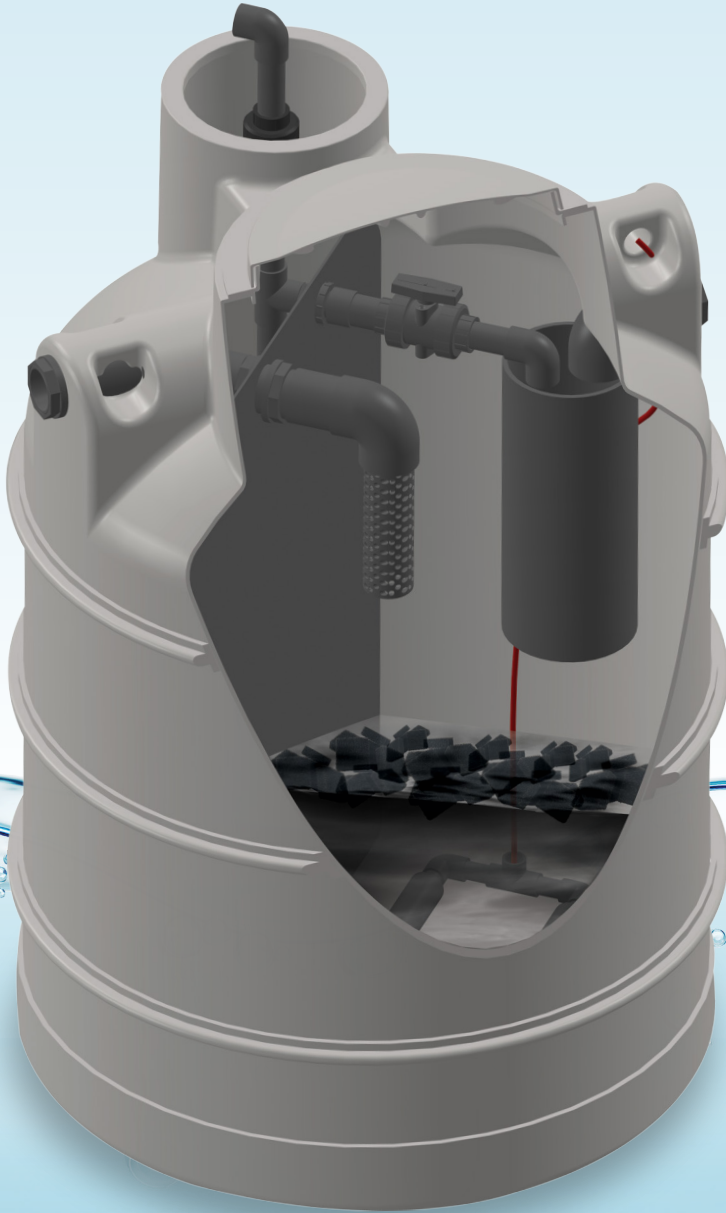







REACTO™ MBBR

A technovative solution for decentralized **Sewage Treatment**



- 96% **Pollutant Removal**
-  **BioMedia System**
-  **Strong & Compact**
- 1-222 **Inhabitants Served**
-  **Odourless**
- ✓ **Simple Installation**

Technovation by :
awatech
transforming technologies

We help our clients with their most complex urban environmental regulatory challenges by building tailored / ready to use solutions at the most affordable costs as well as lowest operational costs with our functional expertise to work on strategy, efficiency and technological innovations based on local conditions and customer requirements.



EC0509/2018:0918

REACTO MBBR

This compact **sewage treatment plant** is designed for domestic installations for up to 222 inhabitants. It's continuous aeration process using unique bio-media system delivers a **pollutant removal level of 96.2%** while combating common problems like media blockage & inadequate oxygen supply.

REACTO MBBR PARTS & PROCESS

1. Collection Sump :

Wastewater from the dwelling toilets, sinks, shower etc. enters the plant at it's Collection Sump and gross solids settle at the bottom of the tank separating up to 70% of the solid waste.

2. BioPod MBBR Unit (Chamber 1):

Wastewater enters this Aeration Chamber from the Collection Sump, where masses of naturally occurring bacteria inhabit specially designed Foam Media. This allows the immense growth of the bacteria which feeds on the waste and removes it from the liquid. A continuous supply of air from low pressure, high volume compressor through fine bubble diffusers in the top section of the unit sustains

these bacteria. Wastewater passes through the Foam Media again and again, ensuring very high treatment efficiency.

3. Final Settlement (Chamber 2)

The liquid then proceeds to the final settlement chamber. The process here slows down the velocity of the liquid allowing for any final trace of impurities to settle down at the bottom of the tank before discharging the treated liquid from the plant. A sludge return system then returns these settled impurities back to the BioZone chamber. There is a separate desludging grid to remove access sludge from the plant. The treated liquid coming out of the REACTO MBBR plant now meets the required regulatory standards.

BENEFITS

■ BIO MEDIA SYSTEM

REACTO MBBR is an IFAS system operating similar to other MBBR plants, but it's unique design eliminates blockages which is commonly found in small treatment plants.

■ DURABLE & STABLE

Since it is made from tough & durable polyethylene it is easy to transport and has a wide base of stability.

■ SAVES MONEY

System is compact in size and light in weight, which allows easy installation and lower maintenance costs.

■ EASY MAINTENANCE

The only component that requires maintenance is the compressor, located in an external housing; which is accessible without coming in contact with sewage.

■ COMPACT SYSTEM

Highly compact solution for up to 222 inhabitants.

■ LOW NOISE

With a near silent compressor housed externally, the operation of the system is virtually silent.

REACTO MBBR SPECIFICATIONS:

Model	Capacity (liters)	Max flow/day (liters)	Per. Eq.	Req. Energy (kWh/day)	Weight (kg)	Height (mm)	Diameter (mm)	Desludging Interval
MBBR-5	1200	5000	22	6.36	40	1725	1200	30 days
MBBR-10	2700	10000	44	12.72	70	1725	1500	45 days
MBBR-15	6600	15000	66	15.48	250	2400	2240	15 day
MBBR-20	6600	20000	90	25.44	250	2400	2240	12 days
MBBR-25	6600	25000	111	30.16	250	2400	2240	10 days
MBBR-40	13200	40000	177	53.00	500	2400	4480	10 days
MBBR-50	13200	50000	222	72.00	500	2400	4480	10 days