



Since 1980

黑 偉

AIRFLOW 270/350

ISO9001

FINE BUBBLE DIFFUSER



Made in Taiwan

散氣盤

Disc Diffusers

COMPANY PROFILE

Hey wel Mechanical Co.,Ltd was founded in 1980, which is the first one of professional manufacturer of two-lobe Roots Blower in Taiwan. In 1988, we started to produce three-lobe Roots Blower as it is an advanced development in field of Roots Blower's business and technology.

The group of Hey wel company with the business concept of " honesty and authentication 、 study and practical 、 continuous development and the enterprise culture; Put full effort on every single detail even though it is a small simple thing and established persistence for products and satisfactory to our customers.

From the beginning of company to nowadays, except that we manufactured regular three-lobe roots blower, yet, we still have researched and developed in high rotation speed of three-lobe roots blowers for which are mainly used for environment protection 、 power 、 chemical engineering 、 foodstuff 、 aqua farm; Especially used for vacuum system as the roots blower in vacuum usage. Currently we have exported our products to over 20 more countries all over the world.

We will keep improving and developing of cutting edge in the industry of roots blower and setting higher products quality goal with the development of time. We have been providing our products with the most excellent performance and price ratio. Furthermore, we will do the best to be one of professional manufacturer of roots blower and related wastewater treatment equipments to meet market requirement.

DIFFUSER FEATURE

Characteristic of fine-bubble diffuser

1. High Oxygen transport effort (OTE) :

There are 4000 air holes spread averagely on EPDM membrane. This generates fine bubble (around 1-3mm). Due to those small bubble have great contact surface , low speed and long time reaction can be performed. Therefore, high OTE makes whole aeration process operates well even under small flow rate, it will have high performance.

2. Save Energy :

High effort on transfer oxygen and it can select economical PD blower to achieve aeration require DTR. The ability to prepare oxygen is up to 25% in 4 meter deep water with wind capacity 2CMH.

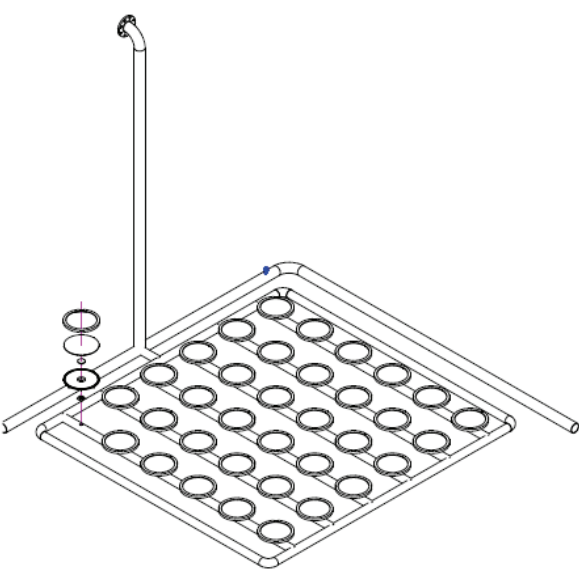
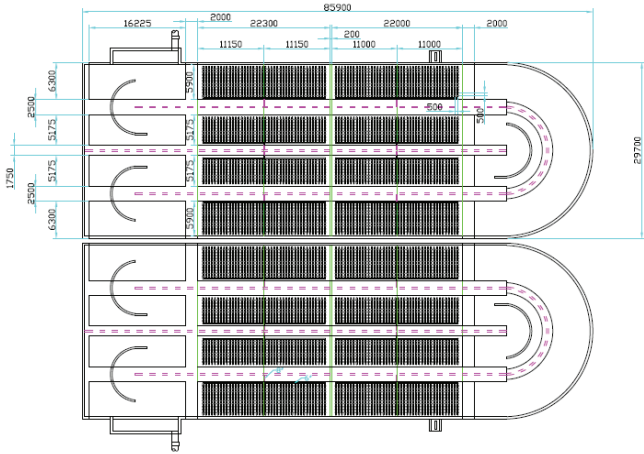
3. Prevent Backflow :

In order to prevent backflow happened, all air holes can turn on and off automatically.

4. Extended Life:

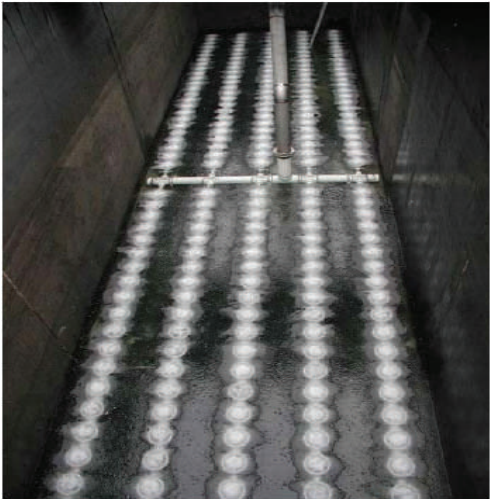
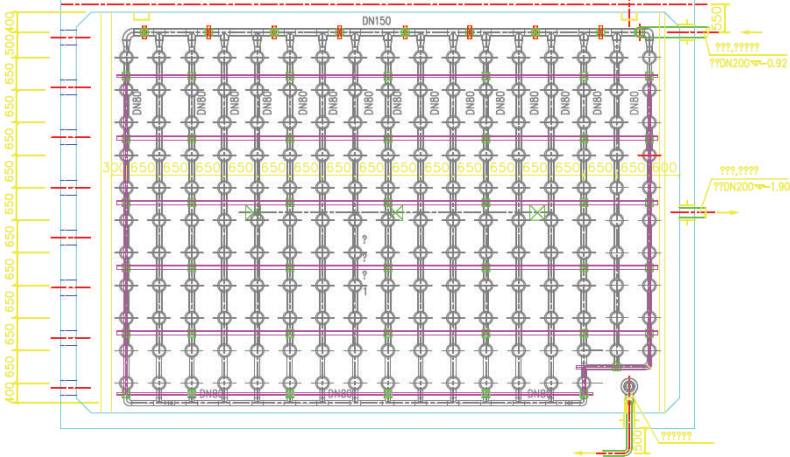
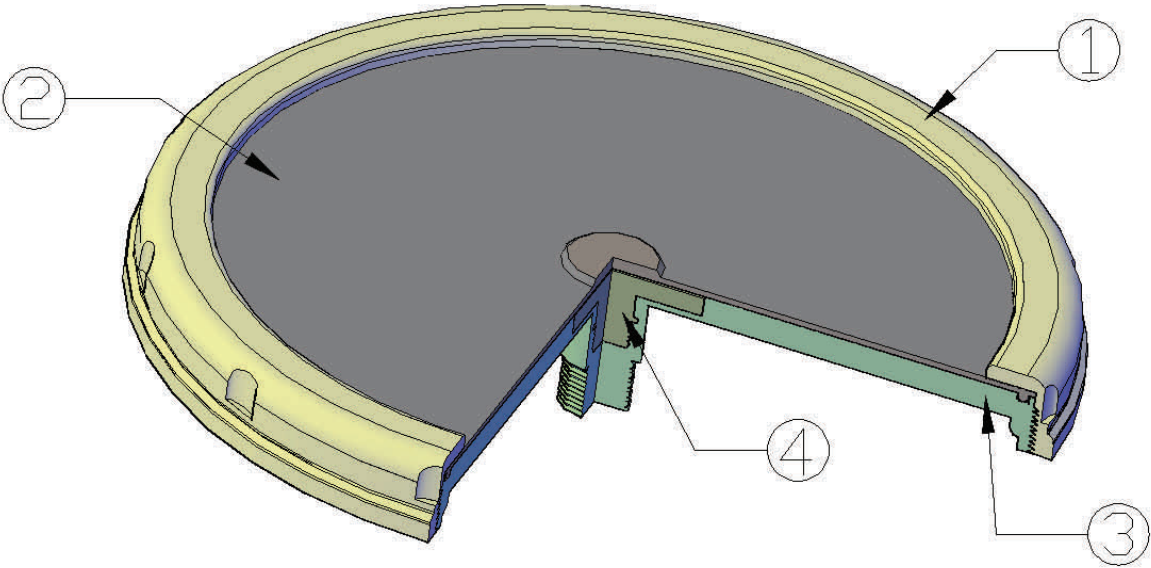
EPDM membrane is made of special flexible polymer. This material is flexible and not easy to become deformed. Production method for EPDM membrane is not by normal infusion, but by extrusion. The advantage of extrusion is whole membrane can afford same compression and cause less damage when used.

AIRFLOW DISC DIFFUSER LAYOUT



Single Membrane construction

Item no.	1	2	3	4
Description	RING	MEMBRANE	BASE	Plug/check valve
Material	P.P	EPDM	P.P	P.P

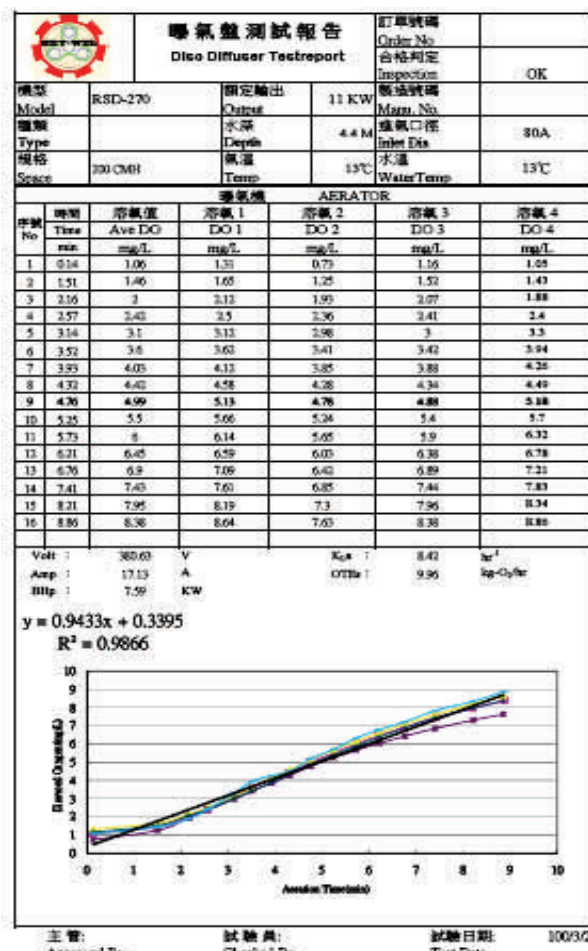
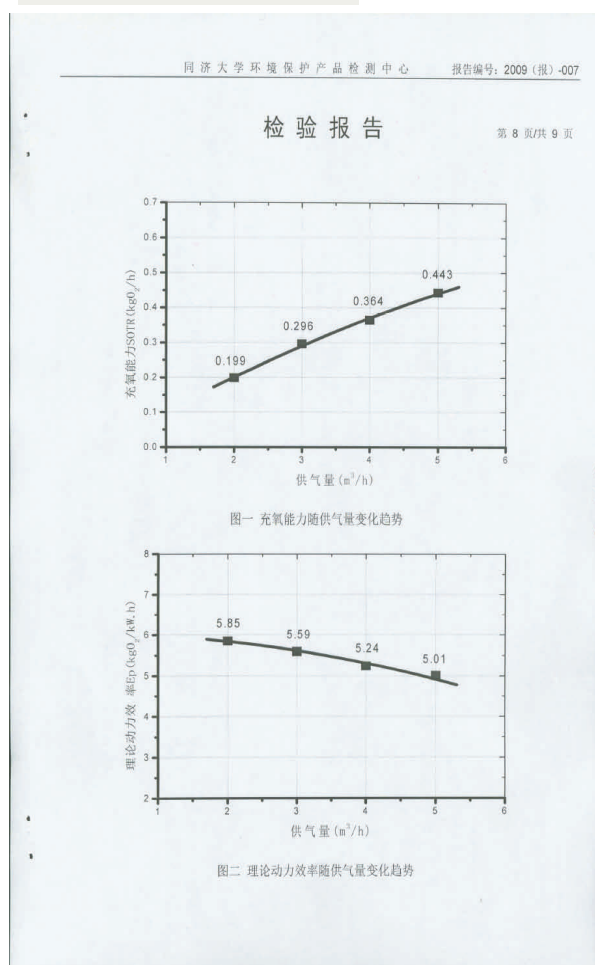


DATA SHEET

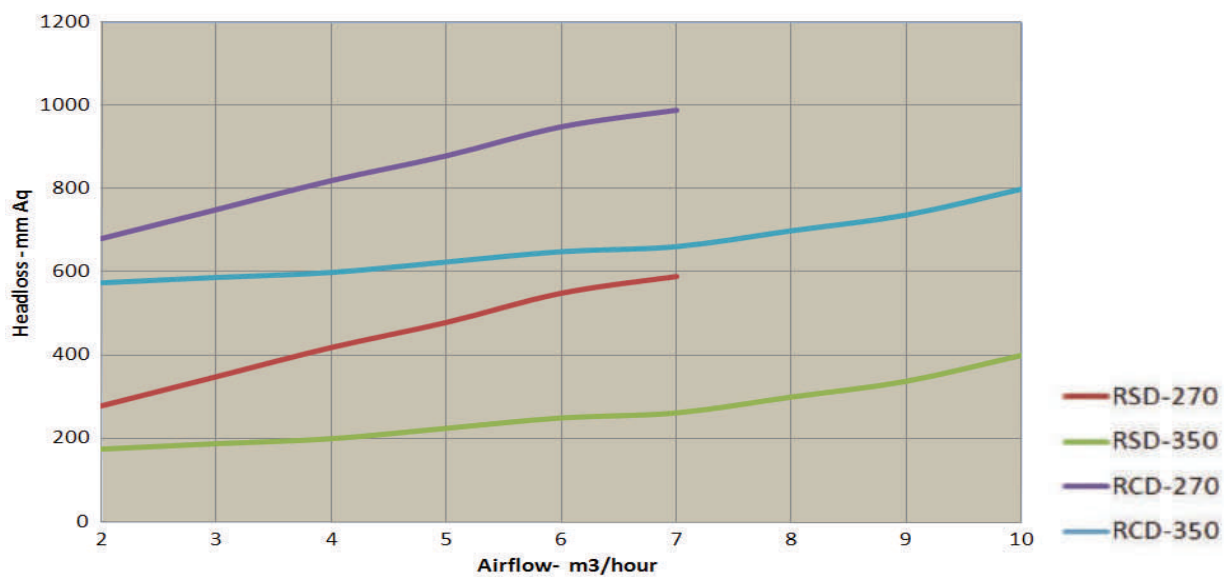
RSD:SINGLE RCD: DOUBLE

MODEL	RSD/RCD-270	RSD/RCD-350
MEMBRANE	EPDM	EPDM
BASE	PP/ABS	PP/ABS
DIAMETER OF DISC	270mm	350mm
AIR FLOW	1.0~6.0 (m ³ /h)	1.0~12.0 (m ³ /h)
BUBBLE SIZE	1~3(mm)	1~3(mm)
SERVICE AREA	0.0375m ²	0.0638m ²
RECOVERY RATE	5~15(%)	5~15(%)
WEIGHT	0.75kg	1kg
OPERATION TEMP.	< 95℃	< 95℃
CONNECTION	20mm(3/4")	20mm(3/4")

TEST REPORT



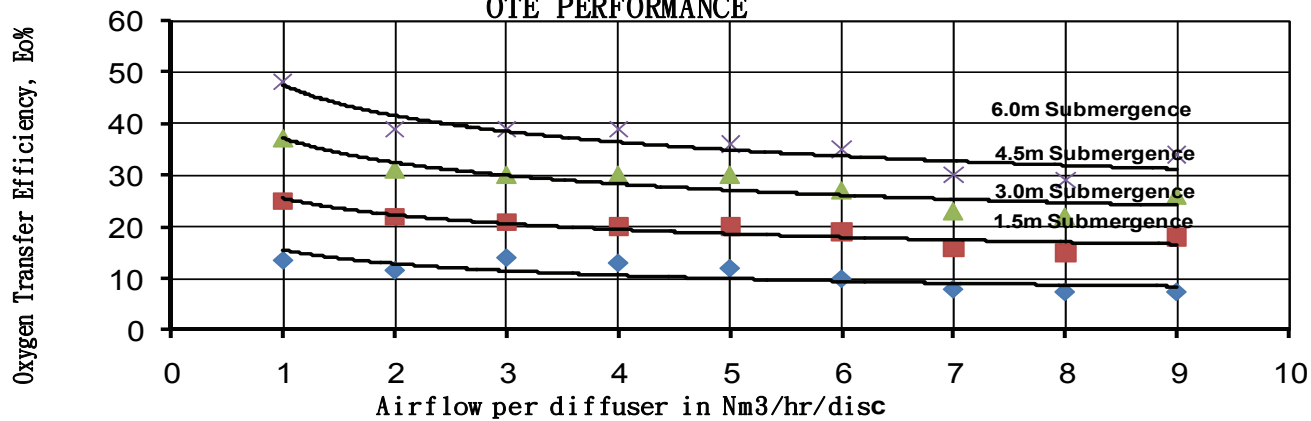
HEADLOSS CURVE



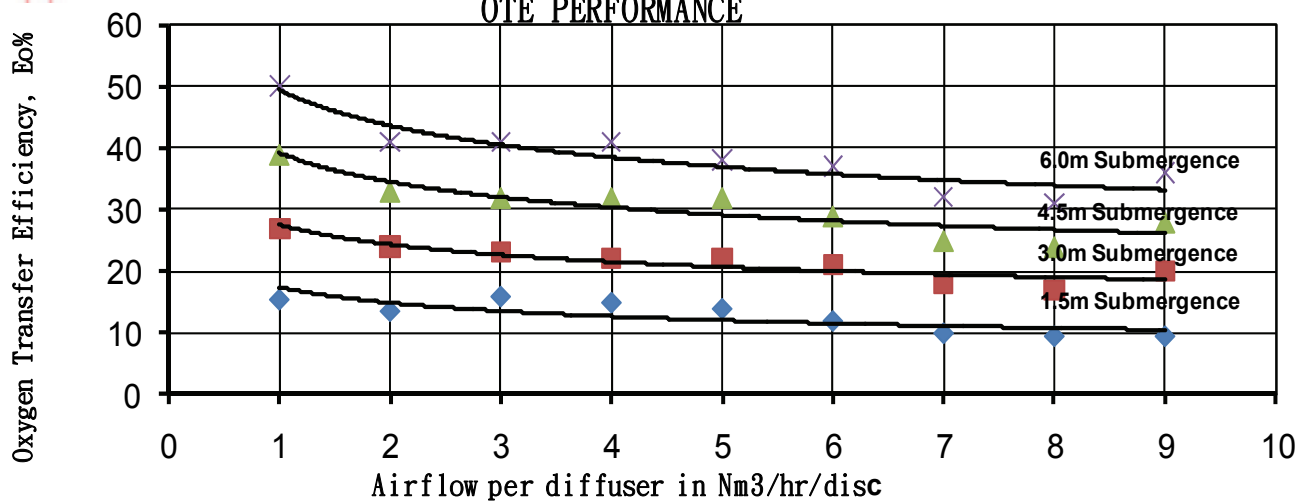
PERFORMANCE CURVE



RSD/RCD 270
OTE PERFORMANCE



RSD/RCD 350
OTE PERFORMANCE



FINE BUBBLE TUBE DIFFUSER

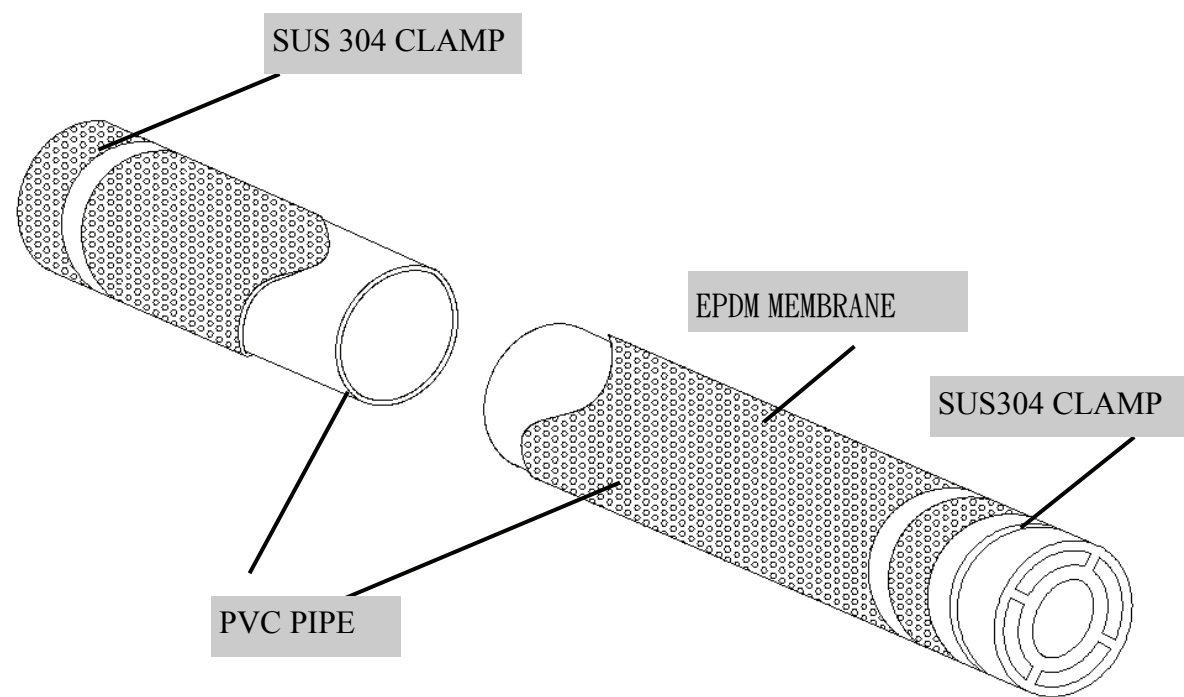
1. EPDM/SILICONE/NBR MEMBRANE MATERAIL
2. HOLLOW DESIGN .
3. COMPRESSION MOLD
4. P.V.C. BODY AND SUS 304 CLAMP
5. A LOT OF OPENING ON MEMBRANE



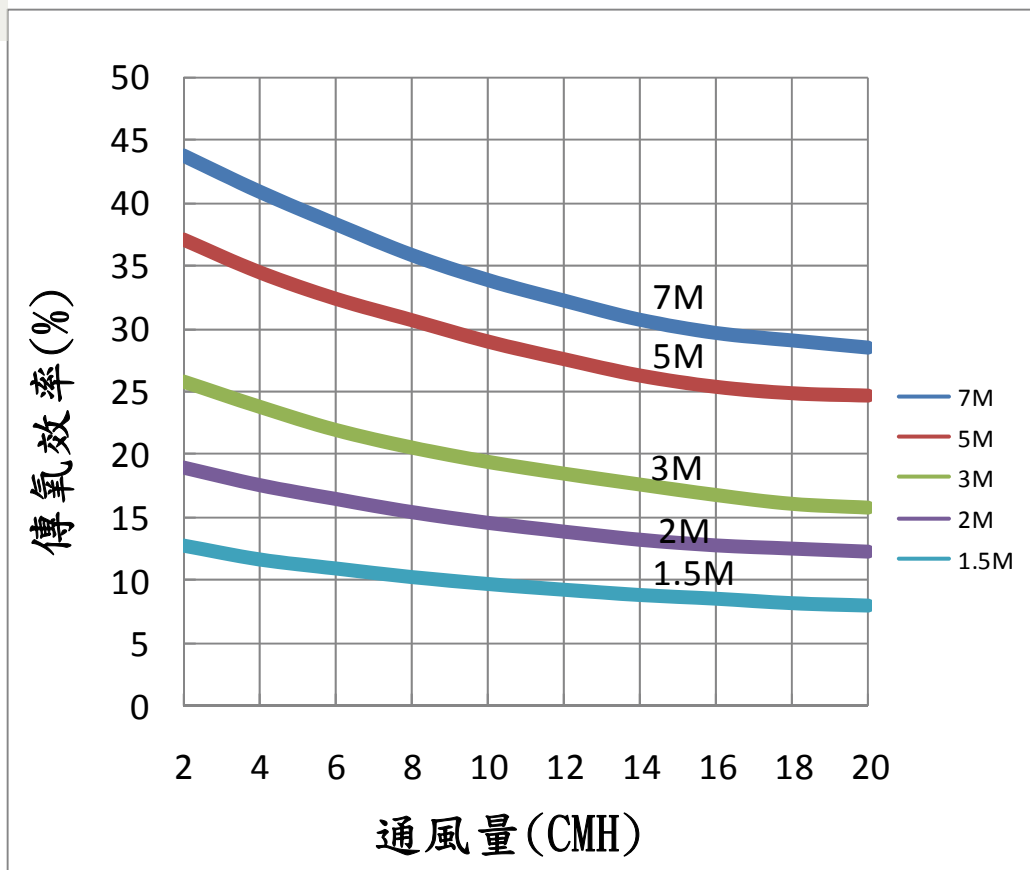
SPECIFICATION

MODEL	DESCRIPTION	FLOW (L/ min)	MEMBRANE	BODY	WEIGHT
TUBE-300	300×61×3/4"PT	10-100	E.P.D.M	P.V.C	0.45kg
TUBE-600	600×61×3/4"PT	30-260	E.P.D.M	P.V.C	0.9kg
TUBE-1000	1000×61×3/4"PT	40-320	E.P.D.M	P.V.C	1.4kg

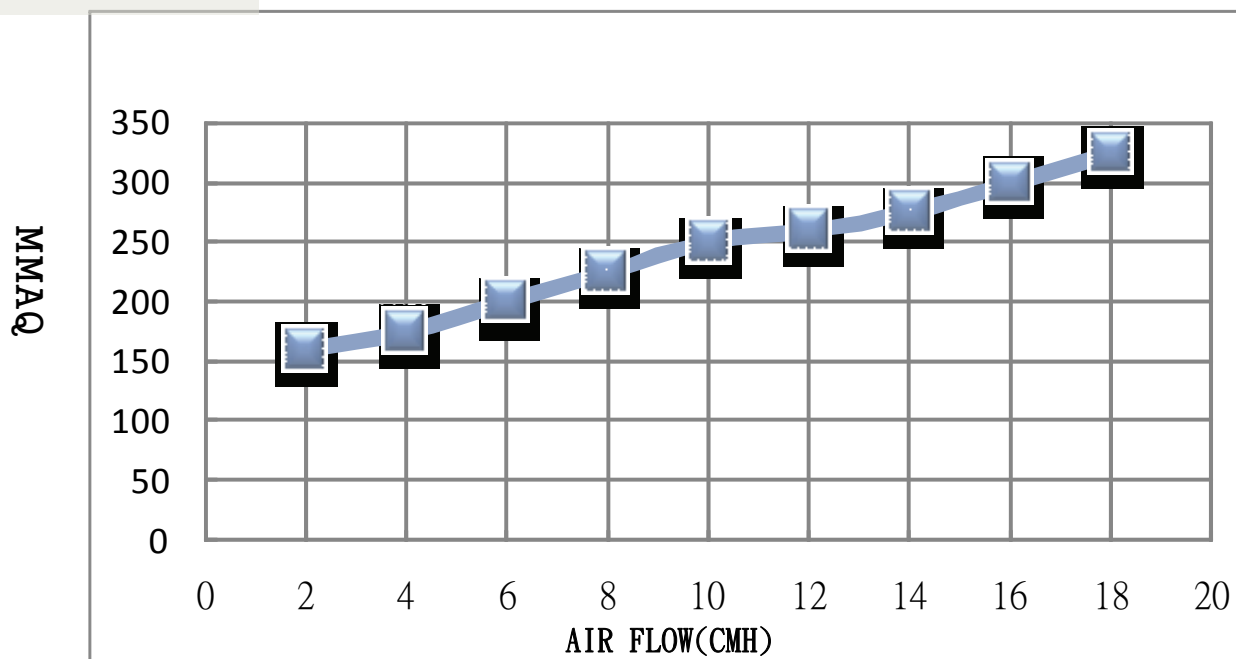
CONSTRUCTION



OTE CURVE



HEADLOSS



TUBE-600 EPDM MEMBRANE + PVC SUPPORT

Introduction :

Hey Wel Mechanical Co.,Ltd. offers high efficiency packing media for biological contact aeration and biological anaerobe aeration. Biological Contact Material is a moving biological growth packing media that used in biological contact aeration and anaerobe aeration tank. Due to its design, T&A provide more specific surface area for bio-film attach than tradition packing media. T&A can offer high oxygen transfer rate and contact frequency by the material rotation and flow in water. The contact material can random flow to avoid clog in the water. Installation is convenient since the contact material is separation lightweight and free support frame.

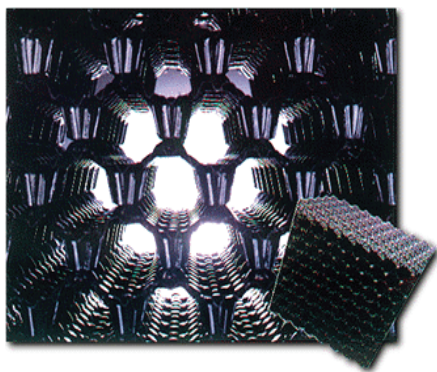
Features :

- Excellent Biological Growth Packing Media.
- Suspending Distributions.
- Convenient Installations.
- Non-clog design.
- Durable Various Materials.

Typical Applications :

- Biological contact aeration.
- Package of domestic wastewater unit.
- Biological Anaerobe aeration.
- Advanced treatment.

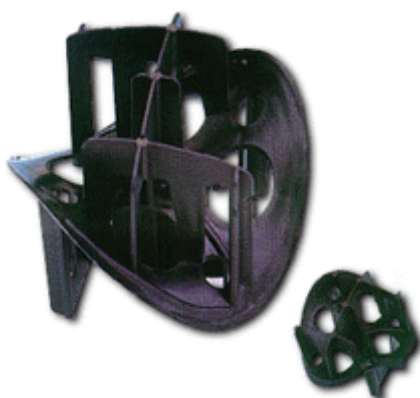
HONEYCOMB



Specification of Contact Materials

Model	Aperture m/m	Surface Area m ² /m ³	Vacant space %	Thick- ness m/m	Flexible Strength kg/m ²	Material	Dimen- sion m/m
RSA-26	26	210	98.8	0.30 ~ 0.45	1500 ~ 1800 ↑	PVC or ABS	L * W * H 500 1000 x 2 x 1000 1000
RSA-40	40	147	99.0	0.30 ~ 0.45	1000 ~ 1500 ↑		
RSA-56	56	110	99.2	0.35 ~ 0.50	1000 ~ 1200 ↑		

BIO-MEDIA



Model	100	125	150
Material	P.P	P.P	P.P
Diameter	100mmφ	125mmφ	150mmφ
Specific Gravity	0.92	0.92	0.92
Surface Area	70m ² /m ³	60m ² / m ³	50m ² / m ³
Vacant space	95%	96%	97%
pcs/m ³	1400	800	500