

The MemTriq[®]Marine

On-board wastewater treatment for the Belgium Navy

Triqua has developed a wastewater treatment plant for application on-board which meets all MARPOL standards and other regulations: MemTriq[®]Marine. The MemTriq[®]Marine, has already been applied for applications on shore. Due to its compactness, an outstanding effluent quality (complete and guaranteed reduction of bacteria, suspended solids and BOD) the system is perfectly suited for wastewater treatment on-board.

MemTriq[®]Marine

In the MemTriq[®]Marine treatment plant a combination of a bioreactor with membrane filtration is applied. In the bioreactor organic components are converted into CO₂ and H₂O. By using membranes the effluent is guaranteed free of suspended solids and bacteria and will meet the highest discharge standards. The treated stream can be reused for all kinds of applications.

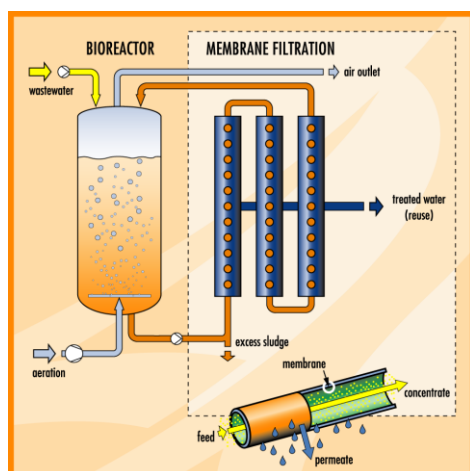


Figure 1: Membrane filtration

Characteristics of The MemTriq[®]Marine:

- High reliability and simple operation. The system is relatively insensitive for shock loads or toxic wastewater streams
- Very compact design. By applying membrane technology a large biological activity can be maintained in a small volume
- High treatment efficiency
- Treated water is free of suspended solids and bacteria
- Eminently suitable for wastewater flows that are difficult to treat

Wastewater treatment at the Godetia A960

At the Godetia A960, a logistic support vessel of the Belgian Navy, the grey and black wastewater is treated in a MemTriq[®]Marine. The reason to choose for a MemTriq[®]Marine is that so-called "special areas" (like Mediterranean, North Sea and Baltic Sea) and harbour authorities use more strict standards for the disposal of wastewater discharge.



Figure 2: The Godetia A960, a logistic support vessel

From a collection tank the wastewater is pre-treated with a rotating sieve to remove large particles. Then the pre-treated wastewater enters the MemTriq[®]Marine. After treatment the water will be discharged.



Figure 3: The MemTriq[®]Marine

Design parameters	
Dimensions	
floor area	5 x 4 m
height	2.2 m
Capacity	860 l/h or 200 persons

Table 1: Design parameters.

For further information:

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