

ポアフロン®水処理膜

製品の概要

- ・排水の再利用等で、節水/水循環型社会に貢献する精密ろ過水処理膜
- ・孔径約 $0.1\mu\text{m}$ の中空糸分離膜で、厳格化する放流基準に対応
- ・運転管理が容易でシンプル。日常保守等の省人化可能



製品の特長

- ・高強度で耐久性に優れた四フッ化エチレン樹脂(PTFE)製の分離膜採用
- ・有機排水では、通常の生物処理(標準活性汚泥法)対比
スペース 約30%、総コスト 約15%を削減可能
(MBR(膜分離活性汚泥法)採用の場合)

製品用途・活用事例

- ・全世界1,000ヶ所以上で安定稼働
- ・産業(工場)排水処理
難分解成分含む繊維/染色、
油分含む食品/飲料/石油精製等の
高濃度有機排水処理→再利用/河川放流等
- ・下水処理
中国 河南省200千 m^3 /日、湖北省100千 m^3 /日や、
韓国、インド、北米でも採用



当社の強み

- ・高強度:他素材比6倍の引張強度で、膜交換頻度少
- ・耐薬品性:pH0~14で薬品洗浄可能。流量回復性に優れる
- ・親水処理:化学架橋で強固。乾燥保管が可能
- ・槽外型MBR標準装置:後付けタイプ。数日の操業停止で設置可能



お問い合わせ先

<https://sei.co.jp/poreflon/>

Poreflon® Water Treatment Membrane

Product Overview

- A microfiltration water treatment membrane that contributes to water conservation and a water-circulating society through wastewater reuse.
- It features a hollow fiber separation membrane with a pore size of approximately $0.1\ \mu\text{m}$, which meets stringent discharge standards.
- Daily maintenance and operation are simple, so enabling labor-saving.



Product Features

- Utilizes a separation membrane made from high-strength and durable polytetrafluoroethylene (PTFE).
- For organic wastewater, it can reduce space by approximately 30% and total costs by about 15% compared to conventional biological treatment methods (standard activated sludge method) when the MBR (Membrane Bioreactor) method is employed.

Product Applications & Use Cases

- Stable operation in over 1,000 locations worldwide
- Industrial (Factory) Wastewater Treatment:
Treatment of high concentrated organic wastewater such as textile/dyes (containing not readily degradable substances) and food/beverage/petroleum refining (containing oil), leading to reuse or discharge into rivers.
- Sewage Treatment:
Used in regions such as Henan Province, China (200,000 m^3/day), Hubei Province (100,000 m^3/day), as well as in South Korea, India, and North America.



Our Strengths

- **High Strength:** Six times the tensile strength compared to other materials, resulting in less frequent membrane replacements.
- **Chemical Resistance:** Capable of chemical cleaning at pH levels ranging from 0 to 14, with excellent flow recovery properties.
- **Hydrophilic Treatment:** Sturdy due to chemical cross-linking and suitable for dry storage.
- **Standard side-stream MBR:** Retro-fit type that can be installed with only a few days of operational downtime.



Contact Information

<https://global-sei.com/poreflon>