- Screening cylinder consisting of a V-shaped profile wound in a spiral around a structure of longitudinal bars,
- Spillway blade made of wear-resistant material that exerts constant pressure on the cylinder piston,
- Backwash by means of a device installed in the screening cylinder,
- Spacing between 0.25 and 6 mm wedge wire or from 1 to 6 mm perforated.
- · Worm geared motor and helical gears.





			Е	Externally Drum Screen								
Dimens	ions	(mm)	EDS 500	1000	1200	1500	2000	3000				
Max height (H	1100	1100	1100	1100	2300	2300						
Max width (W	/) mm	1	1250	1250	1250	1250	1650	1650				
Max length (L	.) mm	1	1750	2250	2450	2750	3100	4100				
Drum length	(Lc)		500	1000	1200	1500	2000	3000				
Drum diamete	er (d)		628	628	628	628	914	914				
Inlet diamete	r DN		100	150	200	250	300	400				
By pass diam	100	150	200	250	300	400						
Outlet diamet	150	200	250	300	350	500						
Installed pow	er Kv	V	0,37	0,55	0,55	0,75	1,1	1,5				
Drum	Oper	ning	Flow m³/h									
		0,25 mm	35	70	80	100	140	310				
<u>o</u>		0,5 mm	60	125	140	200	250	550				
Wedge wire		0,75 mm	90	170	180	250	330	700				
<u>6</u>		1 mm	110	200	240	320	420	950				
)ec		2 mm	165	330	350	500	620	1390				
*	0	3 mm	200	400	400	600	750	1650				
		5 mm	240	480	480	680	900	2000				
		6 mm	250	500	520	730	1000	2100				









INTERNALLY FED DRUM SCREEN

Screening by Rotating Cylinder

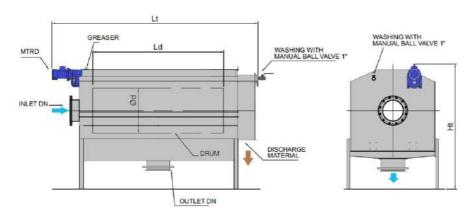
DESCRIPTION

DRUM SCREEN is an internally fed screening device with the flow being fed and distributed inside a screening cylinder. The stainless steel cylinder designed with wedge wire mesh or perforated holes from 0,25 to 6 mm provide the best screening/solids capture performance in all screening applications.



OPERATION

The raw water is fed in the internal rotating surface of the screen. Solids remain on the surface of the screen while the liquid goes through the screen. As the screening cylinder rotates, the solids drop off one diverter flight to the next until they reach the discharge. A spraying/backwash system located on the upper half of the unit, will wash off any solids, grease or other materials sticking to the face of the screen and keep the perforation clean.



- Most efficient screening technology
- Capture everything
- > Structure & Drum in stainless steel

MODEL	IDS 500	IDS 1000	IDS 1200	IDS 1500	IDS 2000	IDS 3000
Max height (H) mm	1650	1650	1650	1650	1900	1900
Max width (W) mm	1000	1000	1000	1000	1300	1300
Max length (L) mm	1950	2350	2650	2950	3150	4150
Drum length (Lc)	500	1000	1200	1500	2000	3000
Drum diameter (d)	628	628	628	628	914	914
Inlet diameter DN	100	150	200	250	300	400
By pass diameter DN	100	150	200	250	300	400
Outlet diameter DN	150	200	250	300	350	500
Installed power Kw	0,37	0,55	0,55	0,75	1,1	1,5





STATIC SCREEN ECO FRIENDLY SCREEN

STATIC SCREEN

Ecological and Economical Screening Solution

DESCRIPTION

STATIC SCREEN is used for many solid/liquid separation. It provides an efficient separation especially in the treatment of storm water mixed with solids, hydrocarbons, coming from oil & gas plants. The screen is built with stainless steel wedge wire mesh from 0,25 mm to 1,5 mm to remove any solids above this mesh size.



OPERATION

The operation of the Static Screen is based on the coanda effect meaning that the liquid to be screened forms a hydraulic attachment to the wedge wire (bars) of the screen. The water goes through the slots while the separated solids stay on the front face of the screen plate. The screen plate has a design with three distinct angles to increase the separation efficiency.

BENEFITS

- Eco-friendly solution
- No moving parts, no motors
- Low installation costs with no maintenance
- Quiet operation



Plug and play skid with two Static Screens



STATIC SCREEN with or without covers

Model Static S	creen	500	1500	2000			
Openin	g	Flow m³/h					
	0,25 mm	40	80	120			
Wedge wire	0,5 mm	45	90	140			
(slot)	0,75 mm	55	110	170			
	1 mm	65	125	195			
	1,5 mm	75	150	230			

Indicative flow table with 200 mg/l of suspended solids





MANUAL FINE SCREEN

Fine screen prior bioreactor, aeration, sedimentation & biological tank

DESCRIPTION

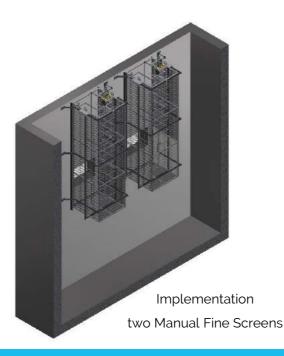
MANUAL FINE SCREEN is designed for many filtration applications. The main purpose is to separate the solids elements before a water process such as biological tank, primary/secondary clarifier, sedimentation tank or any basin that require a fine separation.

OPERATION

The raw water across the mesh or perforated panels especially design for the flow requested. The solids cover the panels and will be ejected by the countercurrent spray system.

BENEFITS

- Easy installation wall mounted
- Custom designed for each site
- Autonomous solution with countercurrent washing system.
- Simple equipment with no moving parts & no motors





DIMENSIONS & MANUFACTURING

- Flow: Designed on request
- Opening filtration: 0.25 to 6 mm
- Screen dimensions: Customized
- Material in stainless steel 304 or 316L



CUSTOMIZED INTAKE SCREEN

Self Cleaning Intake Screen for Pumps & Raw Water Inlet

INTAKE SCREEN

INTAKE SCREEN is designed for water extraction from reservoirs and rivers for use as drinking water, desalination plants, and other industrial uses. The raw water goes through the two cylindrical screens which leave the solids elements against the perforation or wedge wire. An integrated air purging system takes place inside in order to expulse the clogged solids with bubbles.



Intake Screen

APPLICATIONS

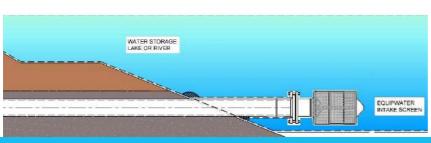
- Raw water from reservoirs and rivers
- Water supply to desalination plants
- Industrial raw water supply for brewing, drinks & food processing





PUMP INTAKE SCREEN

The raw water is fed in the internal rotating surface of the screen. Solids remain on the surface of the screen while the liquid goes through the screen. As the screening cylinder rotates, the solids drop off one diverter flight to the next until they reach the discharge. A spraying/backwash system located on the upper half of the unit, will wash off any solids, grease or other materials sticking to the face of the screen and keep the perforation clean.





Self Cleaning Pump Intake Screen

Protect pumps and other water system components from leaves, algae, moss, sticks, and troublesome debris.





GRIT CLASSIFIER

Sedimentation Process

DESCRIPTION

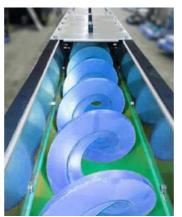
EQUIP GRIT is used to remove grit from water. These separators consist of a shaft less screw conveyor provided with a big sedimentation hopper, including inlet/outlet flanged spouts. Effluent flows through the hopper, that is designed specifically to allow the sedimentation process while the grit separation takes place.

The shaft less screw extracts the grits from the hopper's bottom, while the cleaned water outflow trough the outlet spout. The water enters the hopper and the sand falls on the bottom, to then be extracted from the cochlea that, by rotating at low speed, avoiding turbulence and increases the efficiency of the process.



- Trough Protection with HDPE liner
- Screw in high strength carbon steel or stainless steel 304/316
- → Grit separation: ≥ 90% for particles up to 200 μm











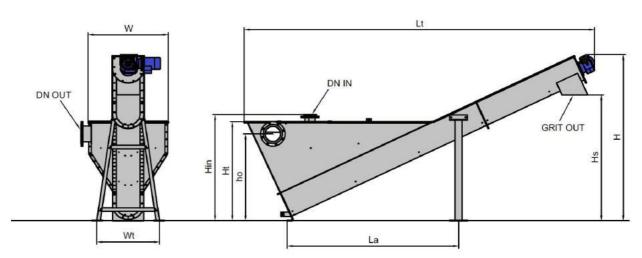
GRIT CLASSIFIER

Sedimentation Process

TECHNICAL CHARACTERISTICS

- Screw: high strength carbon steel, stainless steel 304 or 316L
- Structure: stainless steel 304 or 316L
- Trough Protection: HDPE liner
- Grit separation: ≥ 90% for particles up to 200 µm
- Inlet Flow Rate: up to 130 m³/h





MODEL	Lt	I	La	Wt	W	Ħ	Hin	Но	Hs	DN IN	DN OUT	Flow	Water capacity	Sand removing capacity
	mm	PN10	PN10	m³/h	m³	m³/h								
Equip Grit 200	4000	2150	2000	810	900	1200	1300	1050	1500	DN80	DN100	20	0,58	0,25
Equip Grit 300	4500	2150	2380	995	1065	1330	1400	1150	1585	DN100	DN150	30	0,73	0,4
Equip Grit 600	5000	2300	2380	1150	1265	1370	1450	1200	1750	DN150	DN200	60	1,7	0,4
Equip Grit 80	5400	2500	3065	1400	1530	1690	1750	1550	1900	DN150	DN200	80	1,95	0,4
Equip Grit 100	6200	2890	3250	1450	1600	2090	2200	1870	2300	DN200	DN250	100	3	0,4
Equip Grit 130	7500	3200	3470	1530	1650	2500	2650	2370	2900	DN200	DN250	130	3,8	0,7

On request and with an extra charge, Equip Grit could be supplied with conical hopper for a better grit separation.





GRIT WASHER

Sand Separation & Cleaning

DESCRIPTION

EQUIP GRIT washer is used for the separation and cleaning of sandy material from wastewater. These machines consist of a conical decantation hopper, provided with an agitation system that give to sandy waste water a rotational movement; this rotation facilitates the sedimentation process and, at the same time, keeps in suspension the organic matters.

The hopper's bottom is fed with clean water that creates a counterflow that removes the organic material which is then evacuated from a pipe placed at the upper side of the hopper.





Residual Organic Content: ≤ 5 %

- Grit separation: ≥ 90% for particles up to 200 µm
- Trough Protection with HDPE liner for the screw



The washed sands are removed from the bottom of the hopper by a shafted screw conveyor, while the output cleaned water outflows from a pipe placed at the top of the hopper.

The water enters the hopper through the inlet scroll; the volume is kept in motion by the agitator central that a rotational movement, whose purpose is to facilitate the sedimentation of the sand and at the same time to maintain suspension of the organic material.

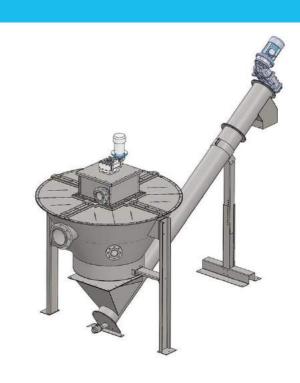


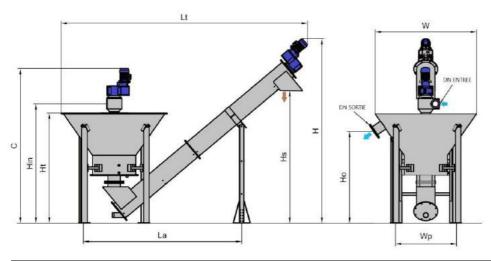


GRIT WASHER

Sand Separation & Cleaning

The sand, on its way towards the bottom is further washed clean water fed in countercurrent, to then be extracted from the cochlea. The water countercurrent also has the task of facilitating the ascent of the organic substances, that are then evacuate at regular intervals by a special exhaust pipe. The clarified water is instead evacuated by a second conduit placed in the upper part of the conical hopper. The constant rotational motion of the water mass allows the sand to pass from the hopper to the discharge screw, which conveys it to the exit.





FEATURES

- Screw: stainless steel 304/316
- Structure: stainless steel 304/316
- Grit: ≥ 90% for particles up to 200 µm
- Residual Organic Content: ≤ 5 %
- Inlet Flow Rate: up to 90 m3/h

MODEL	Lt	I	La	Wp	W	O	Ht	Hin	Н	Hs	INLET	OUTLET	Flow	Water capacity	Sand removing capacity
					m	m					PN10 n		m³/h	m³	m³/h
Equip Grit 30	4500	3300	3000	1100	1900	2750	1950	2100	1600	2400	DN100	DN150	30	0,91	0,4
Equip Grit 60	5200	3700	3100	1900	2100	3000	2300	2500	2000	2800	DN200	DN200	60	1,93	0,4
Equip Grit 90	5500	3700	3100	1900	2300	3100	2320	2500	2000	2800	DN200	DN200	90	2,92	0,4





SCREENING & GRIT REMOVING

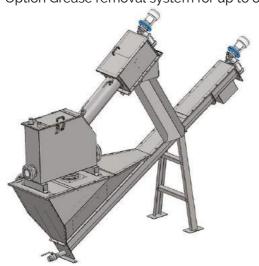
Low Flow Process

DESCRIPTION

MINI UNIT is a combined equipment for screenings and grit removing; it represents the most economical solution to treat low flow rates. The incoming wastewater is filtered through a screw screen than goes into the settling tank. The internal baffle system allows an efficient separation of the sand that is collected on the bottom of the tank and extract with a screw. An integrated optional degreasing system can be installed prior the classifier outlet.



- Trough Protection with HDPE liner
- → Grit separation: ≥ 90% for particles up to 200 μm
- Option Grease removal system for up to 80%



MODEL	Flow	_	Hopper Capacity			
	m³/h	l/sec	m³	m³/h		
Mini Set 10	10	2,7	0,37	0,4		
Mini Set 30	30	8,3	0,7	0,7		



MANUFACTURING FEATURES

- Screws: high strength carbon steel or stainless steel AISI 304/316
- Structure: stainless steel AISI304/316
- Filtration: 0.5 6 mm
- Screen Basket: wedge wire/perforated plate









SCREENING, GRIT & GREASE REMOVING

Combined Unit for Large Flow

DESCRIPTION

LARGE UNIT is a sand classifier with longitudinal hopper that makes a selection of the grit for the principle of gravity and thanks to the whirling motion created by blower, moving the particles, separates the grit from the organic material that due to major specific weight respect to the water decants on the bottom of the hopper, where there is a bottom screw that carries the grit in a collection tank; also bring in suspension oil and grease. An inclined, called extractor, pick up the grit and bring it out of the machine. The grease removal system is made from a series of plate moved by chain that scrapes the water and brings the grease in a collection hopper. The water rich of organic material exits to the machine for overflow from an appropriate discharge.



Classifier with Longitudinal Hopper



Septage Acceptance Combined Treatment Unit for Trucks



Classifier with Longitudinal Hopper and Degreaser





SLUDGE SCREW PRESS

Cost-effective Sludge Thickener Dewatering Solution

DESCRIPTION

The Thickener and Dewater SCREW PRESS are machines used for thickening and dewatering sludge. They represent a viable alternative to machines currently in use and have been designed to achieve high levels of thickening and dewatering, combined with a reduction in energy costs and maintenance.

The machines are both constituted by a drum, with wedge wire spacing, inside which, by means of a geared motor with a low power and low rpm, rotates a screw with a variable pitch shaft.



Dimensionally the two versions have the same footprint, what differs is mainly the screw pitch, the pneumatic counter pressure system, only present in the Dewater Screw Press, and further technical measures needed for the different purpose of the machine.

Both versions are equipped with a cleaning system necessary for the drum cleaning it can be motorized or fixed. On request is possible to have the dehydrator/thickener complete with all the machines (EQUIP POLY, EQUIP FLOCCU, pumps, control panel, ect) needed for its correct operation, installed on mobile skid in stainless steel. In both models the incoming sludge should be first conditioned by a polyelectrolyte treatment, so as to obtain a proper flocculation of the sludge itself, in order to optimize the operation of the machines.







EQUIP SLUDGE SCREW PRESS THICKENER & DEHYDRATOR

SLUDGE SCREW PRESS

Cost-effective Sludge Thickener Dewatering Solution

The Thickener and Dewater Screw Press can be provided, on request, even with a static or dynamic flocculation system. The flocculated sludge, once it comes inside of the thickener or dehydrator proceeds its path moved by a screw with shaft. The screw, depending on the type of machine, changes its pitch, besides other technical characteristics, thus allowing the thickening or dehydration. During the rotation of the screw at low rpm, the separated water passes through the drum to then be channeled towards the discharge area of the eluate.



To obtain the best performance in terms of sludge dewatering, the two machines can be installed one after the other: first the thickener to obtain a concentration, variable depending on the model from 4 to 8% of SS, and to follow the dewater screw press for dewatering, with a dry matter percentage up to 25%. The dewatering screw press is particularly suitable to thicken and also dehydrate the material from flotation units.



After reaching the discharge zone, the sludge is conveyed towards the outlet, situated on the bottom of the machine which in the case of the thickener can be connected to a pump which transfers the product to a possible subsequent dehydration system, while in the dewater screw press, once passed the pneumatic counter pressure system, the sludge is discharged within special dumpster or is loaded into a transport system made with screw conveyors or with transport belts.

- Low energy consumption
- Low cost of operation
- Low noise level
- Easy access and maintenance
- System fully closed



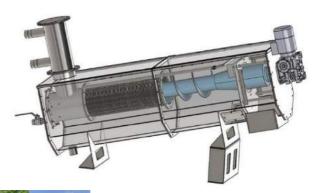


THICKENER SCREW PRESS

Cost-effective Sludge Thickener Solution

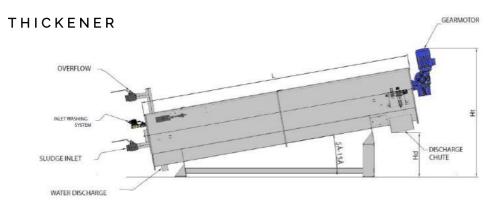
FEATURES SCREW PRESS

- Screen Basket: wedge wire/perforated plate
- Sludge Type: activated digested sludge
- Outlet Dryness: from 4 to 8%
- Inlet Sludge Solids Concentration: from 1 to 4%
- Inlet Flow: up to 94 m³/h











		Dimer	sions		Flow	Power	Wash			
MODEL	Length L	Height Hd	Width W	Height Ht	Screw Pre	Screw Press Thickener		Washing water Consumption		Polymer Consumption
	mm	mm	mm	mm	m³/h	KW at 6,7 RPM	Power kW	liter	/sec	g/KgSS
Screw Press T200	2700	600	600	Variable	8,5	0,37	0,09	0,9	0,22	3 to 4
Screw Press T400	3500	720	820	Variable	19,5	1,1	0,09	1,4	0,34	3 to 4
Screw Press T700	4400	880	1080	Variable	41	1,1	0,09	1,7	0,41	3 to 4
Screw Press Tgoo	4800	1030	1330	Variable	83	1,5	0,09	2,1	0,5	3 to 4
Screw Press T1200	5200	1056	1633	Variable	94	1,5	0,09	2,5	0,6	3 to 4
Comments	Comments The dimensions for Thickener Ht is variable following inclination.		Sludge inlet with a value of 0,6% of SS	We recomend to use an inverter for the gear.	Motorized washing available only on request.	We consider the washing 1 minute	frequency of the e 4 time per hour.			



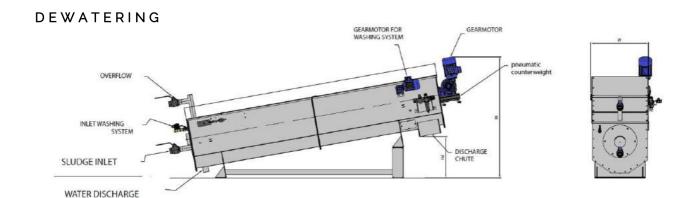
DEWATERING SCREW PRESS

Cost-effective Sludge Dewatering Solution

FEATURES SCREW PRESS

- Screen Basket: wedge wire/perforated plate
- Sludge Type: activated digested sludge
- Outlet Dryness: from 15 to 22%
- Inlet Sludge Solids Concentration: from 4 to 8%
- Inlet Flow: up to 9 m³/h





		Dimer	nsions		Flow	Power	Was	hing Syste	m	
MODEL	Length L	Height Hd	Width W	Height Ht	Screw Press Dewatering		Screw Press Dewatering Motorized Washing water Washing Consumption		_	Polymer Consumption
	mm	mm	mm	mm			Power kW	liter/sec		g/KgSS
Screw Press D200	2700	600	600	Variable	0,8	0,25	0,09	0,9	0,22	3 to 4
Screw Press D400	3500	720	820	Variable	2	0,37	0,09	1,4	0,34	3 to 4
Screw Press D700	4400	880	1080	Variable	4,5	0,55	0,09	1,7	0,41	3 to 4
Screw Press D900	4800	1030	1330	Variable	7.7	0,55	0,09	2,1	0,5	3 to 4
Screw Press D1200	5200	1056	1633	Variable	9	0,75	0,09	2,5	0,6	3 to 4
Comments	The dimensions for the Dehydrator Ht is variable following S		Sludge inlet with a value of 0,6% of SS	We recomend to use an inverter for the gear.	Motorized washing available only on request	the washing 1 m	ne frequency of ninute 4 time per nur			





POLYMER UNIT

Polymer Preparation & Dosing Station

DESCRIPTION

EQUIP POLY preparation and dosing station is designed for the production of polymer / polyelectrolyte solutions for the treatment of sludge. Our plants are used for all separation cases such as biological sludge or physicochemical processes.

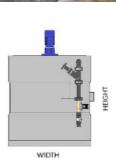
The polymer solutions are prepared by dilution in the tank. The operator sets up the dosing system (dosing pump) and the water supply regulation in the network according to the need. The water is mixed with the concentrated polymer in the tank with a vertical mixer at low speed. The machine is designed to meet a specific retention time (20-30 min) based on the flow of the dosing pump and the water inlet.

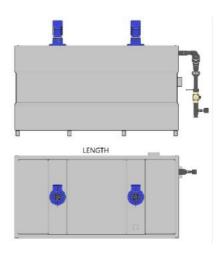


EQUIP POLY unit in standard is composed:

- Mixing tank in stainless steel AISI 304 divided into one or more sections
- Discharge ball valve
- Overflow sleeve
- Vertical low rpm mixer with stainless steel shaft and blades
- Bars sensor level
- Solenoid valve for network water
- Regulation pressure valve + Y filter
- Flow meter for monitoring mechanical-analog input network water
- Screw/piston dosing pump for concentrate poli
- Screw/piston dosing pump for diluted poli

EQUIP P	OL	Υ.	300	500	800	1000	1250	1500	2000	3000	4000	5000
Volume	-	Liters	300	500	800	1000	1250	1500	2000	3000	4000	5000
Length	-	mm	700	850	950	1250	1250	1300	1450	1900	2050	2250
Width	-	mm	650	750	850	950	1100	1150	1250	1300	1450	1550
Height	-	mm	1150	1150	1150	1150	1150	1250	1350	1350	1550	1650









DYNAMIC FLOCCULATOR

Sludge Flocculator

DESCRIPTION

The dynamic EQUIP FLOCCU is a mixing cylindrical tank, that has the scope of mixing sludge at maximum concentration of 5% - 6% with diluted polyelectrolyte/polymer.

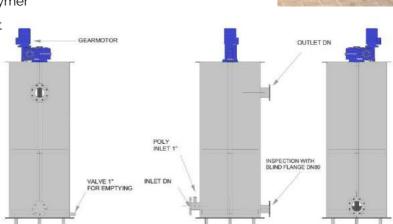
The operating principle is very simple, the polyelectrolyte is determined with a "T" junction on the inlet sludge flange in order to take advantage of vertical mixer blades effect. The result of these mixing is a perfect flocculation of the sludge; in case of the following machinery can be feed with low pressure, the sludge can flow directly from the upper outlet flange.

In other cases the sludge must need a relaunch or installing a mechanical seal to keep the liquid in pressure. The dimension of the tank will be defined accordingly with flow capacity and retention time of flocculation.



The dynamic EQUIP FLOCCU consists of :

- 1 lower flange for the load with a welded inlet sleeve for polyelectrolyte
- 1 flange for maintenance drain to be connected with blind flange / valve (not included)
- 1 shaft with blades for mixing sludge with polyelectrolyte
- 1 low speed electric agitator (40 RPM) 230/400 V 50Hz
- 1 cylindrical tank closed in the lower part in SS 304
- Screw/piston dosing pump for concentrate polymer
- Screw/piston dosing pump for diluted polymer
- 1 upper output flange of the mixed product
- 1 upper closure cover in SS 304 bolted
- 1 regulation pressure valve + Y filter
- 1 inspection window on the top
- 1 Flow meter









STATIC FLOCCULATOR

Sludge Flocculator

DESCRIPTION

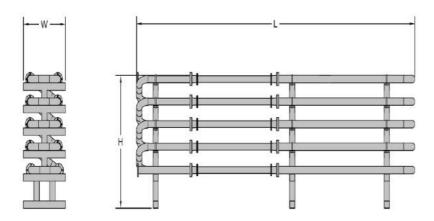
Our static EQUIP FLOCCU is a sludge flocculator also named by "static flocculation pipe" made of PVC and design with a sufficient length in order to have the perfect retention time.

The set, inlet flange, PVC plastic tube and polymer inlet, are supported by a stainless steel structure. The purpose of the static mixer is to mix the sludge and the polymer before the area of the transport pipe.



The advantages of this solution are:

- None electric consumption
- > The maintenance of pressure sludge until the reception machine



EQUIP FLOCCU STATIC	50	80	100	150
Pipe diameter	DN50	DN80	DN100	DN150
Total pipe length	35 m	35 m	35 m	35 m
Length - mm	3400	3400	3400	3400
Width - mm	600	600	800	800
Height - mm	1350	1350	1650	1650







DISC FILTER

Microfiltration Tertiary Treatments

DESCRIPTION

The filter EQUIP DISC is a machine designed for the microfiltration of wastewater, used in the final phase of their treatment. It is a machine designed to obtain high separation efficiency, using meshes realized of stainless steel 316L, with a filtering aperture of 20 μ m.

BENEFITS:

- Meshes are not crossed by suspended solids during washing
- The suspended solids do not accumulate inside the meshes
- Maintenance is simple and wear is limited.
- Meshes are highly resistant

OPERATION:

The water flow proceeds from the inside towards the outside, during this passage the suspended solids are blocked inside the filter allowing the containment tank to remain always clean. The machine is equipped with a washing system with nozzles that is activated each time the water level inside the containment tank reaches the preset level. In the standard version the water level is adjusted using the bar level indicators.

On request we can be provided ultrasonic level indicator with one or two levels and a backwash system with double cartridge filter for easier maintenance.











DISC FILTER

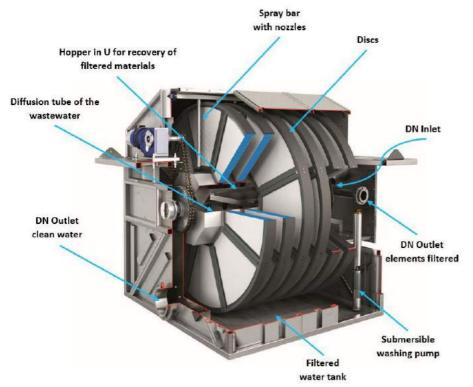
Microfiltration Tertiary Treatments

The water that enters through the appropriate feeding flange continues on its way inside a tube placed in the center of the machine and from there reaches the filtration sectors of the disc filter.

During the filtration the discs are not in operation as long as the amount of solids held from the meshes causes a clogging of the same and the consequent raising of the water level inside the tank. At this point is activated the rotation of the discs and the washing system placed in their upper part, than working in countercurrent, allows a perfect cleaning of the meshes.



The retained solids from the meshes are pressed from the backwash water flow inside a specific channel located inside the central tube, and then slide towards the discharge flange of the solids. The water used by the washing system is picked up, by means of a high prevalence submersible pump or by an external centrifugal pump, which can be placed vertically or horizontally at the discretion of the project.



Thus using filtered water is not necessary any connection with the mains water. In order to safeguard from clogging, is installed a further filter. The water level inside the containment tank is regulated by a barrier that regulates the level of load and that allows to maintain the discs immersed to a value equal to 60% of the filtering area. Filtered water, after the barrier regulation system, passes through the outlet flange.





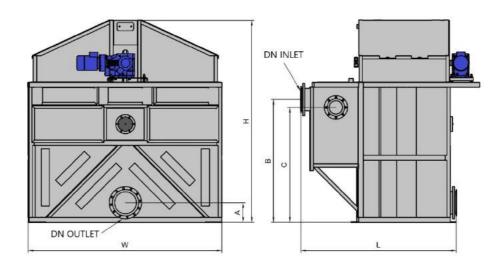
DISC FILTER

Microfiltration Tertiary Treatments

MATERIAL OF CONSTRUCTION OF MAIN COMPONENTS:

- Containing tank (optional): Stainless steel 304 or 316L
- Structure of the disc filter: Stainless steel 304 or 316L
- Filtration mesh: Stainless steel 316L
- Outside structure of the discs: Polyethylene

The standard version includes the supply of an electrical control panel wired, a bar level sensor, a submersible pump for backwashing and a by-pass system, in case of block of the machine.



Number of discs	Height mm	Width mm	Length mm	Diameter discs	Filtration area m²	Washing water flowrate at 6 bar l/s	Power Discs motor	Power Pump motor
4	2470	2350	2390	2200	21	1,9	0,75	2,2
6	2470	2350	2870	2200	31,5	2,9	1,1	4
8	2470	2350	3350	2200	42	3,9	1,1	5,5
10	2470	2350	3830	2200	52,5	4.9	1,5	7,5
12	2470	2350	4310	2200	63	5.9	1,5	7,5
14	2470	2350	4790	2200	73,5	6,9	1,5	7,5
16	2470	2350	5270	2200	84	7.9	2,2	11,5
18	2470	2350	5750	2200	94,5	8,9	2,2	11,5
20	2470	2350	6230	2200	105	9,9	3	11,5





SUBMERSIBLE AERATORS

Oxygenation

DESCRIPTION

EQUIP AIR is a submersible aerator used in applications where it is required the air supply in tanks in sewage treatment plants. The aerator installation is very simple and does not require, in many cases, none of civil work as it is rested on the bottom of the basin and, by means of its weight, the stability is guaranteed.

As the fixing point, we recommend the use of a rope connected to the self-priming pipe, fixed on the wall of the basin, to ensure to maintains the perpendicularity of the pipe. Both the installation and removal of the equipment, if necessary, con be carried out with the full tank.



APPLICATIONS

- Homogenization and equalization tank
- Biological oxidation tank
- Stabilization tank
- Oxidation and nitrification tank



BENEFITS

- Optimal oxygenation with high returns
- Easy installation and maintenance
- Versatility of usage in any type of tank
- Noiseless
- Stainless steel construction for longer life a better resistance to corrosion.

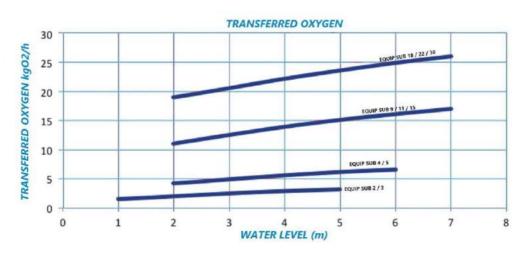




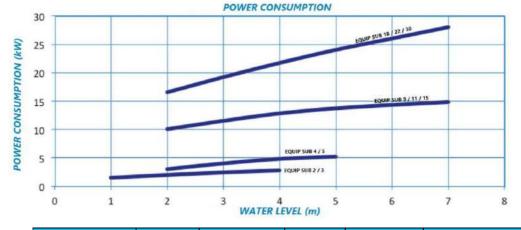
SUBMERSIBLE AERATORS

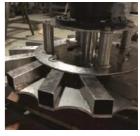
Oxygenation

TECHNICAL CHARACTERISTICS









Model Submersib	ole	Power kW	Nb Poles	RPM	Current Amps	Max water level meters	Weight Kg
	2	2,2	4	1385	5,4	3	75
3 4 5	3	3,1	4	1395	6,9	3,5	80
	4	4	4	1400	9,3	4	120
	5	5,5	4	1410	12,2	4,5	130
EQUIP AIR	9	9	4	1435	20,1	4	280
LQUIF AIR	11	11	4	1435	22,4	5	290
	15	15	4	1450	32,5	6,5	300
	18	18,5	4	1455	40,8	5	400
	22	22	4	1460	44,3	6	420
	30	30	4	1460	56,7	7	440

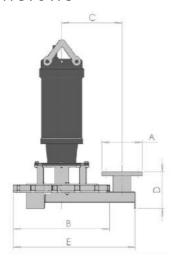




SUBMERSIBLE AERATORS

Oxygenation

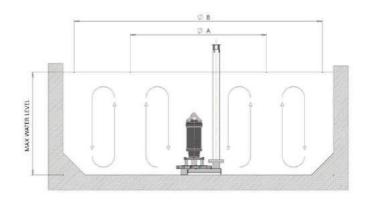
DIMENSIONS



			Dim	ensions (ı	mm)	
Model Submersib	ole	Α	В	С	D	Ш
	2	DN50	380	150	184	480
	3	DN50	380	150	184	480
	4	DN80	480	300	184	605
	5	DN80	480	300	184	605
EQUIP AIR	9	DN100	700	400	184	885
LQOIF AIR	11	DN100	700	400	184	885
	15	DN100	700	400	184	885
	18	DN125	1000	600	240	1150
	22	DN125	1000	600	240	1150
	30	DN125	1000	600	240	1150

STANDARD MATERIALS

- Hydraulic part: Stainless steel 304
- Impeller: Stainless steel 316L
- Bolts and nuts: Stainless steel 304
- Motor case: Ghisa G25
- Electric cable: Ho7RNF



Area of influence

AREA OF INFLUENCE

		stan (n	dard	extended channel (m)			
Model <i>Submersib</i>	ole	Α	В	А	В		
	2	2,5	4,5	2,7	4,9		
	3	2,5	4,5	2,7	4,9		
	4	3,1	7	3,9	8,3		
	5	3,1	7	3,9	8,3		
EQUIP AIR	9	5	10,5	7,2	12,5		
LQOII AIIC	11	5	10,5	7,2	12,5		
	15	5	10,5	7,2	12,5		
	18	6,5	14	8,4	15,2		
	22	6,5	14	8,4	15,2		
	30	6,5	14	8,4	15,2		

Area of influence





SURFACE AERATORS

Aeration in wastewater treatment plants

DESCRIPTION

Surface aerators EQUIP AIR is an optimal solution for aeration in wastewater treatment plants, lagoons, and aerated pond. The aeration combine physical, biological, and chemical processes to promote the biological oxidation.





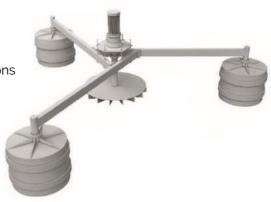
APPLICATIONS

In water treatment plants and in particular:

- Activated sludge tanks in biological wastewater
- Pre-aeration in homogenization basin
- Tanks for aerobic sludge stabilization
- Aeration of lagoons

BENEFITS

- > Easy planning and building of oxidation tanks
- Oxygen supplying easily adaptable to process conditions
- Low operation cost
- Low operating cost.
- Simple maintenance
- Always ready and reliable





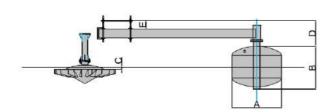


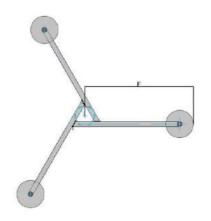
SURFACE AERATORS

Aeration in wastewater treatment plants

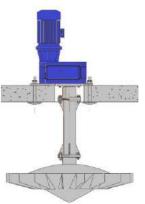
DIMENSIONS

Surface aerators EQUIP AIR has different models to match with the oxygenation requirement and the size of your basin.





	Floating System Dimensions (mm)										
Model	Α	В	C max	D	Е	F					
EQUIP AIR Surface 3 - 4 - 5 - 7	900	800	80	500	20 - 100	2950					
EQUIP AIR Surface 11 - 15	1000	900	100	800	20 - 100	3150					
EQUIP AIR Surface 18 - 22	1300	1000	120	900	20 - 100	3850					



TECHNICAL CHARACTERISTICS

Find below the different values for your EQUIP AIR such as oxygen transfer, power, rotation per minute.

Model EQUIP AIR	Diameter	Power	RPM	Peripheral speed		, 0
Surface	mm	kW		m/sec	mm	Kg O2/h
3	800	3	83	3,4	80	7
4	800	4	98	4,1	80	9
5	910	5,5	82	3,9	80	12
7	910	7,5	98	4.7	80	17
11	1100	11	74	4.3	100	25
15	1300	15	71	4,8	100	33
18	1500	18,5	57	4,5	120	44
22	1600	20	57	5,8	120	52
30	2000	30	47	4,9	120	64
37	2100	37	47	5,1	120	80
45	2350	45	42	5,2	150	96
55	2500	55	40	5,3	150	120
63	2500	75	43	5,5	150	137
75	2750	75	37	5,3	150	160
90	3100	90	33	5,3	150	187
110	3500	110	26	5	150	212



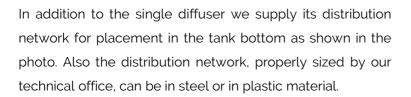


MICRO-BUBBLE DISC DIFFUSER

Oxygenation in wastewater treatment plants

DESCRIPTION

EQUIP DIFFUSER are micro or fine bubble diffusers that can be either tubular or circular and are installed in some stages of the purification plant. The choice of dimension depends on the available space for installation and on the oxygen demand. The plastic material that covers the diffusers can be EPDM or Silicone depending on needs.





TECHNICAL CHARACTERISTICS

Discs 8"/10"/12" diffusers are composed by polypropylene (PP) mold, reinforced with glass fibers (GF 30%). The membrane can have two different hole diameters depending on the application. It can be EPDM or Silicone.

Model EQUIP DIFFUSER Discs	Units	EBD8	EBD10	EBD12		
Type of bubbles		Fine	Fine	Fine		
Diameter discs	Inch	8"	10"	12"		
Materials	EPDM/Silicon : Membrane ABS/PP : Carrier plate					
Connection	inch	3/4"	NPT male th	read		
Bubble size	mm	1 - 2				
Flow design	m³/h	1.5 - 2.3	3 - 4	5 - 6		
Flow range	m³/h	1 - 6	1 - 8	1 - 12		
Oxygen Transfert Efficiency	%	≥ 38 %	(at 6m subm	erged)		
Oxygen Transfert	Kg O2/h	≥0.31	≥0.42	≥0.75		
Standard aeration efficienty	Kg O2/kw.h	1 ≥8.9				
Headloss	Pa	2000 - 4500	2000 - 4300	2000 - 4200		
Service Area	m²	0.2 - 0.64	0.25 - 1	0.4 - 1.5		



EQUIP DIFFUSER

MICRO BUBBLE DISC DIFFUSER

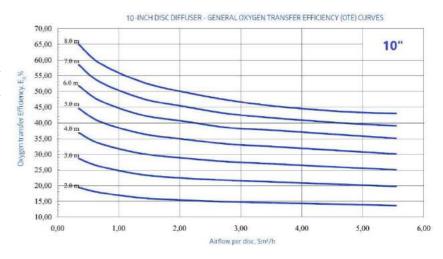
MICRO-BUBBLE DISC DIFFUSER

Oxygenation in wastewater treatment plants

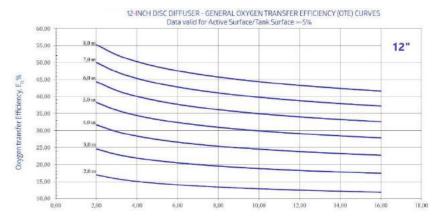
APPLICATIONS

The range of diffusers is able to cover the demand for oxygen or ventilation for various applications in treatment plants of waste water, biological processes and sludge stabilization, until the elimination of fats and sands.

GENERAL OXYGEN TRANSFER

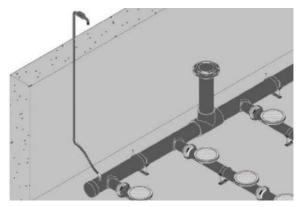


Contact us to define you oxygen needs and following the size of your tanks.



TYPICAL INSTALLATION WITH PVC NETWORK







MICRO-BUBBLE TUBE DIFFUSER

Oxygenation in wastewater treatment plants

DESCRIPTION

Tubular EQUIP DIFFUSER are available in two diameters: 63mm and 90mm on request. Our lengths are 500, 750 and 1000mm. The internal structure of the diffuser is made with plastic material, resistant to corrosive agents. The membrane is available in EPDM or Silicone.



APPLICATIONS

Tube diffusers are best solution for long and narrow aeration tanks. Opportunity to choose different material, connection thread, and size makes EQUIP tube diffusers fit to any type of waste water. EQUIP tube diffusers can be great solution for various applications in treatment plants of waste water, biological processes and sludge stabilization, until the elimination of fats and sands.

ACCESSORIES

- Rubber Saddles
- PVC Saddles
- Check Valve
- Clamp Adapters
- Blind Plugs
- Adapters
- Sealing for Tube Diffusers

- Stainless-Steel Connectors (Square headers)
- Plastic Connectors / Saddles (Round headers)
- Stainless-steel clamps
- Pincer
- Fixing Plates
- L-brackets
- Pipe Support





MICRO-BUBBLE TUBE DIFFUSER

Oxygenation in wastewater treatment plants

INSTALLATION

- Removable/Retrievable installation
- Mounted on the ground/bottom of the tank



MOUNTED ON THE GROUND



REMOVABLE INSTALLATION

TECHNICAL CHARACTERISTICS

Find below the different values for your EQUIP DIFFUSER such as oxygen transfer efficiency, amount of holes or surface of oxygenation.



Model EQUIP DIFFUSER To	ubes	500	750	1000		
Diameter (m	nm)	Ø63				
Lentgh tube	500	750	1000			
	At water depth 5m		23 to 32%			
Oxygen Transfert Efficiency	6m		34 to 39,5%	,)		
	7m					
Air flow	(m³/h) per unit	1.7 - 6.8	3.4 - 13.6	3.4 - 17.0		
Surface area	m² per unit	0.82 - 1.26 0.98 - 2.11 0.98 - 2.35				
Number of holes	amount	8080	10300	13880		
Bubble diameter	mm		0.8 - 2.0			
Pressure loss	Cm	25 - 42	25 - 41.5	25 - 40		
Standard aeration efficienty		7,5				
Tensile Strength	kpa		> 13800			





HORIZONTAL SUBMERSIBLE MIXERS

Mixing wastewater

DESCRIPTION

Our EQUIP MIXER horizontal mixers meet the mixing requirements of municipal and industrial wastewater. Our models allow undissolved particles to stay mixed by preventing sedimentation and thus facilitating the treatment process. The materials used for our mixers guarantee durability and efficiency even in the most extreme conditions.



EMB - 2 BLADES



EMX - 3 BLADES

BENEFITS

- High axial thrust efficiency. Electric motor, mechanical components and propeller profile designed to achieve high efficiency in terms of axial thrust and low energy consumption. Data according to ISO 21630 Standard.
- Double thermal probes, immersed in the stator, prevent overheating of the electric motor and preserve its operating life.
- Humidity probe (on request) installed in the gearbox to prevent damage in the case of leakage.
- Propeller in stainless steel with self-cleaning profile.





HORIZONTAL SUBMERSIBLE MIXERS

Mixing wastewater

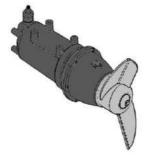
FEATURES EQUIP MIXER

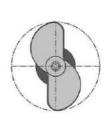
- Asynchronous 3 phases motors with squirrel cage rotor. Max solid content in the liquid: 12%
- 2 thermic probes installed in the stator winding.
- Protection IP68.
- "F" class insulation.
- Max submergence depth: 20m.

- Submersible H07-RN-F neoprene cable.
- Fluid pH 5÷12.
- Max temperature of pumped liquid: 40°C.
- Continuous service.

EQUIP MIXER - MODEL EMB

- Double seal system composed of two lip seals on a ceramic bushing and tungsten carbide mechanical seal.
- Planetary gearbox in order to reduced energy consumption and longer gear life.
- Propeller in stainless steel 304
- Cast iron body







									wiring		LII	, 0
Model EQUIP MIXERS EMB	Number of blades	RPM	Capacity m³/h	Axial force Newton	Power kW	Voltage V	Absorbed intensity Amps (at 400V)	Number of Cable	Number of cable conductors per section mm ²	Cable length m	Direct	Υ-Δ
1,5/6/3B	2	925	643	230	1,5		4,2				Υ	
2,2/6/3B	3	940	876	313	2,2	230 - 400	5.9				Υ	
2,2/4/2B		323	1333	441	2,2	230 - 400	5.3		9x1,5		Υ	
3/4/2B		323	1581	580	3		6,8				Υ	
4/4/2B		320	2146	853	4		9,1				Δ	
5.5/4/2B		326	2391	981	5.5		12,5	1		10	Δ	Υ - Δ
7.5/4/2B	2	328	3254	1520	7.5		15,8		9x2,5		Δ	Υ - Δ
9/4/2B		328	3628	1826	9	400 - 690	19				Δ	Υ - Δ
11/4/2B		351	3977	2158	11		23.5		9×4		Δ	Υ - Δ
15/4/2B		351	5335	2697	15		30				Δ	Υ - Δ
18,5/4/2B		354	6884	3826	18,5		36				Δ	Υ - Δ





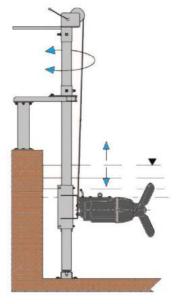
HORIZONTAL SUBMERSIBLE MIXERS

Mixing wastewater

APPLICATIONS

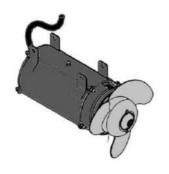
- Mixing of municipal and industrial wastewater
- Mixing of animal slurries
- Biogas plants
- Treatment of sewage sludge
- And many other applications

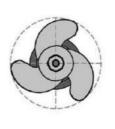
TYPICAL INSTALLATION



EQUIP MIXER - MODEL EMX

- > Sturdy over time in a corrosive environment
- → Body in stainless steel 316 L
- Propeller stainless steel 316 L







									Wiring			
Model EQUIP MIXERS EMX	Number of blades	RPM	Capacity m³/h	Axial force Newton	Power kW	Voltage V	Absorbed intensity A (at 400V)	Number of Cable	Number of cable conductors per section mm ²	Cable length m	Direct	Υ - Δ
0.75/4/3B		1400	279	117	0,75	400	2,2	1	6x1,5		Υ	
1,1/4/3B		1380	360	206	1,1		2,8		0,1,5		Υ	
1,5/6/3B	3	925	643	230	1,5		4,2			10	Υ	
2,2/6/3B		940	876	313	2,2	230 - 400	5.9		9x1,5		Υ	
3/6/3B		935	1061	373	3		8				Υ	





FLOW ACCELERATORS

Mixing wastewater

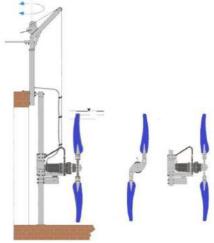
DESCRIPTION

The flow accelerators are submersible mixers and the aim is to keep a mixed wastewater, derived from domestic or industrial plants. Their major advantage is the large hydraulic flow, due to the large diameter of the blades. This allows to use it in various applications.

BENEFITS

- Adjustable propeller blades
- Two-stage planetary gearbox in oil filled
- Blades in polyamide and fiberglass
- Propeller hub in stainless steel
- Motor housing and planetary gear in cast iron
- Bolts/Nuts and lifting system in stainless steel
- Galvanic isolation of components







APPLICATIONS

- Nitrification and Denitrification tanks
- Sludge treatment tanks
- Industrial mixing

TECHNICAL FEATURES

- Asynchronous 3 phases electric motor
- 2 thermic probes in the stator winding
- Protection IP68 and F class insulation
- Max submergence depth: 20m
- Max solid content in the liquid: 12%
- Submersible Ho7-RN-F neoprene cable
- Fluid pH between 5 and 12
- Max temperature of pumped liquid: 40°C
- Continuous service

										wiring			
Model EQUIP FLOW	Number of blades	ø blades mm	RPM	Capacity m³/h	Axial force Newton	Power kW	Voltage V	Absorbed intensity A (at 400V)	Number of Cable	Number of cable conductors per section mm²	Cable length m	Direct	Υ - Δ
1,5/6/2B	2		925	11490	1226	1,5	230 - 400	4,2	1	9x1,5	10	Υ	
2,2/6/2B	2		940	13594	1716	2,2		5.9				Υ	
3/4/3B		2300	1420	14716	2011	3		6,8				Υ	
4/4/3B	3		1405	16250	2452	4	400 - 690	9,1				Δ	Υ - Δ
5.5/4/3B			1430	17803	2943	5	400 - 690	12,5		9x2,5		Δ	Υ - Δ





UNDERGROUND WATER STORAGE

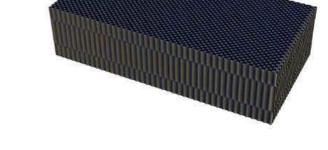
Lightweight honeycomb structure in recycled PVC

DESCRIPTION

EQUIP STORM is an ultra lightweight honeycombed modular structure, made from recycled PVC, it provides an underground storage facility for the application of storm water attenuation or infiltration.



- High compressive strength with installation under all roads & car parks
- Reduced digging costs by minimizes the required volume of earthworks
- Easy & Speed installation

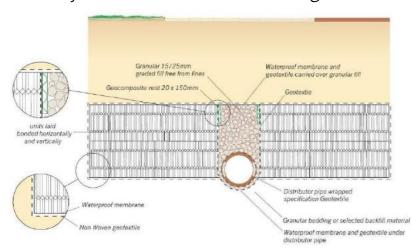


- Can also be used for water recycling and combining with irrigation systems
- Depth of tank invert reduced by using lateral supply
- Sizing by EquipWater available with calculations following your project





Greatly reduces the risk of flooding when used as storm water storage









BED MEDIA TRICKLING FILTER

Bed Media in lightweight recycled PVC

DESCRIPTION

EQUIP TRICKLING is an ultra lightweight honeycombed modular structure, made from recycled PVC used in trickling filters (TFs), and water treatment process. Trickling filters are a biological treatment process for effluents based on the principle of a fixed culture that can be integrated upstream of a rhizofiltration system.



BENEFITS

- Specific shape for improved punching shear strength
- Large Exchange surface
- High resistance to hydrocarbons
- → Rot-proof product
- → Fully recycled and recyclable



INSTALLATIONS











LAMELLA CLARIFIERS SEPARATORS

Lamella Structure in Recycled PVC

DESCRIPTION

EQUIP LAMELLA is a modular structure in lightweight recycled PVC. The purpose of these sloping cells is to quickly and compactly separate the particles in the water. It is an economical process to eliminate pollution through sedimentation via these modular PVC block.



Lamella clarifier or also known as inclined plate separator is designed to remove particulates & sediments from liquids. They serve as primary and tertiary clarification system for sewage or industrial waste streams. It provides a large effective settling area, resulted up to 80% less footprint compared to a traditional settling tank.

APPLICATIONS

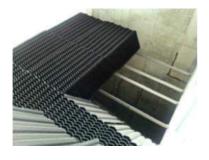
- Sedimentation tank
- Decrease the size of sedimentation tanks
- Flexible dimensions
- Safe installation with worldwide delivery

BENEFITS

- Increase your sedimentation by 6 to 15 times
- Decrease the size of your sedimentation tanks
- Safe installation with worldwide delivery
- Flexible dimensions
- → Recycled & Recyclable



INSTALLATIONS



In Concrete Settling Tank



In Settling Steel Tank





MBBR BED MEDIA

Moving Bed Biofilm Reactor MBBR

DESCRIPTION

EQUIP MBBR is a technology based on an active biofilm growing on small designed plastic carriers that are kept suspended in the reactor. The technology utilizes the advantages of both activated sludge and other biofilm systems (such as bio filters, bio rotors) without being restrained by their disadvantages. The carriers are designed to provide a large protected surface area for the biofilm and optimal conditions for the bacteria culture when the carriers are suspended in water.



APPLICATIONS

- For new plants, especially those requiring a small footprint and easy operation, for BOD/COD and nitrogen removal
- As a high loading system in front of existing biological treatment - roughing reactor
- To implement post-treatment to existing plants for process improvements

BENEFITS

- Effective sludge retention
- Lower sludge final production
- > Continuous response to load fluctuations
- Strong enough to resist against toxic shock

	Models	EM 01	EM 02	ЕМ оз	EM 04	EM 05	EM 06	EM 07	EM 08	EM 09	EM 10
EQUIP MBBR					*						
Diameter x Width	mm	Ø12 X 9	Ø11 × 7	Ø10 x 7	ø16 x 10	Ø25 X 12	Ø25 X 12	ø35 x18	Ø5 × 10	Ø15 × 15	Ø25 × 4
Holes per piece	pcs	4		5	6	19		64	7	40	64
Efficient surface	m²/m³	>800	>900	>1000	>800	>500		>1200	>3500	>900	>1200
Density	g/cm³			0.96-0.98		1.02-10.5		0.96-0.98	1.02-10.5	0.96	-0.98
Packing Numbers	pcs/m³	>630000	>830000	>850000	>260000	>97000		>33000	>2000000	>230000	>210000
Porosity	%	>85				>90		>92	>80	>85	
Dosing ratio	%	15-67 15-68 15-70 15-67			15-65		15-50	15-70 15-65		-65	
Membrane-forming time	days		From 3 to 15 days								
Nitrfication efficiency	gNH4-N/m³.d	400-1200							500-1400		
BOD ₅ oxidating efficiency	gBOD5/m³.d	2000-10000							2500-20000 2		2500-25000
COD oxidating efficiency	gCOD/m³.d	2000-15000							2500-	20000	2500-25000
Applicable temperature	°C	From 5 to 60 °C									
Life-span	year	>15 years									

TURNKEY PROJECTS

















TRAINING

CONTACT US AND DEFINE YOUR NEEDS!



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