

Case Study

Pharmaceutical Wastewater Treatment (Qilu Pharmaceutical Project)

Headquartered in Jinan, Shandong Province, Qilu Pharmaceutical Co., Ltd. is a large comprehensive modern pharmaceutical enterprise in China, specializing in the development, production and sales of preparations for the treatment of tumor, cardio cerebrovascular, anti-infection, mental system, nervous system and ophthalmic diseases and their raw materials. The wastewater sources mainly from chemical synthesis production with the main components of pollutants including dichloromethane, chloroform, toluene, triethylamine, acetonitrile, isopropanol, DMF, etc. The original process adopted the traditional process, which is later transformed into MBR process with saving an area of about 650m².



MBR flat membrane'd been running for 5 years



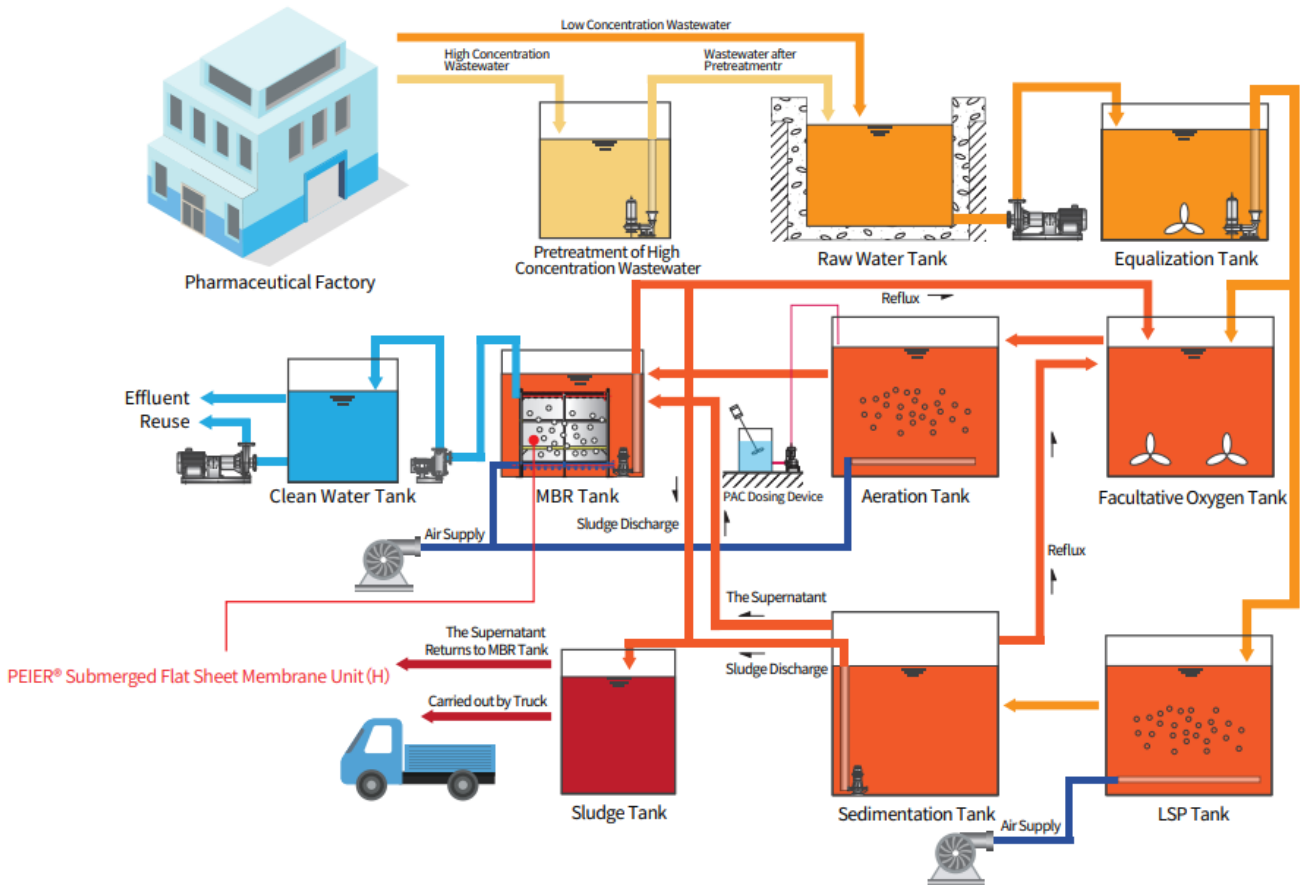
3S membrane module as a replacement

1. Outline of the Facility

Location	Jinan City, Shandong Province
Type of Wastewater	Pharmaceutical wastewater
Flow	1000m ³ /d
Commissioned	Since 2021, replaced in Oct.2021

2. MBR Process Flow Sheet

Process Flow Chart of Wastewater Treatment (Qilu Pharmaceutical Co., Ltd Project)



3. Design Parameter and Actual Data

Type	Parameter	Influent	Design	Actual	Capacity m ³ /D
Pharmaceutical Wastewater	COD _{Cr} (mg/L)	750-3500	≤100	50-80	≤1000
	NH ₃ -N (mg/L)	25-47	≤20	0.5-7.2	
	TN (mg/L)	40-100	≤30	6-22	
	TP (mg/L)	1.4-2.8	≤1	0.4-0.9	

"Design" values of effluent are regulatory limits. "Actual" values are average values.

Jiangsu Peier Membrane Corp.,Ltd,

MBR Flat sheet membrane manufacturer since 2007

Add: East Industry Zone, Gaocheng Town, Yixing City, 214214 Jiangsu Province, China,

Tel:+86 510 8783 8775 Fax:+86 510 87838773, Web:www.chinapeier.com/ www. peier-membrane.com/