

TMBR管式超滤膜 TUBULAR MEMBRANES



CONSEPTEC TMBR管式超滤膜是一种新型的固液分离膜，应用PVDF膜材料，截留分子量从5KDa-250KDa不等，具有高强度、抗污染、耐酸碱等特点，在工程中广泛应用。

CONSEPTEC TMBR tubular UF membrane is a new type of solid-liquid separation membrane. It is made of PVDF membrane material, the molar weight cut-off(MWCO) ranges from 5kda to 250kDa. Its high strength, anti pollution and chemical (acid and alkali) resistance makes it widely used in engineering systems.

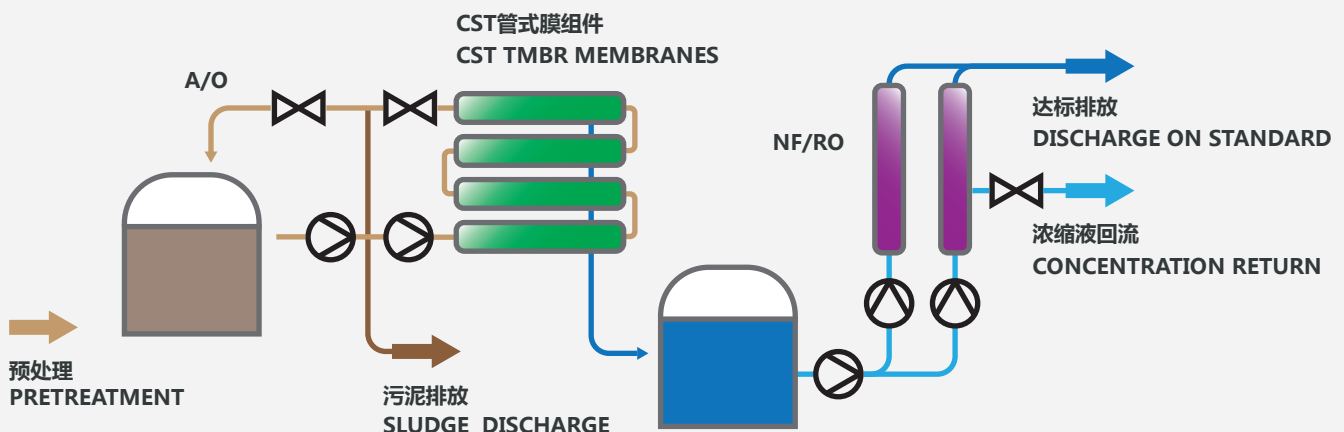
工艺说明

外置式管式膜系统是一种主要针对垃圾渗滤液等高浓度污水处理的工艺，由生化系统和外置式管式超滤膜系统组成。通过生化将有机物等污染物质去除，通过外置式管式超滤膜将泥水分离，直接得到高质量的超滤产水，浓水回流至生化池。设计通量高达70~200LMH，过滤精度可达0.03um，8mm的大通道可以将污泥有效截留并且不会造成膜管污堵，最大污泥浓度可达40gl。



Process Introduction

Tubular membrane system is mainly used in high concentration wastewater treatment systems, such as landfill leachate treatment, it is composed of biochemical system and external tubular UF membrane system. Organics and other pollutants are removed through biochemical reaction, since sludge and water are separated by the external tubular UF membrane to obtain high-quality UF water, and the concentrated water is returned to the biochemical tank. The designed membrane flux is up to 70 ~ 200lmh, and the filtration grade is up to 0.03um. Tubular diameter of 8mm can effectively intercept the sludges without fouling of the membrane, and the maximum sludge concentration is up to 40g/l.



CST TMBR 管式膜组件参数表
CST TMBR Technical Parameters

截留分子量 MWCO (Da)	纯水通量 Clean Water Flux (LMH , 100KPa)	操作压力 Operation pressure (KPa)	最高温度 Max. temperature (°C)	PH范围 Operation PH range	耐受余氯 Chlorine-resistant (PPm.h)
100,000	750	-50~800 -10~1000 (HD)	65	2-12 (HD)	250,000
15,000	50				

技术优势

- 预处理简单，进水SS可高达40000ppm；
- 使用永久亲水性材料，出水质量高，分离性能稳定；
- 抗污染能力强，强度高，不易堵塞，易清洗，膜使用寿命长；
- 回收率高，运行能耗低，运行能耗可达0.5-1kwh/m³；
- 膜组件易于维护，可单支膜组件更换，不影响整套系统运行；
- 外置放置，自动化运行，维护简单；
- 系统设计灵活，标准模块化配置，占地面积小。

Technical Advantage

- The pretreatment is simple, the feed water SS can be up to 40000ppm；
- Useing permanent hydrophilic material, stable effluent quality；
- Strong anti-pollution, high strength, backwashable, easy to clean and long service life of membrane；
- High recovery rate and the low energy consumption, the operation energy consumption is about 0.5-1kwh/m³；
- Easy maintanance of the membrane components, the replacement of single membrane module does not affect the operation of the whole system；
- Automatic operation and easy maintenance；
- Flexible system design with standard modular configuration, saving space.

CST TMBR 膜管直径8mm系列
CST TMBR Tubular Diameter 8mm

	D8-63F	D8-83F	D8-84F	D8-103F	D8-104F
膜组件直径 (inch) Housing diameter	6"	8 "	8"	10"	10"
膜长度 (mm) Length of membrane	3000	3000	4000	3000	4000
膜面积 (□) Membrane area	15.2	27.2	36.7	40.0	53.4
外壳材质 Housing material	FRP	FRP	FRP	FRP	FRP

CST TMBR 膜管直径5mm系列
CST TMBR Tubular Diameter 5mm

	D5-63F	D5-83F	D5-84F	D5-103F	D5-104F
膜组件直径 (inch) Housing diameter	6"	8 "	8"	10"	10"
膜长度 (mm) Length of membrane	3000	3000	4000	3000	4000
膜面积 (□) Membrane area	17.7	32.7	43.6	50.4	67.2
外壳材质 Housing material	FRP	FRP	FRP	FRP	FRP

应用领域
Applications

- 垃圾渗滤液
- 脱硫废水零排放
- 工业废水零排放
- 碱液回收处理
- 油田采出水回注
- 乳化油处理
- 高盐废水/RO浓水处理
- 高COD/BOD废水处理
- 煤化工废水处理
- 市政污水处理
- 特种化工废水
(纺织印染/皮革废水) 处理
- 钢铁/电子及表面处理废水回用
- 生物制剂/食品/饮料物料分离

- Landfill leachate treatment system
- Desulfurization wastewater ZLD system
- Industrial wastewater ZLD system
- Alkali reclaims system
- Reinjection of oilfield produced water system
- Emulsified oil treatment system
- Salinity wastewater/ RO concentration water treatment system
- High COD/BOD wastewater treatment system
- Coal-chemical wastewater treatment system
- Municipal sewage treatment system
- Special chemical wastewater treatment system
(Textile printing and dyeing, leather wastewater treatment system)
- Reuse of iron&steel, electronics and surface wastewater treatment system
- Biological agents, food and beverage materia separation system