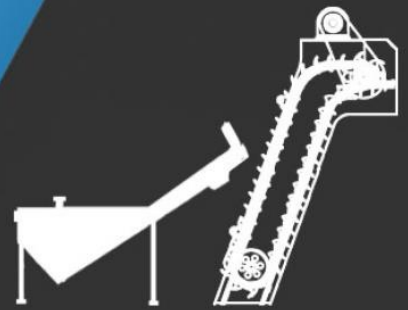




WASTEWATER AND SLUDGE TREATMENT
PRE-TREATMENT EQUIPMENT

SCREENS & GRIT REMOVAL



**PRE TREATMENT
SOLUTIONS
FOR WASTEWATER**

REDA WATER & CHEMICALS COMPANY

PROFESSIONAL WASTEWATER AND SLUDGE
TREATMENT EQUIPMENT MANUFACTURING & ENGINEERING



PRE TREATMENT MECHANICAL SCREENS

MECHANICAL RAKE SCREEN // For Screening in Channel

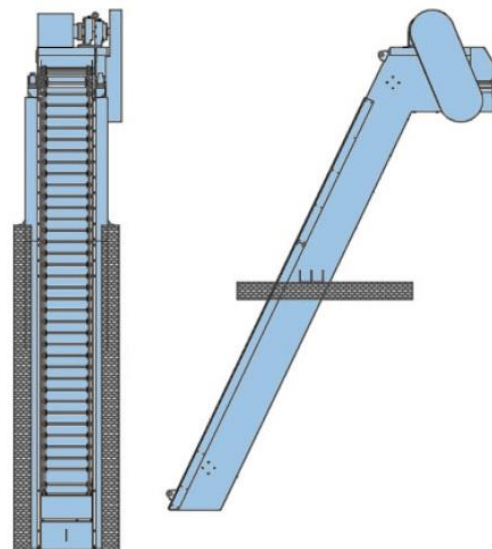
Mechanical Rake Screen is a solid-liquid separation device which has been widely used in municipal wastewater treatment plant, pre-treatment device for domestic effluents, municipal rainwater & sewage pump station. It is regarded as the ideal solid-liquid separation equipment in water treatment field.



<i>Model</i>	<i>Space</i>	<i>Design Capacity</i>
RRS-600	1~20mm	150~600m ³ /hr
RRS-800	1~20mm	210~900m ³ /hr
RRS-1000	1~20mm	290~1200m ³ /hr
RRS-1200	1~20mm	325~1500m ³ /hr
RRS-1400	1~20mm	400~1750m ³ /hr
RRS-1500	1~20mm	450~1900m ³ /hr

BENIFITS

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



PRE TREATMENT ROTARY SCREENS

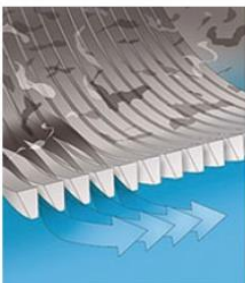
ROTARY SCREEN // Fine Screen With Drum In Channel

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 pores or wedge wire, that act as a filter and rotating with the transport screw, followed by the transportation that ends with a compacting modulus. Screenings are conveyed by a shaft screw until the compacting/dewatering section where both volume and weight are reduced (up to 40%).

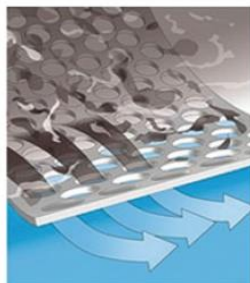


BENIFITS

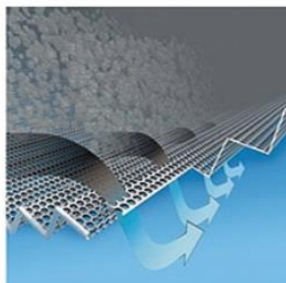
- ➔ Structure & Screw: stainless steel
- ➔ Fine screen & efficient
- ➔ Capture all wipes and fibrous wastes



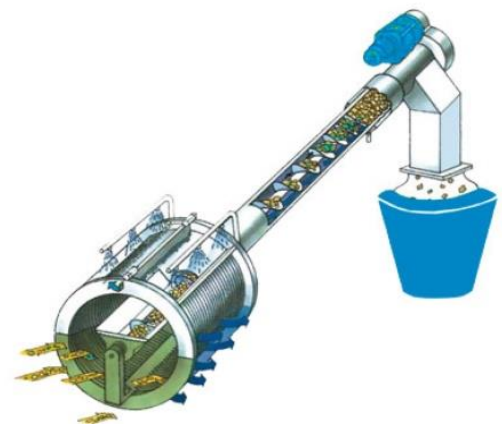
RO1 Wedge wire screen
Gap ≥ 0.5mm



RO2 Perforated plate screen
Gap ≥ 1mm



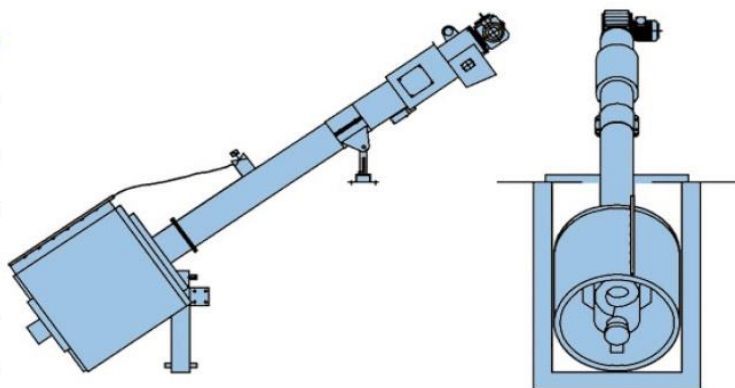
RO3 Perforated plate screen
Gap ≥ 1mm



*The different Rotary Drum Fine Screen has Perforated Plate or Wedge-wire models, from 0.5mm-12mm, more models are available to make custom-design equipment, contact our reps. for more details..

Reliable and well-proven inlet screen for municipal sewage treatment plants and industrial wastewater and process water screening.

<i>Model</i>	<i>Space</i>	<i>Design Capacity</i>
RO*600	0.5~12mm	120~320m ³ /hr
RO*800	0.5~12mm	200~520m ³ /hr
RO*1000	0.5~12mm	320~860m ³ /hr
RO*1200	2~12mm	640~1200m ³ /hr
RO*1600	2~12mm	850~1600m ³ /hr
RO*2000	3~12mm	1500~2600m ³ /hr
RO*2600	3~12mm	3000~4600m ³ /hr



*The different Rotary Drum Fine Screen has Perforated Plate or Wedge-wire models, from 0.5mm-12mm, more models are available to make custom-design equipment, contact our reps. for more details..

YOUR BENEFITS

a) Low headloss – High separation efficiency

Due to the drum's shape and 35° installation the screen area is much larger than that of a vertical or steeply inclined screen, which results in a low headloss, high separation efficiency and maximum throughput.

b) No by-passing

The entire flow enters the screen drum through its open front end and can only leave the drum through its screen area. This prevents plant overflow and guarantees that the screenings are always retained within the screen drum.

c) Several functions combined in one system

Perform the functions of screenings removal, transport, washing, dewatering and compaction in a single space saving unit.

d) Retrofitting

The design of the RO Screens allows for later modification so that the systems can be adapted to changing requirements. The heating and/or integrated screenings washing can be retrofitted. The bar spacing can also be reduced to meet more stringent requirements.

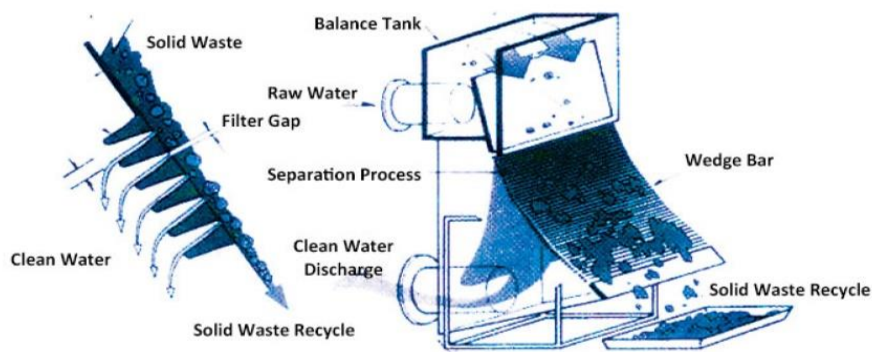
e) Low maintenance

No lubrication. Regular checking and visual inspection are sufficient.

PRE TREATMENT STATIC SCREEN

STATIC SCREEN// Economical Screening Solution

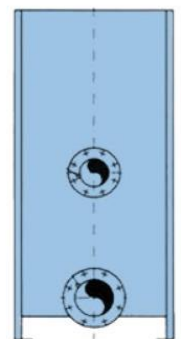
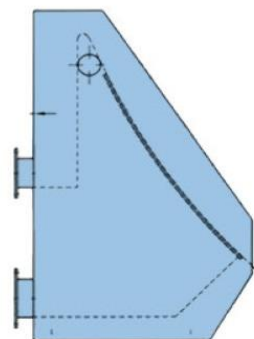
STATIC SCREEN is used for many solid/liquid separation. It provides an efficient separation especially in the treatment of storm water mixed with solids, hydrocarbons, coming from oil & gas plants. The screen is built with stainless steel wedge wire mesh from 0,25 mm to 1,5 mm to remove any solids above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



BENEFITS

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

Model	Filter Gap	Design Capacity
NSS 300	0.2~2mm	3~30m ³ /hr
NSS 500	0.2~2mm	5~50m ³ /hr
NSS 600	0.2~2mm	6~60m ³ /hr
NSS 800	0.2~2mm	8~80m ³ /hr
NSS 1000	0.2~2mm	10~100m ³ /hr
NSS 1500	0.2~2mm	15~150m ³ /hr





Waste Water Treatment
Sludge Treatment
Solid-liquid Separation



WASTE WATER & SLUDGE TREATMENT



SEPARATION PRODUCTS



REDA WATER & CHEMICALS COMPANY

WWW.REDAWATERGROUP.COM

PRE TREATMENT MECHANICAL SCREENS

MECHANICAL ROTARY SCREEN // RRS Series

Rotary Rake Screen is a solid-liquid separation device which has been widely used in municipal wastewater treatment plant, pre-treatment device for domestic effluents, municipal rainwater & sewage pump station. It is regarded as the ideal solid-liquid separation equipment in water treatment field.



<i>Model</i>	<i>Space</i>	<i>Design Capacity</i>
RRS-600	1~20mm	150~600m ³ /hr
RRS-800	1~20mm	210~900m ³ /hr
RRS-1000	1~20mm	290~1200m ³ /hr
RRS-1200	1~20mm	325~1500m ³ /hr
RRS-1400	1~20mm	400~1750m ³ /hr
RRS-1500	1~20mm	450~1900m ³ /hr

MECHANICAL INTERNAL DRUM SCREEN // IRDS Series

Excellent performance for large particle separation. The corrosion resistant stainless steel construction ensures exceptional wear resistance and makes it ideal for all applications.



<i>Model</i>	<i>Pore Size</i>	<i>Design Capacity</i>
IRDS06/900	1~3mm	15~30m ³ /hr
IRDS06/1200	1~3mm	30~60m ³ /hr
IRDS06/1500	1~3mm	45~85m ³ /hr
IRDS06/1800	1~3mm	60~120m ³ /hr
IRDS08/1800	1~3mm	80~170m ³ /hr
IRDS08/2500	1~3mm	120~250m ³ /hr
IRDS08/3000	1~3mm	160~350m ³ /hr

SEPARATION DISSOLVED AIR FLOTATION

DISSOLVED AIR FLOTATION

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



<i>Model</i>	<i>Capacity</i>	<i>Dimintions(LWH)</i>
DAF-010	10m ³ /hr	3.5x2.7x2.4m
DAF-020	20m ³ /hr	5.7x3.2x2.4m
DAF-040	40m ³ /hr	7.7x3.6x2.5m
DAF-060	60m ³ /hr	9.5x3.8x2.5m
DAF-100	100m ³ /hr	11.7x4.2x2.5m
DAF-120	120m ³ /hr	12.5x4.4x2.5m

* More models are available for selection, contact our reps.

Dissolved Air Flotation Plants are successfully operated for a wide variety of industrial and municipal applications, such as:

APPLICATIONS

- Slaughterhouses
- Meat processing and packing
- Fish processing
- Dairies
- Convenience food production
- Margarine production
- Oil and fat refineries
- Canneries
- Kitchens and canteens
- Fast food providers
- Soap works
- Cosmetics industry
- Textile industry
- Chemical industry
- Petrochemical industry
- Iron and steel industry
- Metal processing
- Galvanizing, electroplating
- Land remediation
- Waste management
- Municipal wastewater treatment

LAMELLA CLARIFIER

Lamella clarifier is a high efficient solid-liquid separation device equipped with a series of inclined plates with smaller footprint comparing with traditional sedimentation tank.



<i>Model</i>	<i>Capacity</i>	<i>Size</i>	<i>Sludge Scraper</i>
LCS-005	~5m ³ /hr	2600×1600×3400mm	0.55kW
LCS-010	~10m ³ /hr	3400×1800×3800mm	0.55kW
LCS-020	~20m ³ /hr	3400×2200×3800mm	0.55kW
LCS-040	~40m ³ /hr	4000×2800×3800mm	0.55kW*2
LCS-050	~50m ³ /hr	4700×2800×3800mm	0.55kW*2
LCS-060	~60m ³ /hr	4800×3000×3800mm	0.55kW*2
LCS-080	~80m ³ /hr	5100×3400×4000mm	0.55kW
LCS-090	~90m ³ /hr	6300×3000×4000mm	0.55kW*2
LCS-100	~100m ³ /hr	7100×3000×4000mm	0.55kW*2
LCS-110	~110m ³ /hr	7800×3000×4000mm	0.55kW*2
LCS-120	~120m ³ /hr	8300×3000×4000mm	0.55kW*2



YOUR BENEFITS

- a) Higher efficiency, smaller footprint: inclined plates extended to 1.5m, separation efficiency improved (higher 1.5 ~ 2.0 times) comparing with radial flow clarifier and vertical clarifier and save 80% of area.
- b) Excellent hydraulic conditions: no hydraulic corner and vortex, better precipitation effect .
- c) Inclined plates Chokeless: plates are of angle 60 degrees, spacing between 80 ~ 100 mm, adopt the back-washing device.
- d) Strong and durable: Inclined plates are breakless, collapseless. Adopt 6mm hard PVC board or 8 mm high quality PP board as special separation plate, module embedded installation, high strength, easy disassembling and maintenance.

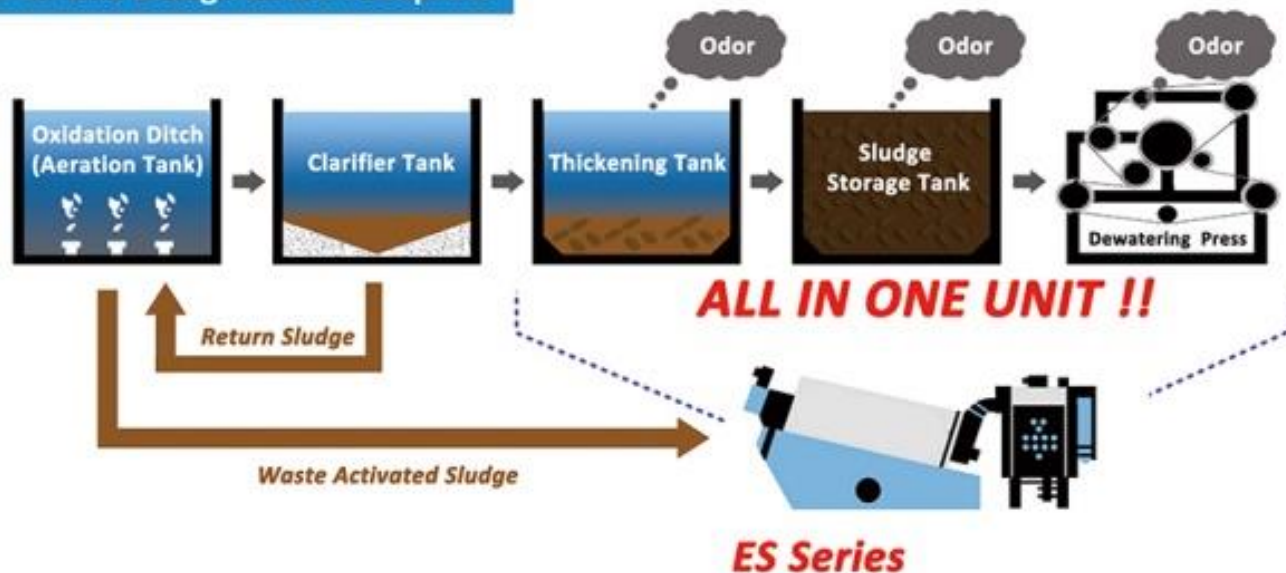
SLUDGE DEWATERING MULTI DISC SCREW PRESS

MULTI DISC SCREW PRESS

sludge dewatering press equipped with multi-disc screw press technology. Dewatering with an automatic self-cleaning filter mesh enables stable constant dewatering without the need for flush water to prevent clogging. It has solved several technical problems of other similar sludge dewatering equipment including belt presses, centrifuge machines, plate-and-frame filter press have, which are frequent clogging, oil sludge treatment failure, high energy consumption and complicated operation etc.

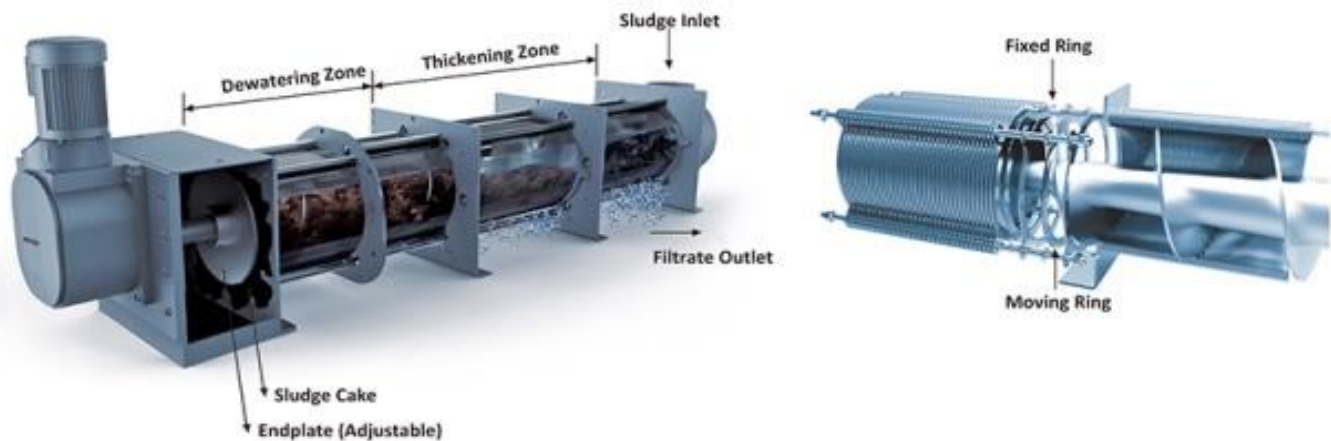


All-in-one Design Small Footprint



Unique Clog Free Structure

is structured with a filter element that consists of two types of Rings: a Fixed Ring and a Moving Ring; and a screw that thrusts the filter element and transfer.



Clog Free	Low Concentration	Various Apps.	Small Footprint	Easy Operation	Expandable	Energy Saving	Low Noise	Reliable	Global Installations
Good at oily sludge clog-free design clean gap by itself	Thin SS available Direct dewater from oxidation ditch	Like WWTP, food industry, paper, chemical, etc.	Small Size Wide line-up array Compact & Smart	Simple control Easy maintenance Automatic running	Adjustable From small to large 1-500 D5-kg/hr	Energy friendly Water Saving & Low Power Cost	Low Speed 60 DB only Like normal talking	2 years warranty Instant after-sale service	Proven technology Installed all over the world

Model	Specifications	Capacity	DS Capacity	Size	Power
ES-101	100mm screw, 1 cylinder	0.2~1.0m ³ /hr	5kg/hr	1883×760×1145mm	0.2kW
ES-131	130mm screw, 1 cylinder	0.4~2.0m ³ /hr	10kg/hr	1883×760×1145mm	0.2kW
ES-132	130mm screw, 2 cylinders	0.8~4.0m ³ /hr	20kg/hr	1983×910×1145mm	0.3kW
ES-201	200mm screw, 1 cylinder	0.8~4.0m ³ /hr	20kg/hr	2440×855×1265mm	0.4kW
ES-202	200mm screw, 2 cylinders	1.6~8.0m ³ /hr	40kg/hr	2535×935×1265mm	0.8kW
ES-301	300mm screw, 1 cylinder	2.0~10m ³ /hr	50kg/hr	3200×985×1570mm	0.8kW
ES-302	300mm screw, 2 cylinders	4.0~20m ³ /hr	100kg/hr	3340×1295×1570mm	1.2kW
ES-303	300mm screw, 3 cylinders	6.0~30m ³ /hr	150kg/hr	3500×1580×1570mm	1.95kW
ES-351	350mm screw, 1 cylinder	4.0~20m ³ /hr	100kg/hr	3950×1090×2150mm	2.25kW
ES-352	350mm screw, 2 cylinders	8.0~40m ³ /hr	200kg/hr	4050×1550×2150mm	3.75kW
ES-353	350mm screw, 3 cylinders	12~60m ³ /hr	300kg/hr	4300×2100×2150mm	6.0kW
ES-401	400mm screw, 1 cylinder	7.0~35m ³ /hr	180kg/hr	4350×1260×2350mm	3.0kW
ES-402	400mm screw, 2 cylinders	14~70m ³ /hr	360kg/hr	4500×1710×2350mm	4.5kW
ES-403	400mm screw, 3 cylinders	21~105m ³ /hr	540kg/hr	4900×2340×2350mm	6.7kW

* Includes polymer floc tank and mixer system. Multiple options available upon request.

* Single cylinder (ES) models for improved performance and longevity. For modular expansion, add required number of cylinders. With base. One floc tank recommended for up to 3 cylinders.

DISC FINE BUBBLE DIFFUSER

The Disc diffuser is your best choice for new diffusion aeration installations utilizing fine bubble membrane technology. Its innovative design is undoubtedly the most efficient and cost effective diffuser of its kind. A real advancement in membrane diffuser engineering. In addition, the Disc diffuser assembly has been designed for quick and easy retrofitting of existing diffused aeration installations to increase performance and decrease utility costs.



3 MODELS & 3 MATERIALS

EPDM: Used in municipal sewage and most industrial sewage, it can keep its physical properties for a long time, anti-tear, maintain its shape after several years of use, and produce fine bubbles. Not suitable for solvent, grease, grease, and high concentration of metal salt.

Silicone rubber: The material is stable, the membrane will not harden and shrink, it has good resistance to organic solvents and grease sewage, but its physical properties are weaker than EPDM, and it is suitable for the field of high grease content and high temperature industrial wastewater.

PTFE coating: For solvents, grease, grease and other chemicals with a wide range of resistance, chemical corrosion resistance, reduce surface scaling, reduce maintenance, prolong the use, suitable for pulp, refinery, garbage filter solution and other difficult to treat industrial sewage field.



SELECTED BETTER RUBBER MATERIAL

Imported quality rubber raw materials, and the material composition are customized according to the requirements of aeration working conditions. Excellent physical and chemical properties can effectively prevent the contraction, hardening and prolong the life of the product.



PROFESSIONAL MEMBRANE PUNCH PROCESSING

Not easy to scale, fine bubble, uniform air distribution. Mold pressing process to ensure uniform membrane specific gravity, multi-direction tear resistance, tear strength is high. Hot melt welding instead of adhesive technology, quality uniform, stable and reliable.



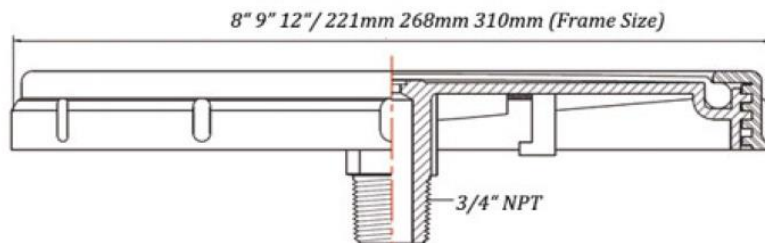
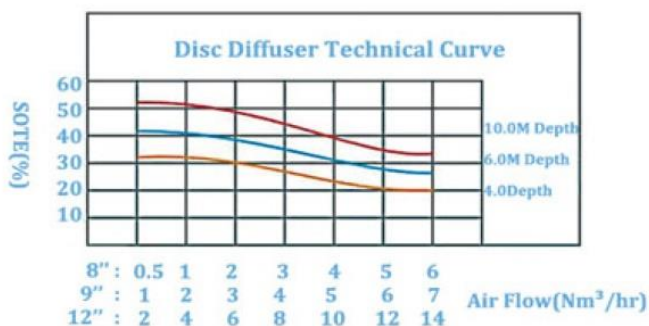
DETAILS DESIGN INGENUITY SPIRIT

Special check structure design, reduce long-term damage under high speed airflow, prolong the life of the membrane. Air flow channel structure optimization design, reduce the resistance loss in the working state.



PHYSICAL AND CHEMICAL PROPERTIES

6 Physical properties test, hardness, tensile strength, tear strength, ultimate elongation, 100% tensile 24h shape variable, density
6 Chemical performance test, hot air aging, acid, alkali, oil resistance, deionized water quality, water volume change rate
Ensure excellent quality



Specifications	φ215mm/ 8"	φ260mm/ 9"	φ300mm/ 12"
Working Air Flow(m³/hr)	1.5-3	2-5	2-8
Designed Air Flow(m³/hr)	3	4	5
Service Area(m²/pcs)	0.25-0.45	0.35-0.65	0.45-0.75
Oxygen Utilization (%)	>30	>30	>30
Oxygen Capacity(kgO₂/hr)	0.13-0.35	0.18-0.45	0.25-0.5
Water Submerged Depth(m)	4-8	4-8	4-8
Dynamic Efficiency (kgO₂/kw.hr)	6.5	6.5	6.5
Drag Loss(Pa)	<3000	<3000	<3000

Heavy-duty membrane is a specially formulated and molded, EPDM compound. It has 100% rebound memory, and will last 5 to 10 years, even at low airflow rates

Thickened center prevents ballooning and tapered membrane guarantees equal, fine bubble distribution across entire surface.

