

Innovative membrane bioreactor technology for efficient wastewater treatment

The advanced membrane bioreactor (MBR) system uses cutting-edge hollow fiber technology based on a PPTA/PTFE composite. Designed to tackle the toughest wastewater challenges, the MBR system delivers unmatched performance and environmental benefits. New MBR membranes permit to deal with extreme waste water conditions and all types of environment.

Key Features

Superior Strength and Durability:

The PTFE separation layer resists strong acids, alkalis, oxidants and polar solvents with a pH range of 0-14.

The PPTA backing layer provides high performance with a monofilament breaking strength exceeding 1000N.

Ecological manufacturing:

The production process generates no wastewater or solvent discharge, resulting in a low carbon footprint.

90% of used membranes are recyclable, supporting sustainable practices.

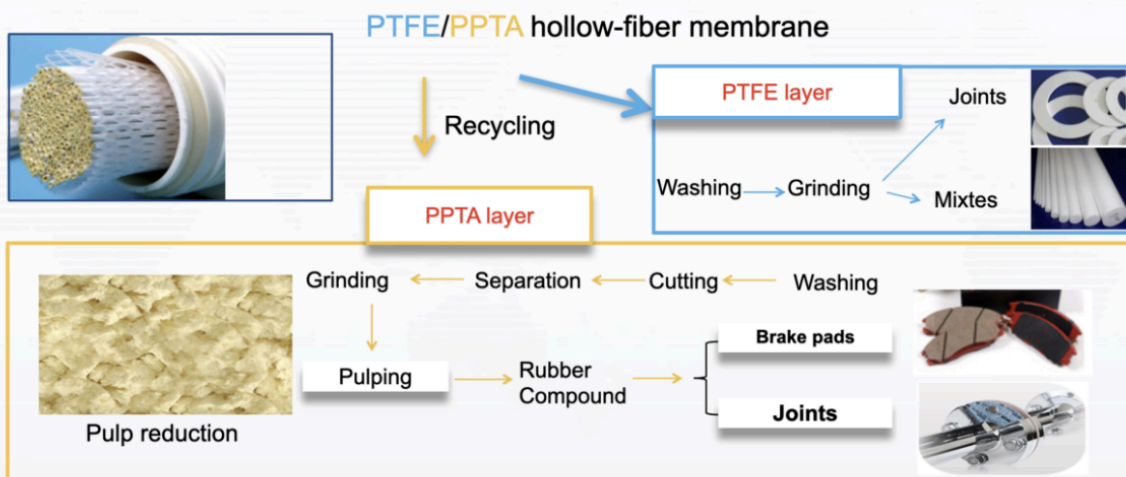
High performance:

A filament strength of 1000 N and a component root delamination resistance of 600 N ensure reliability.

The non-stick membrane surface facilitates cleaning and maintenance.

The system operates with low energy and chemical consumption.

Recycling of hollow-fiber PTFE-PPTA membranes



Wide range of applications

The MBR system is versatile, suitable for various industries and applications, including:
Treatment of drinking water and municipal wastewater: guaranteeing safe and clean water for public use.

Industrial wastewater: effective in sectors such as steel production, plating, printing and dyeing, food, aquaculture, electronics, boiler water and zero discharge.

Specialized uses: landfill leachate and all kinds of industrial wastewater (including chemical and pharmaceutical water), solvent recovery and oil-water separation.

Advantages compared to PVDF membranes

Compared to traditional PVDF membranes, PPTA/PTFE composite membranes offer:

Higher flow rates with lower intrinsic resistance.

Increased reliability and impact resistance.

A lifespan extended by 2 to 4 times.

More environmentally friendly production without solvents or wastewater discharge.

Trust and reliability

These membranes meet critical wastewater treatment needs. The MBR system is designed for high performance, environmental responsibility and long-term reliability, making it the ideal choice for treating difficult wastewater.