

生物旋轉盤 (RBC) ROTATING BIOLOGICAL CONTACTOR



適用範圍：

生物膜處理法是處理廢水的新技術，此法包括水利技術，生物循環薄膜技術及微生物分離技術，對於含有高量BOD氮化物和碳化物之家庭、住宅及工業上的污水處理最為有效，同時亦最為經濟。

Applications :

Bio-membrane treatment is a new technique for disposal sewage treatment. The technique includes water conservancy technique, bio-membrane circulation technique and microbe's segregation technique. It is most efficient and economic in dealing with residence and industry disposal sewage with high BOD nitride and carbide.

特性

1. 具有高度彈性：一般綜合污染廢水之水性、水量，皆複雜而變化大，在此一情形下污水處理的設置應極具高度彈性，以適合目前的需要及配合將來的擴展及變化。
2. 佔地面積少：在各種處理方法中，以使用生物膜方法佔地最少。
3. 節省電力：因轉盤速度低（2rpm），故用電量極少與活性污泥法相較只有其耗電量的1/5或以下。
4. 維護簡易：在生物膜法中幾乎不需維護費，僅需轉動軸之定期潤滑。
5. 操作技術簡單：普通技工經訓練後即可操縱自如。
6. 對負荷量變動彈性大：對有機震動負荷與毒物外溢之抗拒力都較其他傳統方法為優；因廢水停留時間短所以對意外的毒性溢洩可以迅速地恢復。
7. 污泥量少濃度較高易處理，且無臭味及噪音。
8. 效率高：即無初級設備，具去除BOD5仍可達90~98%。
9. 恢復迅速：在操作開始或在停止操作後，恢復正常時間僅需3~5天。

FEATURES

1. High flexibility: In general, the water feature and water quantity are complicated with big changes. Under this circumstance, the sewage treatment facilities should obtain high flexibility so to meet the current need and the future expansion and changes.
2. Small measure of area: Among all kinds of treatments bio-membrane treatment takes the smallest measure of area.
3. Low electricity consumption: Since the rotating contactor runs in low speed (2rpm), it takes very low electricity consumption. Comparing with mud treatment, it takes only one-fifth of its electricity consumption or even lower.
4. Easy to maintain. It requires very little maintain fee except lubricating the rotating shaft periodically.
5. Easy to be operated. Ordinary workers with basic training can operate it smoothly.
6. Great loading flexibility: It is superior to other traditional treatments in organic vibrating loading and in resisting the overflowing toxicant. It is because the short stay period for disposal sewage, so the overflowing toxicant that happens accidentally can be recovered very quickly.
7. Small mud quantity with high concentration, no stinky smell either noise.
8. High efficiency: Even with no initial facilities, it can remove 90% to 98% of BOD5.
9. Fast to get reinstated: It takes only 3 to 5 days to get reinstated when operation starts or stops.

規格：

旋轉生物膜盤法是包括一系列平行的網葉狀圓形膜，所接連而成的生物膜盤組是垂直狀，約一半浸在廢液中另一半露於空氣中；生物膜盤組交換地旋轉於水及空氣中，由水中有機物所培養出來的微生物可以附著在旋轉盤面上而形成一所謂的生物膜，當生物膜和廢水接觸時可以分解或消化其中之好氧物，當曝露於空氣中時可繼續獲得好氧菌類所賴以維生的氧氣，如此不斷的循環反應可使廢水中的污染性也好氧物逐漸減少而達到排放標準。

SPECIFICATIONS:

The rotating biological contactor (RBC) contains a serial of parallel network round shape filter that vertically joined. Half part of it is immersed in disposal sewage and half part of it is explored in air. The RBC interlockly revolves around in water and in the air. Microbes that cultivated from organisms in water then adhere to RBC and form the bio-membrane. When the bio-membrane contact the disposal sewage it decomposes or digests the oxygen-fond microbes, and when it explodes in the air it continuously gains the oxygen, which required by oxygen-fond gem. With this rotating reflection the polluting condition and the oxygen-fond microbes will be reduced and reach to the discharge standard.

名稱 NAME / 型式 MODE	SAME-30
表面積 Surface square measurement	2350m ²
盤體 RBC housing	網葉狀 Network shape
圓盤直徑 Panel diameter	3000mm (尺寸可依需求訂製) 3000mm (size as per request)
生物膜材質 Bio-membrane material	HDPE
中心主軸 Central shaft	無縫鋼管 Seamless stainless steel tube
轉速 Running speed	主軸轉速為每分鐘2轉，週邊速度為每分鐘18.85m The main shaft rotates two times per minutes while the side speed is 18.85m per minute.
馬達 Motor	2HP
減速機 Retarding machine	CYCLO 二段式或HELICAL Two sections of CYCLO or HELICAL
軸承 Bearing	型式自動調正滾子軸承 Automatically change the bearing
防蝕處理 Etch prevention treatment	鋼材部分佈環氧樹脂 (SUS304除外) The steel contains oxygen-encircled resin(except SUS304)

