



MBR Package Plant for Sewage Treatment



Life is good – with clean water

MARTIN Membrane Bioreactors (MBR)



The Future of Wastewater Treatment Technology

A membrane bioreactor (MBR) is a wastewater treatment process combining membrane filtration with biological treatment. This innovative technology offers several advantages over the conventionally activated sludge process. Among these advantages are higher biomass concentration, eliminating the needs of secondary clarifiers and improved effluent quality.

MARTIN Systems transforms sewage to clear and high quality water. The small footprint of the treatment technology enables the systems to be integrated in natural, picturesque surroundings and to treat wastewater for irrigation use.

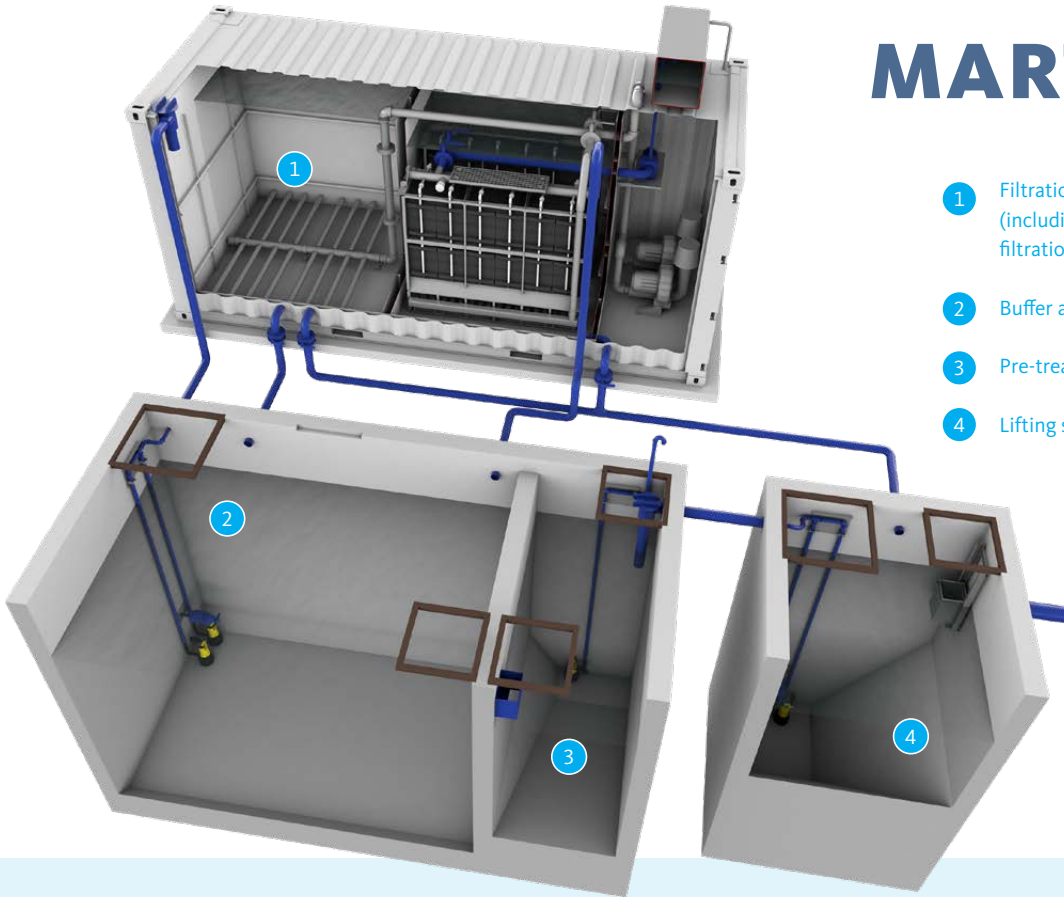
MARTIN Systems has the core technology inside the MBR which consists of polypropylene plates with a polymeric membrane on each side. The membrane is welded on rigid frame. The module reduces virus and bacteria by 99.9999 %. Filter plates are continuously aerated through bubble diffusers to keep them clean. The membranes don't need regular chemical cleaning except one or two maintenance clearings per year.

MARTIN Systems is developing compact package systems for MBR plants so that up to 1000 m³/day can be filtered in one 40-foot ISO container. The inside tanks are made of stainless steel sheets.

Features

- Fast delivery and start-up due to the mobile concept
- German quality equipment in stainless steel housing
- Compact design
- High packing density
- Effluent with irrigation water qualities (no microorganism, no smell)
- Very good price-performance ratio
- Low maintenance and minimum operation requirement
- Minimum construction work on site and easy to relocate

Product Number	Capacity m ³ /day	Population (Persons)	Foot Print (approx.) L x W [m]
MMS-P25U	25	166	7 x 2
MMS-P75U	75	500	13 x 3
MMS-P150U	150	1000	14 x 4
MMS-P300U	300	2000	16 x 5
MMS-P450U	450	3000	18 x 6
MMS-P600U	600	4000	22 x 6
MMS-P1000U	1000	6600	28 x 6



- ① Filtration container
(including control cabinet, aeration tank, filtration system, blowers and pumps)
- ② Buffer and mixing tank
- ③ Pre-treatment (settling / grease trap)
- ④ Lifting station

Features

- Above information is based on Inlet BOD : 300 mg/l ,
Outlet < 5 mg/l
- Discharge of 150 liter/person/day

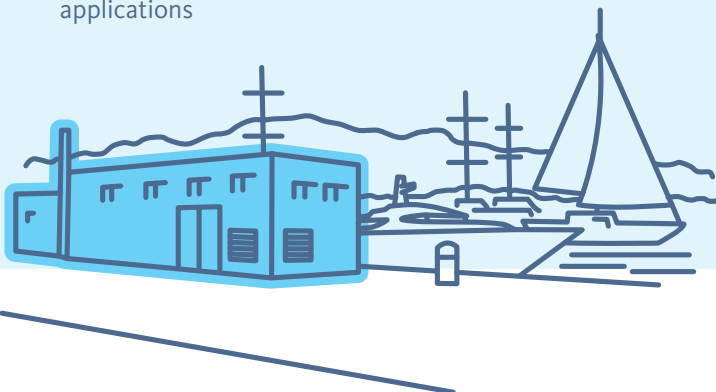
Applications

MARTIN Systems offers tailor-made membrane bioreactors (MBR) to treat wastewater from different applications:

- Municipal wastewater
- Educational institutions and healthcare applications
- Hotels, labour and refugee camps, parks and military bases
- Building complexes
(Offices, Shopping Centers, Small Township)
- Industrial wastewater, e.g. food and beverage applications

MARTIN Systems offers complete package plant including

- Raw wastewater pump stations
- Pretreatment
- Biological treatment systems
- Membrane filtration unit
- Permeate storage tank
- Sludge treatment
- Odor control system
- Mobile power generator
- Containerized operator room





Life is good – with clean water

MARTIN Systems GmbH
Friedrichstr. 95
10117 Berlin, Germany
T +49 30 2005 970 0
www.martin-systems.com
info@martin-systems.com

**Mating (Shanghai) Membrane
Technology System Co., Ltd.**
No. 2148 Zhudai Road,
Jiading District, Shanghai, China, 201806
T +86 21 59581257
info@matingmo.com
www.matingmo.com